

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
FEBRUARY 8, 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 BLIWIbU QkqFIDq38oP4GA

After registering, you will receive a confirmation email containing information about joining the webinar.

Or join by phone:

+1 438 809 7799

or +1 587 328 1099

or +1 613 209 3054

or +1 647 374 4685

or +1 647 558 0588 or +1 778 907 2071

Webinar ID: 850 5969 8628

Passcode: 763052

International numbers available: https://us02web.zoom.us/u/kcuVTmzep

A G E N D A ADDENDUM

DATE: Wednesday February 8, 2023

CLOSED MEETING: Directly following Section 13 Announcements

REGULAR MEETING: 10:00 A.M.

Addendum

7.1.3 **10:25 AM** Delegation by Jim Estill and Rob Wigood to provide Council with comments regarding Agenda Item 9.3.1 Report ADM-2023-005 - Community Infrastructure and Housing Accelerator (CIHA) Request — Estill Innovation Community Development

7.1.4 **10:35 AM** Delegation by Dan Forestell and Dan Neundorf to provide Council with comments regarding Agenda Item 9.3.1 Report ADM-2023-005 - Community Infrastructure and Housing Accelerator (CIHA) Request — Estill Innovation Community Development

7.1.5 **10:45 AM** Delegation by Angie Mason to provide Council with comments regarding Agenda Item 9.3.1 Report ADM-2023-005 - Community Infrastructure and Housing Accelerator (CIHA) Request — Estill Innovation Community Development

<u>9.3.1 Report ADM-2023-005 - Community Infrastructure and Housing Accelerator (CIHA) Request – Estill Innovation Community Development – Revised to include additional public comments</u>



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH FEBRUARY 8, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE – 23 BROCK RD S, PUSLINCH

<u>9.3.2 Report ADM-2023-006 - Badger Daylighting Zoning Amendment Application Status Update</u> Revised to include additional peer review comments

<u>10.1 Mini Lakes 2021 Annual Waste Water and Water Monitoring Reports and Peer Review – revised</u> to include OCWA comments

<u>10.2 CBM Aggregates - Roszell Pit (625189) - 2022 Ecological and Aquatic Monitoring Report Peer Review – revised to include Grand River Conservation Authority Comments</u>

≠ 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 January 25, 2023 Proposed Budget Public Information Meeting Minutes
 - 6.1.2 December 13, 2022 Committee of Adjustment Meeting Minutes
 - 6.1.3 December 13, 2022 Planning and Development Advisory Committee Meeting Minutes
 - 6.2 Grand River Conservation Authority January 2023 General Membership Meeting
 - 6.3 Grand River Conservation Authority Budget and Levy Meeting
 - 6.4 Association of Municipalities Ontario Policy Update Call for Provincial Action on Property Assessments
 - 6.5 City of Hamilton Impacts of Bill 23, More Homes Built Faster Act, 2022
 - 6.6 City of Kitchener Ontario's Big City Mayors (OBCM) Bill 23, More Homes Built Faster Act, 2022
 - 6.7 Town of Halton Hills Repeal Bill 23
 - 6.8 The Township of Montague Support for Renfrew Inquest Resolution
 - 6.9 The Township of Montague World Thinking Day
 - 6.10 City of Thunder Bay Council Resolution Bill 42 Gender Affirming Healthcare Act



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH FEBRUARY 8, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE – 23 BROCK RD S, PUSLINCH

- 6.11 Lanark Highlands Violence Against Women
- 6.12 Improvements to Boreham Park Citizen Letter
- 6.13 ERO Posting 0196196 Proposed Changes to the Heritage Act and its regulation Bill 23 Decision

7. Delegations ≠

- 7.1 Specific Interest (Items Listed on the Meeting Agenda)
 - 7.1.1 **10:05 AM** Delegation by Fred Taylor and Steve Edwards to provide Council with comments regarding 6678 Wellington Road 34 ≠
 - 7.1.2 **10:15 AM** Delegation by Gilliam Smith to provide Council with comments in support of application for 128 Brock Road South ≠
 - 7.1.3 <u>10:25 AM Delegation by Jim Estill and Rob Wigood to provide Council with comments regarding Agenda Item 9.3.1 Report ADM-2023-005 Community Infrastructure and Housing Accelerator (CIHA) Request Estill Innovation Community Development</u>
 - 7.1.4 <u>10:35 AM Delegation by Dan Forestell and Dan Neundorf to provide Council</u> with comments regarding Agenda Item 9.3.1 Report ADM-2023-005 Community Infrastructure and Housing Accelerator (CIHA) Request Estill Innovation Community Development
 - 7.1.5 <u>10:45 AM Delegation by Angie Mason to provide Council with comments regarding Agenda Item 9.3.1 Report ADM-2023-005 Community Infrastructure and Housing Accelerator (CIHA) Request Estill Innovation Community Development</u>
- 7.2 General Interest (Items Not Previously Listed on the Meeting Agenda)
 - 7.2.1 None

8. **Public Meetings**

8.1 None

9. Reports ≠

- 9.1 Puslinch Fire and Rescue Services
 - 9.1.1 None
- 9.2 Finance Department
 - 9.2.1 Report FIN-2023-003 2022 Completed Capital Projects ≠
 - 9.2.2 Report FIN-2023-004 Balances in Discretionary and Restricted Reserves (circulated under separate cover) ≠
 - 9.2.3 Report FIN-2023-005 Ontario Regulation 284-09 2023 Budget ≠



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH FEBRUARY 8, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE — 23 BROCK RD S, PUSLINCH

- 9.2.4 Report FIN-2023-006 2023 Budget Final ≠
- 9.2.5 Report FIN-2023-007 Shop Local Puslinch Gift Certificate Program ≠

9.3 Administration Department

- 9.3.1 Report ADM-2023-005 Community Infrastructure and Housing Accelerator (CIHA) Request Estill Innovation Community Development Revised to include additional public comments ≠
- 9.3.2 Report ADM-2023-006 Badger Daylighting Zoning Amendment Application
 Status Update Revised to include additional peer review comments ≠
- 9.3.3 Report ADM-2023-007 Fox Run Phase 2 Condominium Plan Revision (circulated under separate cover) ≠
- 9.3.4 Report ADM-2023-008 2022 Annual Water Report ≠

9.4 Planning and Building Department

- 9.4.1 Report PD-2023-001 Wellington Motor Freight Zoning By-law Amendment Application Request to deem application complete ≠
- 9.4.2 Report BLD-2023-001 Building Department Fourth Quarter Update October to December 2022 ≠
- 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 None

10. Correspondence ≠

- 10.1 Mini Lakes 2021 Annual Waste Water and Water Monitoring Reports and Peer Review revised to include OCWA comments ≠
- 10.2 <u>10.2 CBM Aggregates Roszell Pit (625189) 2022 Ecological and Aquatic Monitoring</u>

 <u>Report Peer Review revised to include Grand River Conservation Authority Comments</u> ≠

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



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH FEBRUARY 8, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE – 23 BROCK RD S, PUSLINCH

- 12.1.1 BL2023-009 Being a By-law to adopt the budget for the Corporation of the Township of Puslinch for the year 2023
- 12.1.2 BL2023-010 Being a By-law to appoint a Deputy Clerk for the Corporation of the Township of Puslinch
- 12.1.3 BL2023-011 Being a By-law to appoint Fence Viewers for the Corporation of the Township of Puslinch

13. Announcements

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

- 14.1 Confidential report prepared by the Township solicitor regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose human resource matter
- 14.2 Confidential report prepared by the Municipal Clerk regarding a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board contract negotiations
- 14.3 Confidential verbal report regarding personal matters about an identifiable individual, including municipal or local board employees Heritage Committee Appointment Vacancy
- 15. Business Arising from Closed Session
- 16. Notice of Motion
- 17. New Business
- 18. Confirmatory By-law ≠18.1 BL2023-012 Confirm By-law February 8, 2023 ≠
- 19. **Adjournment** ≠



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH PUBLIC INFORMATION MEETING MINUTES

DATE: Wednesday January 25, 2023

TIME: 7:00 p.m.

PLACE: Virtual Meeting held by Zoom Webinar

FILE: Public Meeting – 2023 Budget

MEMBERS: Mayor James Seeley – Chair

Councillor Russel Hurst Councillor Jessica Goyda Councillor John Sepulis Councillor Sara Bailey

TOWNSHIP and CAO, Glenn Schwendinger

COUNTY STAFF: Director of Finance/Treasurer, Mary Hasan

Municipal Clerk, Courtenay Hoytfox
Director of Public Works, Mike Fowler
Chief Building Official, Andrew Hartholt

Fire Chief, Tom Mulvey

Deputy Treasurer, Mirela Oltean

The Chair called the meeting to order at 7:00 PM and remarked the purpose of this Public Meeting is to inform and provide the public with the opportunity to ask questions, or to express views with respect to the Township's Proposed 2023 Budget. The members of Council are here to observe and listen to the publics' comments; however, Council will not make any decisions this evening.

Presentation:

Mary Hasan, Director of Finance/Treasurer provided an overview of the proposed 2023 budget, including:

- The budget process.
- What do property taxes pay for in the Township?
- How the budget has changed from 2022
- The impacts of the proposed budget on taxpayers
- What is included in the operating budget
- The 2023 Capital Budget and Long-Term Forecast
- The Township's Discretionary and Restricted Reserves

Mayor Seeley then invited members of the public to provide comments. There were no questions from members of the public.

Adjournment:

The meeting adjourned at 7:28 PM.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
COMMITTEE OF ADJUSTMENT
DECEMBER 13, 2022
7:00 PM
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

MINUTES

1. CALL THE MEETING TO ORDER

The December 13, 2022 Committee of Adjustment Meeting was held on the above date and called to order at 7:00 p.m. via electronic participation.

2. ROLL CALL

MEMBERS IN ATTENDENCE

Councilor John Sepulis, Chair Paul Sadhra Dan Kennedy Dennis O'Connor Deep Basi

MEMBERS ABSENT

None

STAFF IN ATTENDANCE

Lynne Banks, Development and Legislative Coordinator Courtenay Hoytfox, Municipal Clerk Joanna Salsberg, Planner, County of Wellington

3. **OPENING REMARKS**

The Chair welcomed those attending the meeting to the Committee of Adjustment and informed the attendees that Township Staff would present the application, then the applicant would have the opportunity to present the purpose and details of the application and provide any further relevant information. Following this, the public can obtain clarification, ask questions and express their views on the proposal. The members of the Committee can then obtain clarification, ask questions and express their views on the proposal. All application decisions are subject to a 20 day appeal period.

4. <u>DISCLOSURE OF CONFLICT OF INTEREST</u>

None

5. APPROVAL OF MINUTES

Moved by: Deep Basi

That the Minutes of the Committee of Adjustment meeting held Tuesday, November 8, 2022, be adopted.

CARRIED

Seconded by: Dennis O'Connor

6. <u>APPLICATIONS FOR MINOR VARIANCE OR PERMISSION</u> under section 45 of the Planning Act to be heard by the Committee this date.

None

7. OTHER MATTERS

None

8. ADJOURNMENT

Moved by: Dan Kennedy Seconded by: Dennis O'Connor

The Committee of Adjustment meeting adjourned at 7:02 p.m.

CARRIED



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH PLANNING & DEVELOPMENT ADVISORY COMMITTEE DECEMBER 13, 2022
7:00 PM
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

MINUTES

1. CALL THE MEETING TO ORDER

The December 13, 2022 Planning & Development Advisory Committee Meeting was held on the above date and called to order at 7:03 p.m. via electronic participation.

2. OPENING REMARKS

The Chair advised that the following portion of the Committee meeting will be for the Committee to review and provide comments on development planning applications.

3. ROLL CALL

MEMBERS IN ATTENDENCE

Councilor John Sepulis, Chair Paul Sadhra Dan Kennedy Dennis O'Connor Deep Basi

MEMBERS ABSENT

None

STAFF IN ATTENDANCE

Lynne Banks, Development and Legislative Coordinator Courtenay Hoytfox, Municipal Clerk Joanna Salsberg, Planner, County of Wellington

4. DISCLOSURE OF CONFLICT OF INTEREST

None

5. APPROVAL OF MINUTES

Moved by: Paul Sadhra Seconded by: Deep Basi

That the Minutes of the Planning & Development Advisory Committee Meeting held Tuesday, November 8, 2022, be adopted.

CARRIED

6. <u>APPLICATION FOR SITE PLAN URBAN DESIGN REVIEW</u>

None

7. ZONING BY-LAW AMENDMENT

None

8. LAND DIVISION

8(a) Severance application B138-22 (D10-HOL) – Kenneth and Janine Holman – Part Lot 16, Concession 10, municipally known as 4524 Concession 11, Township of Puslinch.

Proposed severance is 0.42 hectares with 58m frontage, existing vacant land for proposed rural residential use with single detached dwelling.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH PLANNING & DEVELOPMENT ADVISORY COMMITTEE DECEMBER 13, 2022 7:00 PM

VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

Retained parcel is 1.9 hectares with 20m frontage, existing 2 sheds for proposed single detached dwelling.

- Hailey Keast, agent for the applicant, provided an overview of the application.
- Paul Sadhra advised that he has concerns if a new dwelling isn't built but the accessory structures remain on the property in contravention of the Township Zoning By-law
- Lynne Banks advised that one of the conditions for approval would be that the owner enter into an agreement with the Township to permit the accessory structures to remain on the property until the new house is built. She also advised that there are specified time frames in the agreement that states how long the owner has to obtain building permits and occupancy permits and also noted that the owner is required to provide a security deposit to the Township which would be used in the event that a main dwelling isn't built and allows the Township to enter the property and use the security deposit to remove the accessory structures.
- Dennis O'Connor asked that the MDS be completed for the barn that is capable of holding livestock southeast of the proposed severed lot.
- Deep Basi asked if safe entrance is possible for both lots.
- Hailey Keast advised that there is safe entrance from both lots and noted that one of the
 entrances is a little wider at the entrance to the property in order to ensure that sight lines are
 met
- Hailey also noted that with respect to the MDS, the calculations were completed and included in the submission package to the County.
- John Sepulis asked Joanna Salsberg if a Tree Preservation Plan will be required.
- Joanna Salsberg advised that that the County may impose a condition that a Tree Preservation Plan be provided at the County level to the satisfaction of the County.
- John Sepulis asked that Joanna Salsberg provide clarity on the distinction between the Township and County regarding the requirements for a Tree Preservation Plan.
- Joanna Salsberg advised that when the Township has a property within a zone with an EP (Environmental Protection) overlay, then there will be a significant woodlot within the official plan designation and that zoning overlay is reflected within the zoning by-law. She further noted that in this particular case the portion of the property that is proposed to be severed doesn't have that official plan designation in terms of a significant woodland and it doesn't have the zoning bylaw level as well for that overlay on top of it, and because the property is not designated, then the County still is obligated to ensure that the trees are protected and so it may still be a condition to the satisfaction of the County to satisfy the policies of the office plan.
- There were no further questions or comments from the Committee.

The Committee supports the application with the **following conditions** imposed:

- 1. That the Owner satisfy all the requirements of the Township of Puslinch, financial and otherwise (including taxes paid in full and Consent Review/Condition Clearance fee) which the Township may deem to be necessary at the time of issuance of the Certificate of Consent for the property and orderly development of the subject lands. Any fees incurred by the Township for the review of this application will be the responsibility of the applicant; and further that the Township of Puslinch file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
- 2. That safe access to the proposed severed lands can be accommodated to the satisfaction of the Township; and further that the Township file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
- 3. That the Owner apply for, and receive, a minor variance for the lands to be retained for the reduced lot frontage; and further that the Township file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
- 4. That the owner enter into an agreement with the Township to permit the two accessory structures



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH PLANNING & DEVELOPMENT ADVISORY COMMITTEE DECEMBER 13, 2022 7:00 PM VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

to remain on the property until the new residence is completed and the owner has occupancy. A term of the agreement is that the owner will be required to provide a security to the Township which will be returned to the owner once the accessory structure has been demolished.

- 5. That the owner obtain zoning conformity for the barn located on the southeast portion of the lot for MDS1 setbacks to the satisfaction of the Township; and further that the Township file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
- **8(b)** Lot line adjustment B139-22 (D10-MAR) Gina and Gino Martinello Part Lot 10, Concession 4, municipally known as 4670 Sideroad 10, Township of Puslinch.

Proposed lot line adjustment is 0.14 hectares with 15.24m frontage (Part 1 on sketch), vacant land to be added to abutting rural residential lot – John, Giovanni and Nancy Martinello (Part 2 on sketch).

Retained parcel is 14.88 hectares with 168.59m frontage, existing and proposed rural residential use with existing dwelling (Part 3 on sketch).

- Nancy Shoemaker, agent for the applicant, provided an overview of the application.
- Paul Sadhra asked Courtenay Hoytfox for confirmation that the outstanding building permits would be addressed at the zoning compliance review stage.
- Courtenay Hoytfox advised that if the Township receives an amended building permit, Township staff will review it to ensure that it meets the Townships new ARU polices and specifically the size requirements in the zoning by-law.
- John Sepulis asked Courtenay Hoytfox to review any other issues that are associated with zoning compliance with both the severed and retained lands.
- Courtenay Hoytfox advised that the Township's first condition regarding zoning compliance will ensure that the ARU meets the provisions of the zoning by-law. She further advised that the second condition relating to the Record of Site Condition is required since the owner has brought fill into the property without the appropriate approvals in place and it will address the current environmental conditions of the property including soil testing and other requirements that would have been done under a proper permit and approval for the fill. She further noted that the potential to sever off lands that may have fill that is contaminated exasperates the issues with the Township and instead of having one property with the potential for contaminated soil brought on to the property, the lot line adjustment will result in 2 properties with the potential for contaminated soil. She noted that the Record of Site Condition would satisfy any concerns the Township might have with respect to the fill that has been brought on to the property.
- There were no further questions or comments from the Committee.

The Committee supports the application with the **following conditions** imposed:

- 1. That the Owner satisfy all the requirements of the Township of Puslinch, financial and otherwise (including taxes paid in full and Consent Review/Condition Clearance fee) which the Township may deem to be necessary at the time of issuance of the Certificate of Consent for the property and orderly development of the subject lands. Any fees incurred by the Township for the review of this application will be the responsibility of the applicant; and further that the Township of Puslinch file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
- 2. That the Owner obtain and provide a Record of Site Condition in accordance with Ontario Regulation 153/04, to the satisfaction of the Township of Puslinch, in relation to the severed parcel, that shows no contamination being present on the severed parcel; and further that the



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH PLANNING & DEVELOPMENT ADVISORY COMMITTEE DECEMBER 13, 2022
7:00 PM
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

Township file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.

3. That the owner obtain zoning compliance for both the severed and retained lands to the satisfaction of the Township; and further that the Township file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.

9. OTHER MATTERS

- John Sepulis asked Courtenay Hoytfox to provide an update on how the Committee meetings will be held in the new year.
- Courtenay Hoytfox advised that Council meetings and public information meetings are now being held as hybrid meetings, both in person and virtual, and that Council members and senior staff are now required to attend the meetings in person. She further noted that all Township committee meetings will also be conducted in the same manner and that committee members will be required to attend in person as well as Township staff. However she advised that the applicants, their agents, County planning staff and the public can either attend in person or virtually. She advised that this will apply to the first PDAC meeting scheduled in 2023 for January 10, 2023.
- John Sepulis also asked Courtenay Hoytfox to clarify the change on the agenda from "Disclosure of Pecuniary interest" to "Disclosure of Conflict of Interest".
- Courtenay Hoytfox advised that Council adopted a new Procedural By-law and that the wording
 not only reflects conflicts of interest related to pecuniary interest but also conflicts related to the
 Township's Code of Conduct. She also advised that training will be provided to the Committee
 in the new year to review what is covered under the by-law.
- John Sepulis asked Courtenay Hoytfox to provide an update on applications for the members and residents that wish to apply to be on the Committee.
- Courtenay Hoytfox advised that the deadline for applications is January 13, 2023 and that the applications will be reviewed by Council on January 18th and appointments made and that the Committee with the new members will begin at the PDAC meeting in February.
- Dan Kennedy asked if a member is travelling would they be permitted to attend the meeting virtually.
- Courtenay Hoytfox advised that they must attend in person and wouldn't be permitted to attend virtually.
- There were no further questions or concerns from the Committee.

10. CLOSED MEETING

None

11. <u>NEXT MEETING</u>

Next Regular Meeting will be held on Tuesday, January 10, 2023 @ 7:00 p.m.

12. ADJOURNMENT

Moved by: Paul Sadhra Seconded by: Deep Basi

That the Planning & Development Advisory Committee is adjourned at 7:35 p.m.

CARRIED



Grand River Conservation Authority

Summary of the General Membership Meeting – January 27, 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:

- GM-01-23-04 Budget 2023 Draft #2
- GM-01-22-06 Budget 2022 Draft #2
- GM-01-22-03 Refuse Collection and Recycling RFP
- GM-01-23-08 Proposed By-law 1-2023

Information Items

The Board received the following reports as information:

- GM-01-23-03 Per diems and Honorariums for 2023
- GM-01-23-01 Cash and Investment Status
- GM-01-23-07 Ontario's Housing Supply Action Plan Related Regulatory Changes, Ministerial Order and OWES Manual Amendments
- GM-01-23-02 Development, Interference with Wetlands and Alterations to Shorelines Regulation
- GM-01-23-06 Current Watershed Conditions
- GM-01-23-05 Lake Erie Surge Flood Event December 23, 2022

Correspondence

The Board received the following correspondence:

- Ministry of Municipal Affairs and Housing re: Greenbelt Amendments and Revocation of the Central Pickering Development Plan and O.Reg. 154/03
- County of Brant re: Bill 23, More Homes Built Faster Act, 2022 Legislative Update and Comments
- Conservation Ontario re: Review of A Place to Grow (Growth Plan) and PPS (ERO Posting 019-6177)
- Ministry of Natural Resources and Forestry regarding the exception request for chair and vice-chair term limits

Source Protection Authority

The General Membership of the GRCA also acts as the Source Protection Authority Board. No meeting was held this month.

Election of Officers

The board elects a chair and vice-chair each January to serve for the coming year.

- Chris White was acclaimed as Chair of the Grand River Conservation Authority for a third one-year term
- Susan Foxton was acclaimed as Vice-Chair of the Grand River Conservation Authority for a third oneyear term

For full information, please refer to the <u>January 27 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 following the next meeting of the General Membership scheduled on February 24, 2023.

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'.



Phone: 519.621.2761 **Toll free:** 866.900.4722 **Fax:** 519.621.4844 **Online:** www.grandriver.ca

January 25, 2023 By Email: admin@puslinch.ca

Courtenay Hoytfox, Municipal Clerk Township of Puslinch 7404 Wellington Road 34 Puslinch, ON N0B 2J0

Dear Courtenay Hoytfox

Re: 2023 Grand River Conservation Authority Budget and Levy Meeting

Please be advised that the Annual General Meeting of the Grand River Conservation Authority will be held on Friday, February 24, 2023, at 9:30 a.m., to consider the 2023 Budget and General Municipal Levy.

The attached report, which includes the most recent draft of the 2023 Budget, will be presented to the GRCA General Membership on January 27, 2023. Based on board direction to staff, this draft budget includes a General Levy of \$12,968,000 which represents a 3.5% increase over 2022. The General Levy, if approved at the Annual General Meeting, will be apportioned to watershed municipalities on the basis of "Modified Current Value Assessment" as defined in Ontario Regulation 670/00.

The attached draft 2023 Budget outlines the programs and services of the Grand River Conservation Authority and how those programs are expected to be funded in 2023. Also attached is a calculation of the apportionment of the 2023 General Levy to participating municipalities. Should you have any questions concerning the draft Budget or the levy apportionment, please contact the undersigned.

Yours truly,



Karen Armstrong, Deputy CAO and Secretary-Treasurer

Grand River Conservation Authority

Report number: GM-01-23-04

Date: January 27, 2023

To: Members of the Grand River Conservation Authority

Subject: Budget 2023 – Draft #2

Recommendation:

THAT Report 01-23-04 - Budget 2023 - Draft #2 be received as information;

AND THAT an amount equal to any undesignated surplus realized from the 2022 year-end operating results be transferred to the Transition reserve at the end of 2022.

Summary:

This draft continues to present a balanced budget position for 2023.

This draft of the budget includes the following significant changes since the October 28, 2022 draft #1 budget report:

• \$1,060,000 Special Projects spending

• (\$1,060,000) Special Project funding increased

• \$ 475,000 Motor Pool capital spending increased

• (\$ 475,000) Transfer from Motor Pool Reserve increased

This report includes a recommendation to transfer a portion of the 2022 operating surplus into the transition reserve at year-end 2022.

The Final Budget will include adjustments to the Conservation Area program, Outdoor Education Program, Forestry (Tree Planting) program, special projects, expenses carried forward from 2022, and the 2022 surplus carry forward (based on audited 2022 results). These adjustments are not anticipated to affect the 2023 budgeted general levy increase of 3.5%.

This draft includes the following amounts:

- Expenditures \$34,814,188
- General Municipal Levy \$12,968,000 (\$438,000 or 3.5% increase over prior year)
- Provincial Water and Erosion Control Infrastructure (WECI) Grant \$700,000
- Provincial Source Protection Program Grant \$640,000
- Reserves to decrease by \$1,379,500 in 2023

Report:

The final 2023 budget will be presented for approval at the February 24, 2023 General Membership Meeting.

This draft of the 2023 Budget includes the following changes made since the October 28, 2022 General Membership Meeting:

Special Projects Budget 2023 (net increase in expenses \$1,060,000):

\$ 130,000	Waste Water Optimization Project expenses increased
\$ 130 000	Provincial funding increased

\$ 100,000 \$ 100,000	Ecological Restoration Project expenses increased Other Donations funding increased
\$ 25,000	Haldimand Water Festival expenses increased
\$ 25,000	Municipal Government funding increased
\$ 35,000 \$ 35,000	Brant/Brantford Water Festival expenses increased Donation funding increased
\$ 30,000	Species at Risk expenses increased
\$ 30,000	Federal Government funding increased
\$ 75,000 \$ 75,000	Nature Smart Climate Solutions expenses increased Federal Government funding increased
\$ 85,000	Profit Mapping expenses increased
\$ 85,000	Provincial funding increased
\$ 80,000	Subwatershed Study-City of Kitchener
\$ 80,000	Municipal Funding-Other
\$500,000 \$500,000	Guelph Lake NC Building expenses increased Foundation funding increased

Capital Budget 2023 (net increase in expenses \$475,000)

\$475,000	Motor Pool Equipment expenses increased (from \$375K to \$850K)
\$475.000	Transfer from Motor Pool Reserve increased

Operating Budget 2023 (no changes for draft #2)

Transition Reserve

The transition reserve was established at year-end 2020. The purpose of the reserve is to fund expenditures related to the transitioning of GRCA to new provincial regulations requirements and/or fund costs related to managing expenses impacted by COVID-19 or revenue losses due to COVID-19. It is recommended that any 2022 year-end operating surplus that has not been designated to be incorporated into the 2023 budget be transferred to the transition reserve in 2022. By February, the year-end audit will have been completed and the year-end 2022 operating surplus will be finalized and the amount to be transferred into this reserve will be incorporated into the 2023 final budget report at the February 24, 2023 General Meeting.

Significant Outstanding Budget Items

Draft #2 operating budget continues to assume status quo operations. After actual 2022 figures are finalized, the final budget will be prepared and the outstanding matters listed below will be addressed.

(a) Year 2022 Carry forward Adjustments

2022 Surplus carry forward

Budget 2023 draft #2 assumes a \$100,000 surplus carry over from year 2022. The December 2022 Financial Summary for year-end 2022 forecasts a \$650,000 surplus. Some surplus will be carried over to 2023 to cover additional costs added to the 2023 budget. Staff recommend that any 2022 surplus that is not required to achieve a breakeven 2023 budget (i.e. municipal levy increase kept to 3.5%) be transferred into the transition reserve as outlined above. The amount of surplus to be transferred to the transition reserve is estimated to be \$300,000 to \$500,000. The 2022 carry forward surplus will be updated based on the actual yearend results.

2022 Special Projects carry forward

Any projects commenced in year 2022 or earlier and not completed by December 31, 2022 will be carried forward and added to Budget 2023 (i.e. both the funding and the expense will be added to Budget 2023 and therefore these adjustments will have no impact on the breakeven net result).

(b) Conservation Areas

Conservation Area 2023 budgeted revenue is \$10,000,000. Actual 2022 revenue is approximately \$11,200,000. The final budget version will include revised operating and capital expense amounts. The program is budgeted to break even.

(c) Outdoor Education Program.

Following an analysis of actual 2022 expenses the final budget version will be revised as considered necessary.

(d) Forestry (Tree Planting) Program

Following an analysis of actual 2022 expenses the final budget version will be revised as considered necessary.

(e) Major Water Control Structures Capital Maintenance Expenditures

A final determination of the amount of spending to be added to Budget 2023 will be impacted by unspent amounts from 2022 that will be carried forward to 2023, including the use of the reserve for 2023 projects. Current government funding opportunities includes the Disaster Mitigation and Adaptation Fund (DMAF), the National Damage Mitigation Program (NDMP), and the Provincial Water and Erosion Control Infrastructure (WECI) Program.

Attached are the following related documents:

- Budget 2023 Timetable
- Summary Reserve Report Budget 2023
- Preliminary Budget 2023 Package to Municipalities

Financial Implications:

In this draft, the GRCA is proposing a \$34,814,188 budget. A net decrease to reserves of \$1,379,500 is budgeted.

The current inflationary economic situation and supply chain challenges have the potential to result in significant unbudgeted cost increases, in particular for large purchases/capital projects, which in turn may result in outcomes such as deferral of projects, changes in the scope of projects, and/or the use of reserves to fund unbudgeted costs.

Other Department Considerations:

None

Prepared by:

Sonja Radoja Manager of Corporate Services

Approved by:

Karen Armstrong
Deputy CAO/Secretary-Treasurer

Samantha Lawson
Chief Administrative Officer



2023 BUDGET

(Draft to January 27, 2023 General Board Meeting)

Grand River Conservation Authority

2023 Budget

Index

Schedules		<u>Pages</u>
1) Su	mmary Schedules	
	 GRCA 2023 Budget Highlights Summary of Revenue and Expenditures Overview - 2023 Revenue by Source Overview - 2023 Expenditures by Category GRCA Per Capita Levy 2013 to 2023 Summary of Expenditures, Funding and Change in Municipal Levy Summary of Municipal General Levy 	1-4 5 6 7 8 9 10
2) Sec	ction A – Operating Budget	11-37
	 Table 1: Water Resources Planning and Environment Table 2: Flood Forecasting and Warning Table 3: Water Control Structures Table 4: Planning Table 5: Forestry and Conservation Lands Property Tax Table 6: Conservation Services Table 7: Communications and Foundation Table 8: Outdoor Education Table 9: Corporate Services Table 10: Conservation Lands, Property Rentals, Hydro, Conservation Areas, and other Miscellaneous Revenues and Expenditure Other Information (Information Systems and Motor Pool) 	s
3) Sec	ction B – Capital Budget	38-40
4) Sec	ction C – Special Projects Budget	41-43

GRCA 2023 Budget Highlights

The Grand River Conservation Authority is a successful partnership of municipalities, working together to promote and undertake wise management of the water and natural resources of the Grand River watershed.

The Grand River stretches 300 kilometres from Dundalk in Dufferin County to Port Maitland on Lake Erie. It takes in one of the fastest growing regions in the province, with a population of approximately 1,000,000. The Grand River watershed is also home to some of the most intensively farmed land in the nation.

The prospect of high growth and the impact on water and natural resources and the quality of life present an enormous challenge to the GRCA, municipalities and all watershed residents. It creates an urgent need to work co-operatively to care wisely for the Grand River and its resources.

The work of the GRCA is divided into seven business areas:

- Reducing flood damages
- Improving water quality
- Maintaining reliable water supply
- Protecting natural areas and biodiversity
- Watershed planning
- Environmental education
- Outdoor recreation

In order to carry out these functions, the GRCA draws revenues from a variety of sources:

- User fees, such as park admissions, nature centre programs, planning fees and others
- Revenues from property rentals and hydro generation at our dams
- Municipal levies, which are applied primarily to watershed management programs
- Municipal grants dedicated to specific programs, such as the Rural Water Quality Program and Water Quality Monitoring
- Provincial transfer payments for water management operating expenses
- Provincial grants for specific purposes, such as the provincial Source Protection Program and Capital Projects related to water management
- Donations from the Grand River Conservation Foundation for programs such as outdoor education, tree nursery operations and various special projects
- Federal grants and other miscellaneous sources of revenue

The GRCA continues to work on the updates and implementation of a Drinking Water Source Protection Plan for each of the four watersheds in the Lake Erie Source Protection Region, including the Grand River watershed, as part of the provincial Source Protection Program under the *Clean Water Act*, 2006. Besides supporting municipalities and other agencies in implementing the plans, the focus in 2023 continues on completing updates to the Grand River Source Protection Plan, including development of water quantity policies, updating water quality vulnerability assessments, and the development of the annual progress report for the Grand River Source Protection Plan.

In 2022 terms of reference for a watershed-based resource management strategy was completed as part of the requirement of the Conservation Authorities Act to develop a watershed strategy. In 2023, the focus will be on developing a draft watershed-based resource management strategy and engage municipalities through the Water Managers Working group. The existing water management plan will provide important information to the watershed strategy.

Bill 23 – More Homes Built Faster Act, 2022 impacts the 2023 Budget to the extent that certain fees are being frozen and there is the potential for revenue declines due to restrictions on natural heritage resource planning services offered by Conservation Authorities.

1. Watershed Management and Monitoring

Watershed management and monitoring programs protect watershed residents from flooding and provide the information required to develop appropriate resource management strategies and to identify priority actions to maintain a healthy watershed. Activities include operation of flood and erosion control structures such as dikes and dams; flood forecasting and warning; water quality monitoring; natural heritage restoration and rehabilitation projects; water quantity assessment; watershed and subwatershed studies.

Operating Expenditures:

Water Resources Planning and Environment \$2,338,900 (Table 1)
Flood Forecasting and Warning \$923,000 (Table 2)
Water Control Structures \$1,944,200 (Table 3)

Capital Expenditures: \$1,800,000 (Section B)

Total Expenditures: \$7,006,100

Revenue sources: Municipal levies, provincial grants and reserves

2. Planning

Program areas:

- a) Natural Hazard Regulations
 - The administration of conservation authority regulations related to development in the floodplain, and other natural hazards e.g. wetlands, slopes, shorelines and watercourses.
- b) Plan Input and Review

Planning and technical review of municipal planning documents and recommending policies related to natural hazards; providing advice and information to municipal councils on development proposals and severances; review of environmental assessments.

Operating Expenditures: \$2,574,200 (Table 4)

Capital Expenditures: NIL

Revenue sources: Permit fees, enquiry fees, plan review fees, and municipal levy

3. Watershed stewardship

The watershed stewardship program provides information and/or assistance to private and public landowners and community groups on sound water and environmental practices that will enhance, restore or protect their properties. Some activities are reforestation/tree planting through the Burford Tree Nursery, the Rural Water Quality Program, restoration and rehabilitation projects. The program also, provides conservation information through workshops, publications, the web site and media contacts.

Operating Expenditures:

Forestry & Conservation Land Taxes \$ 1,402,500 (Table 5) Conservation Services \$ 605,700 (Table 6)

Capital Expenditures: NIL

Total Expenditures: \$2,008,200

Revenue sources:

Municipal levies and grants, provincial grants, tree sales, landowner contributions, donations from the Grand River Conservation Foundation and other donations.

4. Conservation Land Management

This includes expenses and revenues associated with the acquisition and management of land owned or managed by the GRCA including woodlots, provincially significant wetlands (e.g. Luther Marsh, Dunnville Marsh), passive conservation areas, rail-trails and a number of rental properties. Activities include forest management, woodlot thinning, and hydro production at our dams.

Operating Expenditures:

Conservation Lands, Rentals, Misc \$4,218,800 (Table 10-Conservation Lands)
Hydro Production \$212,000 (Table 10-Hydro Production)

Capital Expenditures: NIL

Total Expenditures: \$4,430,800

Revenue sources:

Property rentals, hydro production, timber sales, conservation land income, donations from the Grand River Conservation Foundation

5. Education

The GRCA operates six nature centres, which provide curriculum-based programs to about 50,000 students from six school boards and independent schools throughout the watershed. In addition, about 16,000 members of the public attend day camps and weekend family and community events.

Operating Expenditures: \$810,100 (Table 8)

Capital Expenditures: NIL

Revenue sources: School boards, nature centre user fees, community event fees, donations from the Grand River Conservation Foundation and municipal general levy.

6. Recreation

This includes the costs and revenues associated with operating the GRCA's 11 active conservation areas. The GRCA offers camping, hiking, fishing, swimming, skiing and other activities at its parks. It provides 2,200 campsites, making it the second-largest provider of camping accommodation in Ontario. About 1.7 million people visit GRCA parks each year.

Operating Expenditures: \$ 8,500,000 (Table 10)
Capital Expenditures: \$ 2,000,000 (Section B)

Total Expenditures: \$ 9,800,000

Revenue sources:

Conservation Area user fees, government grants, reserves and donations.

7. Corporate services & Strategic Communications

This includes the cost of head office functions such as accounting and human resources, as well as the cost of facilities, insurance, consulting and legal fees and expenses relating to the General Membership.

Operating Expenditures:

Strategic Communications \$ 597,500 (Table 7) Corporate Services \$3,568,288 (Table 9)

Capital Expenditures: \$ 779,000 (Section B)

Total Expenditures: \$4,944,788

Revenue sources: Municipal levies and reserves.

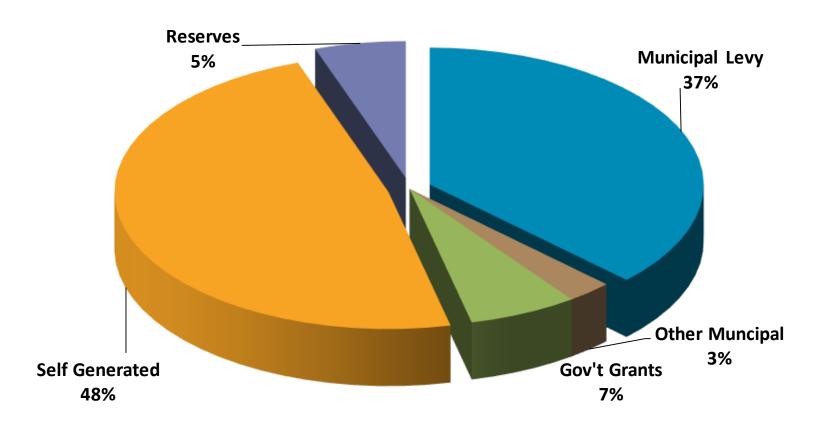
GRAND RIVER CONSERVATION AUTHORITY

BUDGET 2023 - Summary of Revenue and Expenditures

FUNDING	_	Actual 2021	Budget 2022	Budget 2023	Budget Incr/(decr)
Municipal General Levy Funding	-	12,225,000	12,530,000	12,968,000	438,000 3.50%
Other Government Grants		3,131,738	3,927,188	3,172,188	(755,000) -19.2%
Self-Generated Revenue		16,021,037	16,273,177	16,803,000	529,823
Funding from Reserves		494,912	2,144,000	1,871,000	3.3% (273,000) -12.7%
TOTAL FUNDING		31,872,687	34,874,365	34,814,188	(60,177)
EXPENDITURES					-0.2%
EXI ENDITORES		Actual 2021	Budget 2022	Budget 2023	Budget Incr/(decr)
	_				2 4 4 9 4 11 10 17 (4 2 2 1)
Base Programs - Operating includes funding to reserves	SECTION A	27,048,151	26,497,365	27,695,188	1,197,823
	SECTION A	27,048,151 2,150,870	<u> </u>	27,695,188 4,579,000	1,197,823 4.52% (523,000)
includes funding to reserves			26,497,365		1,197,823 4.52% (523,000) -10.25% (735,000)
includes funding to reserves Base Programs - Capital	SECTION B	2,150,870	26,497,365 5,102,000	4,579,000	1,197,823 4.52% (523,000) -10.25% (735,000) -22.4%
includes funding to reserves Base Programs - Capital Special Projects	SECTION B	2,150,870 2,106,489	26,497,365 5,102,000 3,275,000	4,579,000 2,540,000	1,197,823 4.52% (523,000) -10.25% (735,000)

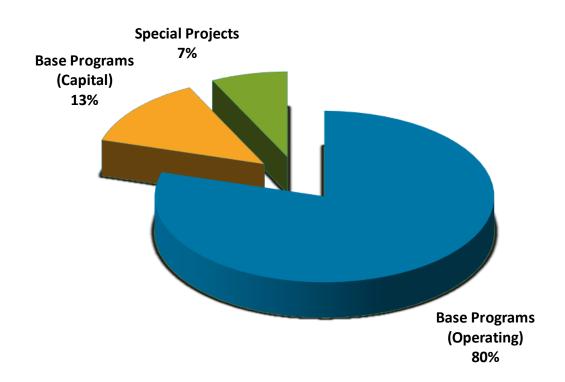
Budget – Revenue by Source

Total 2023 Budget Revenue = \$34.8 Million (\$ 34.9 Million in 2022)

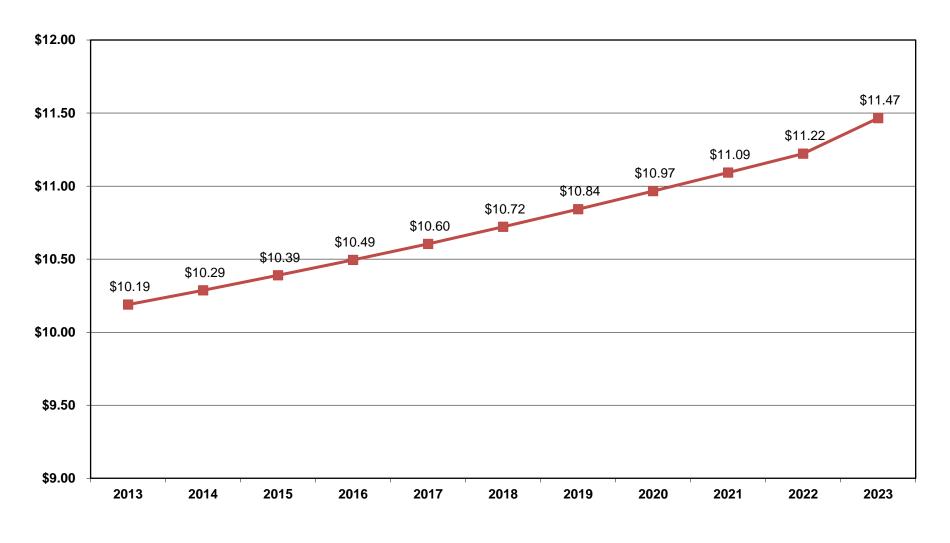


Budget – Expenditures by Category

2023 Budget Expenditures = \$34.8 Million (\$ 34.9 Million in 2022)



Grand River Conservation Authority Per Capita General Levy 2013 to 2023



GRAND RIVER CONSERVATION AUTHORITY

Budget 2023 - Summary of Expenditures, Funding and Change in Municipal Levy

		TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 9	TABLE 10	TABLE 10	TABLE 10	
		Water Resources Planning & Environment	Flood Forecasting & Warning	Water Control Structures	Resource Planning	Forestry & Conservation Land Taxes	Conservation Services	Communications	Environmental Education	Corporate Services	Loss/(Surplus) impact on Muncipal Levy Increase	Conservation Land and Rental Management and Misc	Hydro Production	Conservation Areas	TOTAL
2023 OPERATING															
TOTAL EXPENSES	Α	2,338,900	923,000	1,944,200	2,574,200	1,402,500	605,700	597,500	810,100	3,568,288		4,218,800	212,000	8,500,000	27,695,188
TOTAL OTHER FUNDING	В	87,500	224,338	355,350	1,189,000	607,000	31,000	0	500,000	135,000		3,368,000	580,000	8,500,000	15,577,188
Other Programs" Surplus/(Loss) Loss to be offset with Surplus Surplus 2021 carriedforward to 2022	B less A C										482,800 (100,000)	(850,800)	368,000	-	(482,800) (482,800) 100,000
2023 Levy	A less B less C	2,251,400	698,662	1,588,850	1,385,200	795,500	574,700	597,500	310,100	3,433,288	382,800	0	0	0	12,018,000
															0
Levy Increase:															
2023 Levy		2,251,400	698,662	1,588,850	1,385,200	795,500	574,700	597,500	310,100	3,433,288	382,800				12,018,000
2022 Levy		2,179,900	678,662	1,537,350	1,307,200	773,500	555,200	577,500	284,600	3,786,565	(100,477)				11,580,000
Levy Increase over prior year		71,500	20,000	51,500	78,000	22,000	19,500	20,000	25,500	(353,277)	483,277	n/a	n/a	n/a	438,000
	ı														
2023 CAPTAL		Water Resources Planning & Environment	Flood Forecasting & Warning	Water Control Structures						Corporate Services				Conservation Areas	
TOTAL EXPENSES	Α	110,000	190,000	1,500,000						779,000				2,000,000	4,579,000
TOTAL OTHER FUNDING	В	75,000	25,000	750,000						779,000				2,000,000	3,629,000
2023 Levy	A less B	35,000	165,000	750,000						-				=	950,000
Levy Increase:															
2023 Levy		35,000	165,000	750,000						-				-	950,000
2022 Levy		35,000	165,000	750,000						-				-	950,000
Levy Increase/(decrease) over prior year		-	-	-						-				-	-
	I	-										Conservation			
2023 SPECIAL		Water Resources Planning & Environment	Flood Forecasting & Warning	Source Protection Program		Forestry & Conservation Land Taxes	Conservation Services	Communications	Environmental Education			Land and Rental Management and Misc	Hydro Production		
TOTAL EXPENSES	Α	210,000		640,000		100,000	1,090,000		500,000						2,540,000
TOTAL OTHER FUNDING	В	210,000		640,000		100,000	1,090,000		500,000			-			2,540,000
2023 Levy	A less B	-	-			-	-	-		-		-			-
,														TOTAL EXPENSES TOTAL FUNDING NET RESULT	34,814,188 34,814,188 -

Grand River Conservation Authority Summary of Municipal Levy - 2023 Budget

DRAFT - January 27, 2023

	% CVA in Watershed	2022 CVA (Modified)	CVA in Watershed	CVA-Based Apportionment	2023 Budget Matching Admin & Maintenance Levy	2023 Budget Non-Matching Admin & Maintenance Levy	2023 Budget Capital Maintenance* Levy	2023 Budget Total Levy	Actual 2022	% Change
Brant County	82.9%	7,349,082,037	6,092,389,009	2.92%	13,125	337,655	27,729	378,509	361,733	4.6%
Brantford C	100.0%	15,438,439,128	15,438,439,128	7.40%	33,261	855,636	70,266	959,163	925,478	3.6%
Amaranth Twp	82.0%	823,007,110	674,865,830	0.32%	1,454	37,403	3,072	41,929	40,312	4.0%
East Garafraxa Twp	80.0%	646,737,870	517,390,296	0.25%	1,115	28,675	2,355	32,145	31,052	3.5%
Town of Grand Valley	100.0%	602,204,454	602,204,454	0.29%	1,297	33,376	2,741	37,414	34,921	7.1%
Melancthon Twp	56.0%	605,191,515	338,907,248	0.16%	730	18,783	1,542	21,055	20,387	3.3%
Southgate Twp	6.0%	1,095,001,488	65,700,089	0.03%	142	3,641	299	4,082	3,913	4.3%
Haldimand County	41.0%	7,387,846,603	3,029,017,107	1.45%	6,526	167,875	13,786	188,187	180,063	4.5%
Norfolk County	5.0%	9,785,538,892	489,276,945	0.23%	1,054	27,117	2,227	30,398	29,714	2.3%
Halton Region	10.5%	48,462,400,444	5,103,428,670	2.44%	10,995	282,844	23,227	317,066	304,589	4.1%
Hamilton City	26.8%	96,614,037,173	25,844,254,944	12.38%	55,679	1,432,351	117,626	1,605,656	1,557,692	3.1%
Oxford County	36.5%	4,574,385,729	1,667,806,332	0.80%	3,593	92,434	7,591	103,618	100,481	3.1%
North Perth T	2.0%	2,359,924,293	47,198,486	0.02%	102	2,616	215	2,933	2,779	5.5%
Perth East Twp	40.0%	2,078,521,741	831,408,696	0.40%	1,791	46,079	3,784	51,654	49,597	4.1%
Waterloo Region	100.0%	105,303,687,542	105,303,687,542	50.45%	226,867	5,836,184	479,273	6,542,324	6,325,085	3.4%
Centre Wellington Twp	100.0%	5,401,783,927	5,401,783,927	2.59%	11,638	299,380	24,585	335,603	319,769	5.0%
Erin T	49.0%	2,607,980,359	1,277,910,376	0.61%	2,753	70,825	5,816	79,394	77,102	3.0%
Guelph C	100.0%	28,289,926,279	28,289,926,279	13.55%	60,948	1,567,896	128,757	1,757,601	1,702,688	3.2%
Guelph Eramosa Twp	100.0%	2,930,879,758	2,930,879,758	1.40%	6,314	162,436	13,339	182,089	176,486	3.2%
Mapleton Twp	95.0%	1,881,798,619	1,787,708,688	0.86%	3,851	99,079	8,136	111,066	106,574	4.2%
Wellington North Twp	51.0%	1,801,568,972	918,800,176	0.44%	1,979	50,922	4,182	57,083	55,274	3.3%
Puslinch Twp	75.0%	2,769,118,798	2,076,839,099	0.99%	4,474	115,103	9,452	129,029	124,311	3.8%
Total		348,809,062,729	208,729,823,079	100.00%	449,688	11,568,310	950,000	12,968,000	12,530,000	3.5%

^{*}Capital Maintenance Levy represents levy allocated to maintenance of capital infrastructure, studies, and/or equipment.

SECTION A BASE PROGRAMS – OPERATING

SECTION A - Operating Budget GRAND RIVER CONSERVATION AUTHORITY

Budget 2023 vs Budget 2022

EVENDITUES	Actual 2021	Budget 2022	Budget 2023	Incr/(Decr)	%age change
EXPENDITURES OPERATING EXPENSES	27,048,151	26,497,365	27,695,188	1,197,823	4.52%
Total Expenses	27,048,151	26,497,365	27,695,188	1,197,823	4.52%
SOURCES OF FUNDING					
MUNICIPAL GENERAL LEVY (NOTE)	10,701,206	11,580,000	12,018,000	438,000	3.78%
MUNICIPAL SPECIAL LEVY	43,047	50,000	50,000	-	0.00%
OTHER GOVT FUNDING	636,502	517,188	517,188	-	0.00%
SELF-GENERATED	15,035,681	13,666,000	14,568,000	902,000	6.60%
RESERVES	315,474	117,000	442,000	325,000	277.78%
SURPLUS CARRYFORWARD	316,241	567,177	100,000	(467,177)	-82.37%
Total BASE Funding	27,048,151	26,497,365	27,695,188	1,197,823	4.52%

NOTE: See "Summary of Revenue, Expenditures and Changes in Municipal Levy" for details of \$438,000 levy increase.

TABLE 1

(a) Watershed Studies

This category includes watershed and subwatershed studies. These studies provide the strategic framework for understanding water resources and ecosystem form, functions and linkages. These allow for assessment of the impacts of changes in watershed resources and land use. Watershed studies also identify activities and actions that are needed to minimize the adverse impacts of change. This program supports other plans and programs that promote healthy watersheds.

Specific Activities:

- Carry out or partner with municipalities and other stakeholders on integrated subwatershed plans for streams and tributaries. Subwatershed Plans are technical reports which provide comprehensive background on how surface water, groundwater, terrestrial and aquatic ecosystems function in a subwatershed. The plans recommend how planned changes such as urbanization can take place in a sustainable manner. Subwatershed studies are ongoing or planned in the City of Kitchener, Region of Waterloo, City of Guelph and City of Brantford.
- In 2022 terms of reference for a watershed-based resource management strategy was completed as part of the requirement of the Conservation Authorities Act to develop a watershed strategy. In 2023, the focus will be on developing a draft watershed-based resource management strategy and engage municipalities through the Water Managers Working group.

(b) Water Resources Planning and Environment and Support

This category includes the collection and analysis of environmental data and the development of management plans for protection and management of water resources and natural heritage systems. These programs assist with implementation of monitoring water and natural resources and assessment of changes in watershed health and priority management areas.

- operate 8 continuous river water quality monitoring stations, 73 stream flow monitoring stations, 27 groundwater monitoring stations, and 37 water quality monitoring stations in conjunction with MOE, apply state-of-the-art water quality assimilation model to determine optimum sewage treatment options in the central Grand, and provide technical input to municipal water quality issues
- analyze and report on water quality conditions in the Grand River watershed
- maintain a water budget to support sustainable water use in the watershed, and maintain a drought response program
- analyze water use data for the watershed and provide recommendations for water conservation approaches

• provide advice to Provincial Ministries regarding water use permits to ensure that significant environmental concerns are identified so that potential impacts can be addressed.

(c) Water Management Division Support

Provides support services to the Water Management Division including support for Flood Forecasting and Warning and Water Control Structures.

Specific Spending:

- administrative services
- travel, communication, staff development and computer
- insurance

(d) Natural Heritage Management

The natural heritage management program includes those activities associated with providing service and/or assistance to private and public landowners and community groups on sound environmental practices that will enhance, restore or protect the aquatic and terrestrial ecosystems. The program includes watershed scale natural heritage assessments and implements restoration activities on GRCA land.

- implement "best bets" for protection and enhancement of fisheries, work with outside agencies, non-government organizations and the public to improve fish habitat through stream rehabilitation projects including the implementation of the recommendations of the watershed studies.
- maintain and implement the Forest Management Plan for the Grand River watershed and develop and implement components of the watershed Emerald Ash Borer strategy
- carry out restoration and rehabilitation projects for aquatic and terrestrial ecosystems e.g. species at risk and ecological monitoring on GRCA lands, and prescribed burn activities and community events such as tree planting and stream restoration

TABLE 1
GRAND RIVER CONSERVATION AUTHORITY
Water Resources Planning & Environment

Actual 2021	Budget 2022	Budget 2023	Budget Change
			incr/(decr)
1,380,849	1,684,000	1,706,500	22,500
175,035	268,300	268,300	(
122,304	150,000	199,000	49,000
100,978	165,100	165,100	(
336,000	-	<u> </u>	(
2,115,166	2,267,400	2,338,900	71,500
			(incr)/decr
43,047	50,000	50,000	0
-	37,500	37,500	0
-	-	<u>-</u> _	0
43,047	87,500	87,500	-
2,072,119	2,179,900	2,251,400	
			71,50
	1,380,849 175,035 122,304 100,978 336,000 2,115,166 43,047	1,380,849	1,380,849 1,684,000 1,706,500 175,035 268,300 268,300 122,304 150,000 199,000 100,978 165,100 165,100 336,000 - - 2,115,166 2,267,400 2,338,900 43,047 50,000 50,000 - 37,500 37,500 - - - 43,047 87,500 87,500

TABLE 2

Flood Forecasting and Warning

The flood warning system includes the direct costs associated with monitoring the streams, and rivers in order to effectively provide warnings and guidance to municipalities and watershed residents during flood emergencies.

Overall, flood protection services provide watershed residents with an effective and efficient system that will reduce their exposure to the threat of flood damage and loss of life. It is estimated that the existing flood protection in the Grand River watershed saves an average of over \$5.0 million annually in property damage.

- maintain a 'state of the art' computerized flood forecasting and warning system.
- operate a 24 hour, year-round, on-call duty officer system to respond to flooding matters.
- collect and manage data on rainfall, water quantity, reservoir conditions, water levels from 56 stream flow gauges, 24 rainfall gauges, and 12 snow courses.
- use Ignition system to continuously, monitor river conditions and detect warning levels, assist municipalities with emergency planning, and respond to thousands of inquiries each year.
- assist municipalities with municipal emergency planning and participate in municipal emergency planning exercises when requested.
- hold municipal flood coordinator meetings twice a year to confirm responsibilities of agencies involved in the flood warning system. Test the system. Update and publish a flood warning system guide containing up to date emergency contact information. Maintain update to date emergency contact information throughout the year.

TABLE 2
GRAND RIVER CONSERVATION AUTHORITY
Flood Forecasting & Warning

Actual 2021	Budget 2022	Budget 2023	chang
			:
386 520	400 000	570,000	incr/(de 80,0
,	,	•	00,0
•	,	•	
111,776	108,000	108,000	•
734.467	843.000	923.000	80,0
	0.10,000	0_0,000	
			(incr)/d
164,338	164,338	164,338	
(53)	-	-	
` ,		60,000	(60,
164,285	164,338	224,338	(60,
570,182	678,662	698,662	
	(53) 164,285	236,160 236,000 111,778 108,000 - 734,467 843,000 164,338 164,338 (53) - 164,285 164,338	236,160 236,000 236,000 111,778 108,000 108,000

TABLE 3

Water Control Structures

This category includes costs associated with the capital and maintenance of structures, the primary purpose of which is to provide protection to life and property. These structures include dams, dykes, berms and channels etc. Also included in this category are non-flood control dams and weirs, which maintain upstream water levels.

Overall, flood protection services provide watershed residents with an effective and efficient system that will reduce their exposure to the threat of flood damage and loss of life. It is estimated that the existing flood protection in the Grand River watershed saves an average of over \$5.0 million annually in property damage.

- operate and maintain 7 major multi-purpose reservoirs, which provide flood protection and flow augmentation, and 25 kilometres of dykes in 5 major dyke systems (Kitchener-Bridgeport, Cambridge-Galt, Brantford, Drayton and New Hamburg)
- ensure structural integrity of flood protection infrastructure through dam safety reviews, inspections and monitoring, reconstruction of deteriorating sections of floodwalls and refurbishing of major components of dams and dykes.
- carry out capital upgrades to the flood control structures in order to meet Provincial standards
- operate and maintain 22 non-flood control dams, which are primarily for aesthetic, recreational, municipal fire suppression water supply or municipal drinking water supply intake purposes
- develop and implement plans to decommission failing or obsolete dams
- ice management activities to prevent or respond to flooding resulting from ice jams
- develop and implement public safety plans for structures

TABLE 3
GRAND RIVER CONSERVATION AUTHORITY
Water Control Structures

OPER	ATING	Actual 2021	Budget 2022	Budget 2023	Budget change
Expenses	<u>S:</u>				incr/(decr)
	Salary and Benefits	1,159,637	1,278,000	1,399,500	121,500
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	31,939	29,200	29,200	-
	Property Taxes	156,533	170,700	170,700	=
	Other Operating Expenses	288,690	344,800	344,800	=
	Amount set aside to Reserves	251,000	=	=	=
	TOTAL EXPENSE	1,887,799	1,822,700	1,944,200	121,500
<u>Funding</u>					(incr)/decr
	MNR Grant Funds taken from Reserves	285,350	285,350	285,350 70,000	70,000
	TOTAL FUNDING	285,350	285,350	355,350	70,000
	Net Funded by General Municipal Levy	1,602,449	1,537,350	1,588,850	
	Net incr/(decr) to Municipal Levy				51,500

(a) PLANNING - Regulations

This category includes costs and revenues associated with administering the *Development*, *Interference with Wetlands and Alternations to Shorelines and Watercourses Regulation* made under the *Conservation Authorities Act*. This includes permit review, inspections, permit issuance, enforcement and follow-up, which may include defending appeals.

- Process over 1,000 permits each year related to development, alteration or activities that may interfere with the following types of lands:
 - ravines, valleys, steep slopes
 - wetlands including swamps, marshes, bogs, and fens
 - any watercourse, river, creek, floodplain or valley land
 - the Lake Erie shoreline
- The regulation applies to the development activities listed below in the areas listed above:
 - the construction, reconstruction, erection or placing of a building or structure of any kind,
 - any change to a building or structure that would have the effect of altering the use
 or potential use of the building or structure, increasing the size of the building or
 structure or increasing the number of dwelling units in the building or structure
 - site grading
 - the temporary or permanent placing, dumping or removal of any material originating on the site or elsewhere.
- maintain policies and guidelines to assist in the protection of people and property (i.e. Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation)
- enforcement of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation and maintain compliance policies and procedures
- update and maintain flood line mapping; develop natural hazards mapping in digital format to be integrated into municipal planning documents and Geographic Information Systems

(b) PLANNING - Municipal Plan Input and Review

This program includes costs and revenues associated with reviewing Official Plans, Secondary and Community Plans, Zoning Bylaws, Environmental Assessments, development applications and other proposals, in accordance with Conservation Authority and provincial or municipal agreements.

- review municipal planning and master plan documents and recommend environmental policies and designations for floodplains, wetlands, natural heritage areas, fisheries habitat, hazard lands and shorelines, which support GRCA regulations and complement provincial polices and federal regulations
- provide advice to municipalities regarding environmental assessments, and other
 proposals such as aggregate and municipal drain applications to ensure that all natural
 hazard concerns are adequately identified and that any adverse impacts are minimized
 or mitigated
- provide information and technical advice to Municipal Councils and Committees and Land Division Committees regarding development applications to assist in making wise land use decisions regarding protection of people and property from natural hazard areas such as flood plains, erosion areas, Lake Erie shoreline, watercourses and wetlands.

TABLE 4
GRAND RIVER CONSERVATION AUTHORITY
Resource Planning

OPER	ATING	Actual 2021	Budget 2022	Budget 2023	Budget change
Expenses	<u>s:</u>				incr/(decr)
	Salary and Benefits	1,736,286	2,074,000	2,297,000	223,000
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	183,298	222,500	222,500	-
	Other Operating Expenses	51,609	54,700	54,700	-
	Amount set aside to Reserves	310,000		-	
	•	2,281,193	2,351,200	2,574,200	223,000
<u>Funding</u>	Self Generated Funds taken from Reserves	1,190,560	1,044,000	1,144,000 45,000	(incr)/decr (100,000) (45,000)
	TOTAL FUNDING	1,190,560	1,044,000	1,189,000	(145,000)
	Net Funded by General Municipal Levy	1,090,633	1,307,200	1,385,200	
	Net incr/(decr) to Municipal Levy				78,000

Forestry & Property Taxes

The forestry program includes those activities associated with providing service and/or assistance to private and public landowners and community groups on sound environmental practices that will enhance, restore or protect their properties.

This category includes direct delivery of remediation programs including tree planting/reforestation.

General Municipal Levy funds the property tax for GRCA owned natural areas/passive lands.

- plant trees on private lands (cost recovery from landowner)
- operate Burford Tree Nursery to grow and supply native and threatened species
- carry out tree planting and other forest management programs on over 7,000 hectares of managed forests on GRCA owned lands
- hazard tree management to protect people and property

TABLE 5
GRAND RIVER CONSERVATION AUTHORITY
Forestry & Conservation Land Taxes

<u>OPERATING</u>		Actual 2021	Budget 2021	Budget 2022	Budget change
Expenses:					incr/(decr)
Salary and Benefits		467,005	531,000	553,000	22,000
Travel, Motor Pool, Expenses,Te	ephone, Training and Development, IT	46,925	54,300	54,300	0
Property Taxes		167,524	183,200	183,200	0
Other Operating Expenses		533,611	612,000	612,000	0
Amount set aside to Reserves		100,000			0
TOTAL EXPENSE		1,315,065	1,380,500	1,402,500	22,000
<u>Funding</u>					(incr)/decr
Donations		15,198	27,000	27,000	-
Self Generated		600,015	580,000	580,000	
TOTAL FUNDING		615,213	607,000	607,000	0
Net Funded by General Municipal Levy		699,852	773,500	795,500	
Net incr/(decr) to Municipal Lev	у				22,000

Conservation Services

The Conservation Services program includes those activities associated with providing service and/or assistance to private and public landowners and community groups implementing projects to conserve and enhance natural resources on their properties.

This category includes the Rural Water Quality program and Forestry extension services.

- Co-ordinate the Rural Water Quality Program. This involves landowner contact, community outreach and delivery of a grant program to encourage adoption of agricultural management practices and projects to improve and protect water quality. Funding for this important initiative comes from watershed municipalities and other government grants.
- Carry out tree planting, and naturalization projects with private landowners
- Co-ordinate community events e.g. children's water festivals and agricultural and rural landowner workshops to promote landowner environmental stewardship action

TABLE 6
GRAND RIVER CONSERVATION AUTHORITY
Conservation Services

OPER/	ATING	Actual 2021	Budget 2022	Budget 2023	Budget change
Expenses	<u>:</u>				incr/(decr)
	Salary and Benefits	410,257	478,000	497,500	19,500
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	50,831	86,200	86,200	-
	Other Operating Expenses	1,432	22,000	22,000	-
	Amount set aside to Reserves	125,000		-	
	TOTAL EXPENSE	587,520	586,200	605,700	19,500
Funding					(incr)/decr
	Prov & Federal Govt	-	30,000	30,000	-
	Funds taken from Reserves	552	1,000	1,000	
	TOTAL FUNDING	552	31,000	31,000	-
	Net Funded by General Municipal Levy	586,968	555,200	574,700	
	Net incr/(decr) to Municipal Levy				19,500

Strategic Communications

The communications department provides a wide range of services and support for the GRCA, the Grand River Conservation Foundation, and the Lake Erie Region Source Protection Program. This category includes watershed-wide communication and promotion of conservation issues to watershed residents, municipalities and other agencies.

Communications - Specific Activities:

- Media relations
- Public relations and awareness building
- Online communications
- Issues management and crisis communications
- Community engagement and public consultation
- Corporate brand management

TABLE 7
GRAND RIVER CONSERVATION AUTHORITY
Strategic Communications

<u>OPERATING</u>	Actual 2021	Budget 2022	Budget 2023	Budget chang
Expenses:				incr/(decr)
Salary and Benefits	358,234	492,000	512,000	20,000
Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	42,067	62,000	62,000	-
Other Operating Expenses	3,885	23,500	23,500	-
Amount set aside to Reserves	55,000		-	-
TOTAL EXPENSE	459,186	577,500	597,500	20,000
<u>Funding</u>				
Net Funded by General Municipal Levy	459,186	577,500	597,500	
Net incr/(decr) to Municipal Levy				20,000

Environmental Education

This category includes costs and revenues associated with outdoor education facilities, which provide education and information about conservation, the environment and the Conservation Authority's programs to 50,000 students in 6 school boards and 16,000 members of the general public annually. The majority of funding for this program comes from school boards, the Grand River Conservation Foundation and public program fees.

- operate 6 outdoor education centres under contract with watershed school boards, providing hands-on, curriculum-based, outdoor education (App's Mills near Brantford, Taquanyah near Cayuga, Guelph Lake, Laurel Creek in Waterloo, Shade's Mills in Cambridge and Rockwood)
- offer curriculum support materials and workshops to watershed school boards
- offer conservation day camps to watershed children and interpretive community programs to the public (user fees apply)

TABLE 8
GRAND RIVER CONSERVATION AUTHORITY
Environmental Education

<u>OPERATING</u>	Actual 2021	Budget 2022	Budget 2023	Budget change
Expenses:				incr/(decr)
Salary and Benefits	430,437	553,000	574,500	21,500
Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	48,032	57,000	57,000	0
Insurance	15,491	17,000	21,000	4,000
Property Taxes	10,048	14,000	14,000	0
Other Operating Expenses	144,476	143,600	143,600	0
Amount set aside to Reserves	55,000	0	0_	0
TOTAL EXPENSE	703,484	784,600	810,100	25,500
Funding				(incr)/decr
Provincial & Federal Grants	748	0	0	0
Self Generated	362,912	500,000	500,000	0
TOTAL FUNDING	363,660	500,000	500,000	0
Net Funded by General Municipal Levy	339,824	284,600	310,100	
Net incr/(decr) to Municipal Levy				25,500

CORPORATE SERVICES

This category includes the costs for goods and services, as listed below, that are provided corporately. A small portion of these costs is recovered from provincial grants, namely from source protection program funding and from the MNR operating grant.

Specific Activities:

This category includes the following departments:

- Office of the Chief Administrative Officer and the Assistant Chief Administrative Officer/Secretary-Treasurer
- Finance
- Human Resources
- Payroll
- Health & Safety
- Office Services

In addition, this category includes expenses relating to:

- The General Membership
- Head Office Building
- Office Supplies, Postage, Bank fees
- Head Office Communication systems
- Insurance
- Audit fees
- Consulting, Legal, Labour Relations fees
- Health and Safety Equipment, Inspections, Training
- Conservation Ontario fees
- Corporate Professional Development
- General expenses

GRAND RIVER CONSERVATION AUTHORITY

Corporate Services

	·		
			Deficit to be funded
Budge	t 2023		with Muncipal Levy
Expenses	<u> </u>		
	Salary and Benefits	2,133,000	
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	359,000	
	Insurance	127,000	
	Other Operating Expenses	949,288	
	Amount set aside to Reserves	2 500 000	
Eunding	TOTAL EXPENSE	3,568,288	
<u>Funding</u>	Recoverable Corporate Services Expenses	70,000	
	Funds taken from Reserves	65,000	
	TOTAL FUNDING	135,000	
	TOTAL TORDING	133,000	
	Net Result before surplus adjustments	3,433,288	
	Deficit from Other Programs offset by 2022 Surplus Carryforward	-,,	(482,800)
	2022 Surplus Carried Forward to 2023 used to reduce Levy		100,000
	Net Funded by General Municipal Levy	3,433,288	(382,800)
			Surplus available to
Dudge	4 2022		offset Muncipal Levy Increase
Budge			Levy Increase
Expenses		0.054.000	
	Salary and Benefits	2,051,000	
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	379,000	
	Insurance	103,000	
	Other Operating Expenses	1,338,565	
Funding	TOTAL EXPENSE	3,871,565	
<u>r ununig</u>	Recoverable Corporate Services Expenses	70,000	
	Funds taken from Reserves	15,000	
	TOTAL FUNDING	85,000	
	Net Result before surplus adjustments	3,786,565	
	Deficit from Other Programs offset by 2021 Surplus Carryforward		(466,700)
	2021 Surplus Carried Forward to 2022 used to reduce Levy		567,177
	Net Funded by General Municipal Levy	3,786,565	100,477
			Surplus available to
A OTH	NI 0004		offset Muncipal
ACTU	AL 2021		Levy
Expenses			
	Salary and Benefits	1,977,881	
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	311,950	
	Insurance	83,833	
	Other Operating Expenses	835,919	
	Amount set aside to Reserves	490,000	
	TOTAL EXPENSE	3,699,583	
<u>Funding</u>	D 1 110 /	500	
	Provincial Grant	500	
	Donations/Other	64.040	
	Recoverable Corporate Services Expenses	61,040	
	TOTAL FUNDING	61,540	
	Net Result before surplus/(deficit) adjustments	3,638,043	
	2021 Surplus from Other Programs used to reduce Levy	0,000,040	41,809
	2020 Surplus Carried Forward to 2021 used to reduce Levy		316,241
	Net Funded by General Municipal Levy	3,638,043	358,050
	Test and a protocol manosparacy	-,,	

TABLE 10 (a)

Conservation Lands, Rental Properties, Forestry & Misc

The Conservation Land Management Program includes all expenses and revenues associated with acquisition and management of land owned/managed by the Authority. This includes protection of provincially significant conservation lands, woodlot management, rental/lease agreements and other revenues generated from managing lands and facilities. These expenses do not include those associated with the "active" Conservation Areas and outdoor education programs on GRCA lands.

- acquire and manage significant wetlands and floodplain lands, e.g. the Luther Marsh Wildlife Management Area, the Keldon Source Area, the Bannister-Wrigley Complex, and the Dunnville Marsh
- operate "passive" conservation areas in order to conserve forests and wildlife habitat (Puslinch Tract in Puslinch, Snyder's Flats in Bloomingdale, etc.). Some are managed by municipalities or private organizations (Chicopee Ski Club in Kitchener, Scott Park in New Hamburg, etc.)
- develop and maintain extensive trail network on former rail lines owned by GRCA and municipalities (much of this is part of the Trans-Canada Trail network). The Grand River Conservation Foundation is one source of funding for the trails.
- rent 733 cottage lots at Belwood Lake and Conestogo Lake; hold leases on over 1200 hectares of agricultural land and 8 residential units, and over 50 other agreements for use of GRCA lands. Income from these rentals aids in the financing of other GRCA programs
- permit hunting at various locations including Luther Marsh Wildlife Management Area and Conestogo Lake
- carry out forestry disease control, woodlot thinning and selective harvesting on GRCA lands in accordance with the Forest Management Plan while generating income from sale of timber. Income generated helps pay for future forest management activities
- where appropriate, dispose of lands that have been declared surplus and continue to identify and plan for disposition of other surplus lands. Proceeds from future dispositions will be used for acquisition of "Environmentally Significant Conservation Lands" and for other core programs
- payment of non-insured losses and deductibles for vandalism, loss or theft; miscellaneous amounts recovered from insurance settlements

• investment income arising from reserves and funds received in advance of program expenses

TABLE 10 (b)

HYDRO PRODUCTION

This program generates revenue from 'hydro production'.

Specific Activities:

• generate hydro from turbines in 4 dams, Shand, Conestogo, Guelph and Drimmie; the income is used to fund GRCA programs and repay reserves accordingly for the cost of building/repairing turbines.

TABLE 10 (c)

CONSERVATION AREAS

These programs include costs and revenues associated with delivering recreational programs on GRCA lands and include the costs and revenues associated with day-use, camping, concessions and other activities at GRCA active Conservation Areas.

- operate 11 "active" Conservation Areas (8 camping and 3 exclusively day-use) that are enjoyed by over 1.7 million visitors annually. These visitors also help generate significant spin-off revenues for the local economies
- offer camping, hiking, fishing, swimming, boating, picnicking, skiing and related facilities
- provide 2,200 campsites second only to the provincial park system as a provider of camping accommodation in Ontario
- employ seasonally over 230 students within the conservation areas

GRAND RIVER CONSERVATION AUTHORITY

OTHER PROGRAMS - OPERATING - SUMMARY of Results

						1		1		1	
					(a)						TOTAL Other
		Componention I and	Dramantii Dantala	MISC	Cons Lands, Rental, Misc		(b) Hydro Production		(c) Conservation Areas		Programs
		Conservation Lands	Property Rentals	MISC	MISC		Hydro Production		Conservation Areas		Programs
	t 2023 - OPERATING										
Expenses											
	Salary and Benefits	1,540,000	731,000	-	2,271,000		70,000		4,675,000		
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	152,600	74,500	-	227,100		-		210,000		
	Insurance Property Taxes	290,000	35,000 88,000	-	325,000 88,000		-		65,000		
	Other Operating Expenses (consulting etc)	606,000	701,700	-	1,307,700		25,500		3,550,000		
	Amount set aside to Reserves	-	701,700	-	1,307,700		116,500		3,330,000		
	TOTAL EXPENSE	2.588.600	1.630.200	-	4,218,800		212,000		8,500,000		12.930.800
Funding		, ,	,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,		, , , , , , , , , , , , , , , , , , , ,		,,
	Self Generated	86,000	2,981,000	100,000	3,167,000		580,000		8,500,000		
	Funds taken from Reserves	101,000	100,000	-	201,000		-		-		
	TOTAL FUNDING	187,000	3,081,000	100,000	3,368,000		580,000		8,500,000		12,448,000
		(0.404.000)	4.450.000	400.000	/		000 000				(400,000)
	NET Surplus/(Deficit) for programs not funded by general levy	(2,401,600)	1,450,800	100,000	(850,800)		368,000		-		(482,800)
		-			(a)		+				TOTAL OU
					Cons Lands, Rental,		(b)		(c)		TOTAL Other
		Conservation Lands	Property Rentals	MISC	Misc		Hydro Production		Conservation Areas		Programs
Budge	t 2022 - OPERATING										
Expenses	<u>x</u>										
	Salary and Benefits	1,384,500	703,400	-	2,087,900		68,000		4,300,000		
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	152,600	74,500	-	227,100		-		195,000		
	Insurance	234,000	28,000	-	262,000		-		-		
	Property Taxes	-	88,000	-	88,000		-		65,000		
	Other Operating Expenses (consulting etc)	606,000	701,700	30,000	1,337,700		25,500		3,240,000		
	Amount set aside to Reserves TOTAL EXPENSE	2,377,100	1,595,600	30,000	4,002,700		116,500 210,000		7,800,000		12,012,700
Funding	TOTAL EXPENSE	2,377,100	1,333,000	30,000	4,002,700		210,000		7,000,000		12,012,700
<u>r ununing</u>	Self Generated	86,000	2,921,000	108,000	3,115,000		530,000		7,800,000		
	Funds taken from Reserves	1,000	100,000	-	101,000		-		-		
	TOTAL FUNDING	87,000	3,021,000	108,000	3,216,000		530,000		7,800,000		11,546,000
	NET Surplus/(Deficit) for programs not funded by general levy	(2,290,100)	1,425,400	78,000	(786,700)		320,000		-		(466,700)
					(a)						
					Cons Lands, Rental,		(b)		(c)		TOTAL Other
<u>Actual</u>	2021 - OPERATING	Conservation Lands	Property Rentals	MISC	Misc		Hydro Production		Conservation Areas		Programs
Expenses	S:										
	Salary and Benefits	1,121,516	577,516	-	1,699,032		64,084		4,094,760		
	Travel, Motor Pool, Expenses, Telephone, Training and Development, IT	108,111	67,600	-	175,711		-		206,141		
	Insurance	193,465	25,045	-	218,510		-				
	Property Taxes	-	111,996	-	111,996				52,898		
	Other Expenses	472,671	744,264	10,755	1,227,690		159,759		3,015,607		
	Amount set aside to Reserves TOTAL EXPENSE	198,000	166,500	-	364,500		60,000		1,814,000		42.004.000
Funding	TOTAL EXPENSE	2,093,763	1,692,921	10,755	3,797,439		283,843		9,183,406		13,264,688
<u>i ununig</u>		ĺ									
	Provincial/Federal	-	-	-	-		_		185,619		
	Donations	33,521	-	-	33,521		- 1		8,979		
	Self Generated	171,588	2,892,673	108,116	3,172,377		601,942		8,989,137		
	Funds taken from Reserves	-	314,922	-	314,922		-		-		
	TOTAL FUNDING	205,109	3,207,595	108,116	3,520,820		601,942		9,183,735		13,306,497
	NET Surplus/(Deficit) for programs not funded by general levy	(1,888,654)	1,514,674	97,361	(276,619)		318,099		329		41,809
	THE COMPLICATION OF PROGRAMS HOL TURINGED BY GEHERALIEVY	(1,000,004)	1,011,011	0.,001	(2.0,010)		0.0,030		020		,000
										l	

OTHER INFORMATION

1. INFORMATION SYSTEMS & TECHNOLOGY - COMPUTER CHARGES

The work of the IS&T Group includes wages, capital purchases and ongoing maintenance and operations is funded through the Information Systems and Technology Reserve. The IS&T Reserve is sustained through a charge back framework. A "Computer Charge" is allocated to the individual programs based on the number of users and the nature of system usage or degree of reliance on IS&T activities and services.

The *Information Systems and Technology* (IS&T) group leads GRCA's information management activities; develops and acquires business solutions; and oversees investment in information and communications technology as detailed below:

- Develop and implement GRCA's long-term information management, information technology and communications plans.
- Assess business needs and develop tools to address requirements, constraints and
 opportunities. Acquire and implement business and scientific applications for use at
 GRCA. Manage information technology and business solutions implementation
 projects on behalf of GRCA, GRCF and the Lake Erie Source Protection Region.
- Develop, and implement GRCA's Geographic Information Systems (GIS) technology and spatial data infrastructure. Manage GRCA's water-related data. Create and maintain standards for the development, use and sharing of corporate data. Develop policies and implement tools to secure GRCA's data and IT and communications infrastructure.
- Acquire, manage and support GRCA's server, storage, network and personal
 computer infrastructure to support geographic information systems (GIS); flood
 forecasting and warning, including real-time data collection; database and
 applications development; website hosting; electronic mail; internet access; personal
 computing applications; and administration systems, including finance, property and
 human resources.
- Develop and operate a wide area network connecting 14 sites and campus style
 wireless point-to-multipoint networks at Head Office, Conservation Areas, Nature
 Centres and Flood Control Structures. Develop and operate an integrated Voice over
 IP Telephone network covering nine sites and 220 handsets. Support and manage
 mobile phones, smart phones and pagers. Develop, implement and maintain GRCA's
 IS&T disaster recovery plan.
- Operate on-line campsite reservation and day-use systems with computers in 10 Conservation Areas. Provide computers and phone systems for use at outdoor education centres.
- Build and maintain working relationships with all other departments within GRCA.
 Develop and maintain partnerships and business relationships with all levels of
 government, Conservation Ontario, private industry and watershed communities with
 respect to information technology, information management, business solutions and
 data sharing.

2. VEHICLE, EQUIPMENT – MOTOR POOL CHARGES

Motor Pool charges are allocated to the individual sections based on usage of motor pool equipment. Effectively, motor pool charges are included with administrative costs or other operating expenses, as applicable, on Tables 1 to 10.

- Maintain a fleet of vehicles and equipment to support all GRCA programs.
- Purchases of new vehicles and/or equipment.
- Disposal of used equipment.
- Lease certain equipment.

SECTION B

BASE PROGRAMS – CAPITAL

SECTION B – CAPITAL BUDGET

Capital maintenance spending in 2023 includes spending in the following program areas:

- Water Resources Planning
- Flood Forecasting and Warning
- Water Control Structures
- Conservation Areas
- Corporate Services

Water Resources Planning expenditures will be for water quality monitoring equipment. Flood forecasting and warning expenditures will be for software systems and gauge equipment.

Water Control Structures expenditures will be for major maintenance on dams and dykes.

Conservation Area capital spending includes expenditures as part of the regular maintenance program as well as spending on major repairs and new construction. In 2023, major capital projects within the Conservation Areas will include:

- New workshop at the Brant CA
- Water service upgrades at Shade's Mill CA
- Planning for Harris Mill masonry repairs at Rockwood CA
- Bridge replacement at Rockwood CA
- Septic replacements at Conestogo CA
- Constructing washrooms at Byng CA

Corporate Services capital spending represents the portion of overall Information Services and Motor Pool expenses that are funded by the Information Technology (IT) and Motor Pool (MP) reserve. See "Other Information" above for spending descriptions for IT and MP.

SECTION B - Capital Budget GRAND RIVER CONSERVATION AUTHORITY

Budget 2023							
	Water Resources Planning & Environment	FFW	Flood Control Expenses	Conservation Land Management (Sch 4)	Conservation Areas	Corporate Services	BUDGET TOTAL
Expenses:							
WQ Monitoring Equipment & Instruments	110,000						110,000
Flood Forecasting Warning Hardware and Gauges		190,000					190,000
Flood Control Structures-Major Maintenance			1,500,000				1,500,000
Conservation Areas Capital Projects					2,000,000		2,000,000
Net IT/MP Capital Spending not allocated to Departments						779,000	779,000
TOTAL EXPENSE	110,000	190,000	1,500,000	-	2,000,000	779,000	4,579,000
<u>Funding</u>	·			·	·		

ıdget 2022							
Net Funded by General CAPITAL Levy	35,000	165,000	750,000	-	-	-	950,0
TOTAL FUNDING	75,000	25,000	750,000	-	2,000,000	779,000	3,629,0
Funding from Reserves	75,000	25,000	50,000		500,000	779,000	1,429,0
Prov & Federal Govt Self Generated			700,000		1,500,000		700,0 1,500,0
ding			700.000				700
TOTAL EXPENSE	110,000	190,000	1,500,000	-	2,000,000	779,000	4,579,0
Net 11/MP Capital Spending not allocated to Departments						779,000	119,0

	Water Resources Planning & Environment	FFW	Flood Control Expenses	Conservation Land Management (Sch 4)	Conservation Areas	Corporate Services	BUDGET TOTAL
Expenses:							
WQ Monitoring Equipment & Instruments	110,000						110,000
Flood Forecasting Warning Hardware and Gauges		190,000					190,000
Flood Control Structures-Major Maintenance			2,200,000				2,200,000
Conservation Areas Capital Projects					2,000,000		2,000,000
Net IT/MP Capital Spending not allocated to Departments						602,000	602,000
TOTAL EXPENSE	110,000	190,000	2,200,000	•	2,000,000	602,000	5,102,000
Funding							
Prov & Federal Govt			1,110,000				1,110,000
Self Generated					1,200,000		1,200,000
Funding from Reserves	75,000	25,000	340,000		800,000	602,000	1,842,000
TOTAL FUNDING	75,000	25,000	1,450,000	-	2,000,000	602,000	4,152,000
Net Funded by General CAPITAL Levy	35,000	165,000	750,000	-	-	-	950,000

ACTUAL 2021 - CAPITAL							
	Water Resources Planning & Environment	FFW	Flood Control Expenses	Conservation Land Management (Sch 4)	Conservation Areas	Corporate Services	ACTUAL TOTAL
Expenses:							
WQ Monitoring Equipment & Instruments	49,233						49,233
Flood Forecasting Warning Hardware and Gauges		476,563					476,563
Flood Control Structures-Major Maintenance			1,267,010				1,267,010
Conservation Areas Capital Projects					533,606		533,606
Net IT/MP Expensess in excess of chargebacks						(175,542)	(175,542)
TOTAL EXPENSE	49,233	476,563	1,267,010	-	533,606	(175,542)	2,150,870
<u>Funding</u>							
Prov & Federal Govt		200,000	619,331				819,331
Self Generated					533,606	1,140	534,746
Funding from Reserves		16,858		-		(176,682)	(159,824)
TOTAL FUNDING	-	216,858	619,331	-	533,606	(175,542)	1,194,253
			•			•	
Net Funded by General CAPITAL Levy	49,233	259,705	647,679	-	-	-	956,617

SECTION C SPECIAL PROJECTS

SECTION C – SPECIAL PROJECTS

This category of activity represents projects that the GRCA undertakes where special one time and/or multi-year funding is applicable. The duration of these projects is typically one year although in some instances projects may extend over a number years, such as the Source Protection Planning Program. External funding is received to undertake these projects.

The main project in this category is the provincial Source Protection Planning Program under the *Clean Water Act*, 2006. Plan development work commenced in 2004, with plan implementation starting in 2015. Work includes research and studies related to the development and updates of a Drinking Water Source Protection Plan for each of the four watersheds in the Lake Erie Source Protection Region. The focus in 2022 continues on completing updates to the Grand River Source Protection Plan, including development of water quantity policies, updating water quality vulnerability assessments, and the development of the annual progress report for the Grand River Source Protection Plan.

Other special projects in the area of watershed stewardship include the "Rural Water Quality Program" grants, floodplain mapping projects, subwatershed study, waste water optimization project, trail development, and numerous ecological restoration projects on both GRCA lands and private lands in the watershed.

SECTION C - Special Projects Budget GRAND RIVER CONSERVATION AUTHORITY Budget 2023

EXPENDITURES	ACTUAL 2021	BUDGET 2022	BUDGET 2023	
Subwatershed Plans - City of Kitchener	67,118	80,000	80,000	
Dunnville Fishway Study	-	-	-	
Waste Water Optimization Program	91,630	130,000	130,000	
Floodplain Mapping	155,567	575,000	-	
RWQP - Capital Grants	637,503	800,000	800,000	
Brant/Brantford Children's Water Festival	228	-	35,000	
Haldimand Children's Water Festival	0	-	25,000	
Species at Risk	79,121	40,000	70,000	
Ecological Restoration	91,142	100,000	100,000	
AGGP-UofG Research Buffers	15,268	-	-	
Great Lakes Agricultural Stewardship Initiative	1,711	-	-	
Precision Agriculture-OMFRA	41,572	70,000	-	
Great Lakes Protection Initiative	39,220	100,000	-	
Nature Smart Climate Solutions	-	-	75,000	
Profit Mapping	-	-	85,000	
Trails Capital Maintenance	38,154	240,000	-	
Emerald Ash Borer	238,306	-	-	
Lands Mgmt - Land Purchases/Land Sale Expenses	27,814	-	-	
Guelph Lake Nature Centre	12,480	500,000	500,000	
Total SPECIAL Projects 'Other'	1,536,834	2,635,000	1,900,000	
Source Protection Program	569,655	640,000	640,000	
Total SPECIAL Projects Expenditures	2,106,489	3,275,000	2,540,000	
SOURCES OF FUNDING	, ,	, ,	, ,	
Provincial Grants for Source Protection Program	569,655	640.000	640,000	
OTHER GOVT FUNDING	1,056,112	1,610,000	1,240,000	
SELF-GENERATED FUNDING FROM/(TO) RESERVES	128,980 351,742	840,000 185,000	660,000	
Total SPECIAL Funding	2,106,489	3,275,000	2,540,000	

Grand River Conservation Authority Summary of Municipal Levy - 2023 Budget

DRAFT - January 27, 2023

	% CVA in Watershed	2022 CVA (Modified)	CVA in Watershed	CVA-Based Apportionment	2023 Budget Matching Admin & Maintenance Levy	2023 Budget Non-Matching Admin & Maintenance Levy	2023 Budget Capital Maintenance* Levy	2023 Budget Total Levy	Actual 2022	% Change
Brant County	82.9%	7,349,082,037	6,092,389,009	2.92%	13,125	337,655	27,729	378,509	361,733	4.6%
Brantford C	100.0%	15,438,439,128	15,438,439,128	7.40%	33,261	855,636	70,266	959,163	925,478	3.6%
Amaranth Twp	82.0%	823,007,110	674,865,830	0.32%	1,454	37,403	3,072	41,929	40,312	4.0%
East Garafraxa Twp	80.0%	646,737,870	517,390,296	0.25%	1,115	28,675	2,355	32,145	31,052	3.5%
Town of Grand Valley	100.0%	602,204,454	602,204,454	0.29%	1,297	33,376	2,741	37,414	34,921	7.1%
Melancthon Twp	56.0%	605,191,515	338,907,248	0.16%	730	18,783	1,542	21,055	20,387	3.3%
Southgate Twp	6.0%	1,095,001,488	65,700,089	0.03%	142	3,641	299	4,082	3,913	4.3%
Haldimand County	41.0%	7,387,846,603	3,029,017,107	1.45%	6,526	167,875	13,786	188,187	180,063	4.5%
Norfolk County	5.0%	9,785,538,892	489,276,945	0.23%	1,054	27,117	2,227	30,398	29,714	2.3%
Halton Region	10.5%	48,462,400,444	5,103,428,670	2.44%	10,995	282,844	23,227	317,066	304,589	4.1%
Hamilton City	26.8%	96,614,037,173	25,844,254,944	12.38%	55,679	1,432,351	117,626	1,605,656	1,557,692	3.1%
Oxford County	36.5%	4,574,385,729	1,667,806,332	0.80%	3,593	92,434	7,591	103,618	100,481	3.1%
North Perth T	2.0%	2,359,924,293	47,198,486	0.02%	102	2,616	215	2,933	2,779	5.5%
Perth East Twp	40.0%	2,078,521,741	831,408,696	0.40%	1,791	46,079	3,784	51,654	49,597	4.1%
Waterloo Region	100.0%	105,303,687,542	105,303,687,542	50.45%	226,867	5,836,184	479,273	6,542,324	6,325,085	3.4%
Centre Wellington Twp	100.0%	5,401,783,927	5,401,783,927	2.59%	11,638	299,380	24,585	335,603	319,769	5.0%
Erin T	49.0%	2,607,980,359	1,277,910,376	0.61%	2,753	70,825	5,816	79,394	77,102	3.0%
Guelph C	100.0%	28,289,926,279	28,289,926,279	13.55%	60,948	1,567,896	128,757	1,757,601	1,702,688	3.2%
Guelph Eramosa Twp	100.0%	2,930,879,758	2,930,879,758	1.40%	6,314	162,436	13,339	182,089	176,486	3.2%
Mapleton Twp	95.0%	1,881,798,619	1,787,708,688	0.86%	3,851	99,079	8,136	111,066	106,574	4.2%
Wellington North Twp	51.0%	1,801,568,972	918,800,176	0.44%	1,979	50,922	4,182	57,083	55,274	3.3%
Puslinch Twp	75.0%	2,769,118,798	2,076,839,099	0.99%	4,474	115,103	9,452	129,029	124,311	3.8%
Total		348,809,062,729	208,729,823,079	100.00%	449,688	11,568,310	950,000	12,968,000	12,530,000	3.5%

^{*}Capital Maintenance Levy represents levy allocated to maintenance of capital infrastructure, studies, and/or equipment.



Office of the President

Sent via email to: minister.fin@ontario.ca

January 13, 2023

The Honourable Peter Bethlenfalvy Minister of Finance Frost Building South, 7th Floor 7 Queen's Park Crescent Toronto, Ontario M7A 1Y7

RE: Reassessment

Dear Minister Bethlenfalvy:

Through recent correspondence and engagement with the Ministry of Finance, AMO has expressed very strong support for a timely return to the assessment cycle. We recognize how important it was to pause reassessment during the height of the pandemic. We made sure our members understood it too.

The province's latest economic statement was silent on the assessment cycle, leaving the sector eager to understand the government's intentions regarding the 2024 tax year and beyond. We also understand that there is a very narrow window for opportunity left for the Municipal Property Assessment Corporation (MPAC) to move forward in time for the 2024 taxation year.

A well-functioning, up-to-date assessment system is the foundation of the municipal tax system that supports strong, vibrant, and growing communities. Ontario's property tax system works well and provides municipalities with a stable and predictable source of revenue. Just as important, it provides stability and predictability for property taxpayers.

With the ROMA conference now just over a week away, our members will be looking to the government for direction on returning to the assessment cycle. We'd encourage the government to heed the sector's call to clarify its intentions. We will continue to work closely with MPAC and with the Ministry of Finance to ensure that the public, media, and municipal councils understand the benefits and the importance of moving forward with the reassessment at this time, and the value to municipalities and taxpayers of a modern, up-to-date, and reliable assessment system.

We would welcome the opportunity to meet with you again to discuss this important matter.

Yours truly,

Colin Best AMO President Halton Regional Councillor

> cc: The Honourable Steve Clark, Minister of Municipal Affairs and Housing Parliamentary Assistant Byers, Ministry of Finance Al Spacek, Chair, Municipal Property Assessment Corporation

From: Kelsey, Lisa <Lisa.Kelsey@hamilton.ca>
Sent: Friday, January 27, 2023 11:38 AM

Subject: City of Hamilton - Impacts of Bill 23, More Homes Built Faster Act, 2022

Good day,

The following Resolution was passed by the City of Hamilton Council at their meeting held on December 5, 2022.

7.14 Impacts of Bill 23, More Homes Built Faster Act, 2022

(Francis/Beattie)

WHEREAS, the changes in Bill 23 will significantly limit the City's ability to provide and make important housing-related infrastructure and service investments resulting in increased costs for Hamilton residents:

WHEREAS, the changes in Bill 23 will have an impact on the City's quality of life and revenues to support complete communities;

WHEREAS, the City has limited revenue sources and as result of Bill 23, residents may face higher property taxes and higher water, wastewater and stormwater bills;

WHEREAS, Bill 23 will also affect the City's ability to provide much needed capital infrastructure to support growth such as roads, parks, community centres and other community amenities; and

WHEREAS, Bill 23 received Proclamation and Royal Assent on November 28, 2022.

THEREFORE, BE IT RESOLVED:

- (a) That the Mayor and City Council in the City's initial response to Bill 23, request the province to:
 - (i) Repeal the amendments to the *Planning Act* and *Development Charges Act* as a result of Bill 23 with respect to the ability to regulate urban design and sustainable design features, parkland dedication and changes to the Development Charges regarding mandatory discounts for market rate development to facilitate responsible growth;
 - (ii) Request the Province of Ontario to extend the commenting period on Bill 23, More Homes Built Faster Act, 2022 to at least January 31, 2023 to enable time for consultation, consideration of alternative options and thorough analysis of both short and long-term impacts;
 - (iii) Request the Province not to proceed with developing regulations, as per Bill 23, to limit the City of Hamilton's ability to protect and require the replacement of affordable and rental housing as a condition of development approvals;

- (iv) Request the province to amend the *Planning Act* to enable the implementation of Inclusionary Zoning across the City and incorporate definitions of affordable rental housing that respond to low and moderate household income;
- (v) Request the province to enact a Regulation to permit the use of conditional zoning, pursuant to Section 34(16) of the *Planning Act*;
- (vi) Request the province to include an "opt-out" provision for municipalities and applicants with respect to refunds for development applications and delay the implementation of refunds for development applications in light of the significant changes to the Planning regulations and internal City processes regarding development; and
- (vii) Request that the Provincial government to provide funding and funding tools to the City matching the amount of revenue lost through development charges, community benefits charges, and Section 42 of the *Planning Act* in Bill 23 to ensure the services needed to facilitate responsible growth continue to be delivered;
- (b) That City Council work with the City Manager to make public through communications and letters to local Members of Parliament and Members of Provincial Parliament outlining the impacts of Bill 23 on specific growth enabling infrastructure projects and housing projects which will not proceed within the City of Hamilton.
- (c) That this resolution be forward to all Ontario municipalities for their support.

Regards,

Lisa Kelsey, Dipl.M.A.
Legislative Coordinator
City of Hamilton, Office of the City Clerk
71 Main Street West, 1st Floor
Hamilton, ON L8P 4Y5
Ph. (905) 546-2424 ext. 4605
Fax. (905) 546-2095



Vision:

The Legislative Division is Dedicated to Excellence in the Provision of Service to the Community, Corporation & Council with Integrity, Accuracy and Transparency.

Mission:

The Legislative Division aims to strengthen and promote local government by facilitating the proceedings of City Council and its Committees, fulfilling the requirements of various Provincial statutes and educating the public to make it understandable and accessible.





Director of Legislated Services & City Clerk Corporate Services Department Kitchener City Hall, 2nd Floor 200 King Street West, P.O. Box 1118 Kitchener, ON N2G 4G7

Phone: 519.741.2200 x 7809 Fax: 519.741.2705

amanda.fusco@kitchener.ca TTY: 519-741-2385

January 20, 2023

Honourable Doug Ford Premier of Ontario Legislative Building Queen's Park Toronto ON M7A 1A1

Dear Premier Ford:

This is to advise that City Council, at a special meeting held on December 12, 2022, passed the following resolution regarding the Ontario's Big City Mayors (OBCM) Bill 23, More Homes Built Faster Act, 2022:

"WHEREAS the provincial government passed Bill 23, More Homes Built Faster Act, 2022 on November 28, 2022 with regulations and changes to several provincial acts which will have a significant impact on municipalities in the province;

WHEREAS notwithstanding there are parts of Bill 23 that will help build homes faster, Ontario's Big City Mayors (OBCM) have written to Premier Doug Ford and Minister Steve Clark regarding their concerns with Bill 23, and have presented to the Standing Committee on Heritage, Infrastructure and Cultural Policy;

WHEREAS the OBCM mayors have noted significant concerns relating to the impact on the collection of development charges and parkland levies, that will result in billions of dollars worth of infrastructure deficits that, without offsetting, will severely impact the current tax base as well as impact how municipalities will fund parkland spaces;

WHEREAS the impacts of this revenue shortfall will result in property tax increases and severely impact a municipality's ability to build the infrastructure needed to support the creation of new homes including roads, sewer and water systems, and supports for the delivery of fire and police services, delaying the building of new homes;

WHEREAS municipal audits announced by the province in selected municipalities will show how these reserve funds are allocated by each municipality to pay for the cost of this needed infrastructure, based on legislation from the province that strictly sets out their uses;

WHEREAS all partners in the homebuilding process, including municipalities who have responsibility for permitting, approvals and servicing, and developers who are responsible for getting shovels in the ground, can improve processes geared toward their part of creating a new housing supply;

WHEREAS while the municipal sector can help cut red tape and speed up the municipal approvals process, it is the responsibility of the province to look at delays within their ministries, and the responsibility of developers and home builders to further coordinate the building of homes in a timely manner once development approvals are in place;

WHEREAS the province has not identified accountability measures for all parties involved in creating housing, nor has the province identified annual targets to demonstrate incremental goals to build 1.5 million homes over the next decade;

THEREFORE BE IT RESOLVED THAT the City of Kitchener endorse and support the OBCM mayors request to the province immediately pause the implementation of changes to the development charges act and parkland fee reductions in Bill 23 until cities have been consulted on finding solutions to the impacts that these changes will have to our communities;

THEREFORE BE IT FURTHER RESOLVED that the City request the province put in place the Housing Supply Action Plan Implementation Table immediately and establish a terms of reference for the implementation table, and that Bill 23 is considered a priority in consultation with municipalities and other stakeholders in the home building industry;

THEREFORE BE IT FURTHER RESOLVED that the City request the province work with municipalities to re-open the discussion on a new long-term permanent municipal funding strategy to maintain services and fund critical infrastructure projects, and include the federal government to discuss joint solutions such as allocating a portion of the Harmonized Sales Tax (HST) to cities, allowing municipalities to build the housing that Ontarians need without having the burden fall on the existing property tax base; THAT while this work on an additional long-term municipal funding strategy is underway, municipalities are made whole, dollar-for-dollar, by the province to eliminate the unintended consequences of revenue reductions associated with Bill 23 changes;

THEREFORE BE IT FURTHER RESOLVED THAT the City of Kitchener endorse and support the OBCM request to hold all stakeholders (provincial ministries, municipalities, developers, and homebuilders) jointly accountable for their part of the home building process through the upcoming housing unit pledge exercise, due to the province by March 1st;

THEREFORE BE IT FURTHER RESOLVED THAT the City of Kitchener endorse and support the OBCM request to urge the province work with each municipality and all other partners in the homebuilding process to identify annual targets, with agreed upon accountability measures and metrics put in place based on each partner's role in the homebuilding process;

THEREFORE IT BE FINALLY RESOLVED that City request the Housing Supply Action Plan Implementation Table regularly identify to the Minister of Municipal Affairs and Housing legislative and regulatory amendments to mitigate or eliminate unintended consequences of Bill 23, inclusive of the effects of outside and market forces that may impact the achievement of these targets."

cc: Honourable Steve Clark, Minister of Municipal Affairs and Housing Ontario Big City Mayors Caucus Ontario Municipalities

Yours truly,

A. Fusco
Director of Legislated Services & City Clerk



1 Halton Hills Drive, Halton Hills, L7G 5G2 905-873-2600 | 1-877-712-2205 haltonhills.ca

January 26, 2023

Honourable Doug Ford, Premier of Ontario Via Email

Re: Repeal Bill 23 - The Build More Homes Faster Act

Please be advised that Council for the Town of Halton Hills at its meeting of Monday, January 23, 2023, adopted the following Resolution:

WHEREAS Bill 23, the Build More Homes Faster Act was introduced on October 25th, the day after Municipal elections in Ontario at a time when councils were in a transition period and unable to respond to the legislation prior to passage of the legislation;

AND WHEREAS the Association of Municipalities (AMO) was not given an opportunity to present its concerns with Bill 23 to the Standing Committee on Heritage, Infrastructure and Cultural Policy further eroding the municipal/provincial relationships;

AND WHEREAS the loss of revenue to the Town of Halton Hills as a result of Bill 23 is estimated at \$58 -\$87 million over 10 year which, without provincial compensation, will severely impact the provision of municipal services including transportation, parks and recreation facilities;

AND WHEREAS the elimination of the Regional role in approval of official plans creates uncertainty around the planning for regional services to support the growth aspirations of the local municipalities;

AND WHEREAS the role of Conservation Authorities has been limited to natural hazards only, thereby precluding a broader role in providing expert advice and services to municipalities on natural heritage matters as part of the planning process;

AND WHEREAS AMO's evaluation concluded that there is no confidence that the measures in Bill 23 will do anything to improve the affordability of housing.

NOW THEREFORE BE IT RESOLVED THAT the Town of Halton Hills urges the Provincial Government to repeal Bill 23;

AND FURTHER THAT this resolution be circulated to Premier Doug Ford, Steve Clark, Minister of Municipal Affairs and Housing, Provincial opposition parties, Ted Arnott MPP, and AMO.

(Appendix A – Town of Halton Hills Report No. PD-2022-0050)

(Appendix B – List of references)

Attached for your information is a copy of Resolution No. 2023-0007.

If you have any questions, please contact Valerie Petryniak, Town Clerk for the Town of Halton Hills at valeriep@haltonhills.ca.

Sincerely,



Melissa Lawr Deputy Clerk – Legislation

cc. The Honourable Steve Clark, Minister of Municipal Affairs and Housing
The Honourable Ted Arnott Speaker of the Ontario Legislature and MPP, Wellington-Halton Hills

John Fraser, Leader of the Ontario Liberal Party and MPP, Ottawa South Peter Tabuns, Leader of the New Democratic Party of Ontario and MPP, Toronto Danforth

Mike Schreiner, Leader of the Ontario Green Party and MMP, Guelph Association of Municipalities of Ontario (AMO) All 444 Municipalities of Ontario



THE CORPORATION OF THE TOWN OF HALTON HILLS

Resolution No.:

2023-0007

Title:

Bill 23 – The Build More Homes Faster Act

Date:

January 23, 2023

Moved by:

Councillor J. Fogal

Seconded by:

Councillor C. Garneau

Item No. 13.1

WHEREAS Bill 23, the Build More Homes Faster Act was introduced on October 25th, the day after Municipal elections in Ontario at a time when councils were in a transition period and unable to respond to the legislation prior to passage of the legislation;

AND WHEREAS the Association of Municipalities (AMO) was not given an opportunity to present its concerns with Bill 23 to the Standing Committee on Heritage, Infrastructure and Cultural Policy further eroding the municipal/provincial relationships;

AND WHEREAS the loss of revenue to the Town of Halton Hills as a result of Bill 23 is estimated at \$58 -\$87 million over 10 year which, without provincial compensation, will severely impact the provision of municipal services including transportation, parks and recreation facilities;

AND WHEREAS the elimination of the Regional role in approval of official plans creates uncertainty around the planning for regional services to support the growth aspirations of the local municipalities;

AND WHEREAS the role of Conservation Authorities has been limited to natural hazards only, thereby precluding a broader role in providing expert advice and services to municipalities on natural heritage matters as part of the planning process;

AND WHEREAS AMO's evaluation concluded that there is no confidence that the measures in Bill 23 will do anything to improve the affordability of housing.

NOW THEREFORE BE IT RESOLVED THAT the Town of Halton Hills urges the Provincial Government to repeal Bill 23;

AND FURTHER THAT this resolution be circulated to Premier Doug Ford, Steve Clark, Minister of Municipal Affairs and Housing, Provincial opposition parties, Ted Arnott MPP, and AMO.

(Appendix A – Town of Halton Hills Report No. PD-2022-0050) (Appendix B – List of references)





REPORT

TO: Mayor Lawlor and Members of Council

FROM: Bronwyn Parker, Director of Planning Policy

DATE: December 7, 2022

REPORT NO.: PD-2022-0050

SUBJECT: Bill 23 – More Homes Built Faster Act

RECOMMENDATION:

THAT Report No. PD-2022-0050 dated December 7, 2022 regarding Bill 23 – the More Homes Built Faster Act, be received;

AND FURTHER THAT staff continue to assess the implications of Bill 23, the More Homes Built Faster Act and provide further update reports to Council as may be appropriate;

AND FURTHER THAT the Province be requested to provide supplemental funding to offset the reductions in Development Charges and cash-in-lieu of parkland accruing to the Town as a result of Bill 23, the More Homes Built Faster Act;

AND FURTHER THAT the Town Clerk forward a copy of Report PD-2022-0050 to the Minister of Municipal Affairs and Housing, the Minister of Tourism, Culture and Sport, the Minister of the Environment, Conservation and Parks, and the Minister of Finance; Halton Area MPPs; the Region of Halton; the City of Burlington; the Town of Milton and the Town of Oakville for their information.

KEY POINTS:

The following are key points for consideration with respect to this report:

- Bill 23, the *More Homes Built Faster Act, 2022* was introduced into the legislature on October 25, 2022.
- The goal of Bill 23 is the creation of an additional 1.5 million new homes in Ontario over the next ten years.

- There are 10 Schedules to Bill 23, (9 of which are applicable in Halton) proposing sweeping changes to various pieces of legislation including but not limited to, the *Planning Act, Development Charges Act, Conservation Authorities Act* and *Ontario Heritage Act*.
- The opportunity to provide public feedback was offered via postings on the Environmental Registry of Ontario (ERO), with comment deadlines ranging from 30 66 days. Comments were provided on a number of the postings in accordance with the established deadlines. Key concerns raised are highlighted in the report, with more detailed comments included as Appendix 2.
- Bill 23 received Royal Assent on November 28, 2022. Most of the Bill is in force as of that date. This report provides an overview of Bill 23 in its final form.

BACKGROUND AND DISCUSSION:

The Ministry of Municipal Affairs and Housing (the Ministry) has committed to a goal of 1.5 million new homes being constructed over the next 10 years, with the More Homes, Built Faster: Ontario's Housing Supply Action Plan 2022-2023 as the key driver behind the delivery of these housing units. The Housing Supply Action Plan (HSAP) suggests that the housing supply shortage can be addressed by "...reducing government fees and fixing development approval delays that slow housing construction and increase costs".

In order to achieve the Province's overarching objectives, Bill 23, the *More Homes Built Faster Act, 2022* was introduced into the Ontario Legislature on October 25, 2022. Bill 23 consists of ten schedules that entail sweeping changes to the various pieces of legislation including but not limited to the *Planning Act, Development Charges Act, Ontario Land Tribunal Act, Conservation Authorities Act* and the *Ontario Heritage Act*. A series of postings on the Environmental Registry with varying commenting deadlines were also introduced at the same time.

Bill 23 is the third piece of legislation prepared by the Province over the last four years that entails significant changes to the land use planning system in Ontario. In 2019, Royal Assent was given to the *More Homes, More Choice Act* (Bill 108). In 2022, the *More Homes for Everyone Act* (Bill 109) received Royal Assent. Bill 109 was discussed in report PD-2022-0031 and is further considered via report PD-2022-0049, which is included on this Council agenda.

At the November 7, 2022, meeting, Council passed a resolution expressing a number of initial concerns with Bill 23. Among other matters, the resolution requested that the Province extend the commenting deadlines from 30 and 31-day postings to 66-day postings, which would mirror some of the ERO postings released on October 25, 2022. While the Province did extend some of the postings to 45-day postings, they did not provide the full 66-day review period Council had requested. A copy of the Council resolution is attached to this report as Appendix 3 for reference purposes.

Bill 23 received Royal Assent on November 28, 2022. Most of the Bill is in force as of that date. The purpose of this report is to summarize Bill 23 in its final form. The report will also touch on some of the key concerns with Bill 23 that were identified by staff.

Bill 23

As identified earlier in this report, Bill 23 was introduced and received First Reading on October 25, 2022. It moved to Second Reading on October 31, 2022 and was ordered referred to the Standing Committee on Heritage, Infrastructure and Cultural Policy at that time. After presentations to the Standing Committee, much discussion and debate, a slightly amended version of Bill 23 passed Third Reading and received Royal Assent on November 28, 2022.

There are ten key elements of the approved Bill 23 that this report will focus on. These include:

- 1. The role of Halton Region in the local planning approval process
- 2. The role of the Conservation Authorities
- 3. Three residential unit permissions
- 4. Required zoning by-law amendments regarding MTSAs
- 5. Public meetings for draft plan of subdivision applications
- 6. Changes to site plan control for up to ten units
- 7. Removal of 2-year prohibitions on amendments for specified applications
- 8. Restrictions on third-party appeals for minor variance and consent
- 9. Changes to the Ontario Heritage Act
- 10. Parkland dedication calculation rate changes
- 11. Development Charge exemptions

1. The role of Halton Region in the local planning approval process

One of the most significant changes as a result of Bill 23 is the pending removal of approval authority from the Region of Halton as it relates to local planning matters. Halton, along with a handful of other GGH upper-tier municipalities including Peel, Durham, York, Niagara, Waterloo and the County of Simcoe, will become "an upper-tier municipality without planning responsibilities". At a date yet to be determined, the Minister of Municipal Affairs and Housing will take over the approval role for local Official Plans and amendments thereto including Secondary Plans.

Based on the foregoing, it is staff's understanding that local municipalities such as Halton Hills would inherit the applicable components of the Regional Official Plan within our jurisdiction. These components would be used as a basis to complete further updates to the Town's Official Plan. Municipalities await the release of regulations and applicable transition policies clarifying these various pieces, which are yet to be announced by the province.

2. The role of the Conservation Authorities

As of January 1, 2023, Conservation Authorities will no longer be permitted to comment on any aspects of the planning approval process including development applications and supporting studies, other than those matters dealing with natural hazards and

flooding. They will also no longer be able to require certain components of the planning process (such as watershed planning; wetland evaluations; or elements related to ecology and biodiversity during Scoped Subwatershed Studies, SISs, EAs, etc.) to be completed to their satisfaction/approval.

In addition, a single regulation has been proposed for all 36 Conservation Authorities in Ontario, rather than having separate regulations pertain to each Authority. This regulation has not yet been prepared or released for comment and the date upon which it would come into effect remains to be determined.

Another significant change as a result of Bill 23 is that any development that has been approved through an application under the *Planning Act* will no longer require a permit from the applicable Conservation Authority. These exemptions will be based on specific conditions or requirements, yet to be determined through regulation. The timeframe for when these exemptions will come into effect are also unknown. Staff would expect to see these draft regulations released for comment early in 2023.

3. Three residential unit permissions

As of November 28, 2022, all Ontario municipalities are required to permit up to three residential units per lot within settlement areas, so long as that lot is serviced by municipal water and wastewater systems. The Province views this as a form of gentle intensification that will deliver a modest amount of supply relative to the overall 1.5 million new homes Provincial target. This permission allows for all three units to be contained within the main building (the principal home on the lot), or two units within the main building and one unit in an accessory building. Municipalities are not permitted to require a minimum size/area for these additional residential units, however, building permits are still required for each residential unit constructed. In addition, municipalities cannot require more than one parking space per residential unit.

In the Halton Hills context, through the Town's Comprehensive Zoning By-law Review, the Town will be required to update its existing zoning requirements (which currently require a minimum of 2 parking spaces for the principle dwelling and 1 parking space per additional residential unit), reducing the minimum number of parking spaces required to only 1 space per residential unit. The Official Plan and Zoning By-law will also require updating to ensure that up to three residential units are permitted on each serviced urban residential lot.

There are no appeal rights afforded as it relates to any required amendments to a municipal Official Plan or Zoning By-law as a result of these changes. In addition, any existing local requirements regarding the number of units permitted, the minimum size of units, or the minimum number of parking spaces per unit, are superseded by Bill 23.

4. Required zoning by-law amendments regarding MTSAs

Under a new subsection (16(20)) of the *Planning Act*, Bill 23 requires that within one-year of approval of an Official Plan Amendment delineating a Major Transit Station Area (MTSA) and identifying the minimum number of residents and jobs per hectare that are planned to be accommodated within that area, municipalities must update their zoning

by-laws. These zoning by-law updates must include minimum heights and densities within the MTSA in keeping with the policies approved through the Official Plan Amendment.

With the recent approval of ROPA 49¹ by the Minister of Municipal Affairs and Housing and given both the Georgetown and Acton MTSAs were not assigned minimum density targets through that approval, appropriate population and employment density targets for these MTSAs must be established. The Town commenced the Georgetown GO Station Secondary Plan review in 2022. At this juncture, staff believe that is the appropriate process for assessing and assigning those prescribed minimum densities. It is our understanding that once the Secondary Plan with the minimum density targets is approved, the Town will have one year to update the zoning by-law mirroring those minimum density targets.

The Acton GO Station Secondary Plan is targeted for a comprehensive review in the coming years (currently scheduled for 2025), at which time those minimum density targets will also be considered and updated as appropriate.

5. Public meetings for draft plan of subdivision applications

One of the changes from Bill 23 is that Statutory Public Meetings for draft plans of subdivision are no longer required under the *Planning Act*. This change came into effect upon Royal Assent on November 28, 2022.

The change does not preclude a municipality from continuing to hold a public meeting for subdivision applications. In our experience, subdivision applications are submitted in conjunction with zoning by-law amendments and in some cases official plan amendments both of which require public meetings. There is little if any efficiency to be gained by not including the plan of subdivision in the statutory public meeting. The public typically will be interested in the road layout, the lotting patterns and the location of blocks for schools, parks, recreational amenities and natural heritage all of which will be shown on the draft plan of subdivision. Given the importance of public consultation to the planning process, the Town will continue to hold public meetings for subdivision proposals that result in the creation of new lots.

6. Changes to site plan control for up to ten units

Site plan control is a land use planning tool that municipalities utilize to evaluate site specific elements when development is proposed. As is described in the provincial site plan control guide, this control over detailed site-specific matters ensures that a development proposal is well designed, fits in with the surrounding uses and minimizes any negative impacts. Items typically considered through site plan control include

¹ ROPA 49 was approved by the Minister of Municipal Affairs and Housing on November 4, 2022. That approval requires that Halton Region update their Table 2 and 2a density targets to establish minimum population and employment targets within MTSAs. However, Bill 23 identifies Halton Region as "an upper-tier without planning responsibilities". As such, it is unclear as to whether the Georgetown and Acton MTSA densities will be established by the Town or Region. It is expected that the Bill 23 regulations and transition policies yet to be released will provide that clarification.

lighting, drainage, access to and from the site (pedestrian and vehicular), waste and snow storage, landscaping, and architectural and urban design among others.

Where a municipality could apply site plan control for any type or scale of development as defined in a municipal site plan control by-law, Bill 23 has now created an exemption for residential developments for 10 units or less. As a result, the Town will be required to update its current site plan control by-law to clarify the application of the tool, removing the requirements where 10 or less residential units are proposed.

In addition, Bill 23 has also removed architectural details (i.e., matters of urban design) and landscape design aesthetics from the scope of site plan control. As per Section 41, subsection 4.1.1 of the *Planning Act*, site plan control can still apply to "...elements, facilities and works on the land if the appearance impacts matters of health, safety, accessibility, sustainable design or the protection of adjoining lands". This subsection provides the Town with the permissions necessary in order to continue to apply Green Development Standards (GDS) at the appropriate time during the development approval process.

7. Removal of 2-year prohibitions on amendments for specified applications

Previous amendments to the *Planning Act* prohibited applications for amendments to a new official plan and secondary plans for a two-year period following initial approval unless Council permission to file such applications was granted. Similarly, applications to further amend a new zoning by-law and a new site-specific zoning by-law amendment or to seek a minor variance to the same were also prohibited for a two-year period without Council permission. Bill 23 has revoked those changes completely, meaning applications to amend any of these approved planning documents are now permitted without any time restrictions.

8. Restrictions on third-party appeals for minor variance and consent

Bill 23 has restricted the appeal rights for minor variance and consent applications, only allowing the applicant, the municipality, certain prescribed public bodies and the Minister the opportunity to appeal decisions for these types of applications.

In addition, this new rule applies retroactively to October 25, 2022 (the date that Bill 23 was first introduced into the Legislature). This means that any existing third-party appeals to the Ontario Land Tribunal on a minor variance or consent decision, where a hearing date has not yet been established, will be dismissed.

Third party appeal rights of Council decisions on official plan and zoning by-law amendments remain in place under *The Planning Act*.

9. Changes to the Ontario Heritage Act

Sweeping amendments to the *Ontario Heritage Act* (OHA) have been approved through Bill 23, however, as of the date of writing of this report, none of these changes are in force. At a date to be proclaimed by the Minister, these amendments will come into effect.

Bill 23 requires that all information currently included in a municipal Heritage Register must be made available online, and that all future properties must meet criteria established by regulation to be listed on the Heritage Register. It is worth noting that the Town already provides the majority of this information on our website and offers this information freely to the public.

Amendments to the OHA will allow owners to serve a notice of objection to a municipality for properties added to the Heritage Register at any time. The Town undertook a multi-phase approach with significant public consultation to build our Heritage Register. As the Town's process to build the Heritage Register was ahead of legislative requirements at the time, these amendments seem to negate the comprehensive and public approach undertaken by the Town.

Removals of listed properties from the Heritage Register are one of the key amendments resulting from Bill 23. Conditions have been specified that would necessitate the removal of a listed property from the Heritage Register, including a Notice of Intention to Designate being withdrawn, and a by-law being repealed or not being passed. These removals would not require consultation with the Town's municipal heritage committee. In addition, properties listed on the Heritage Register would be removed after two years if they have not been designated, and are not eligible for relisting on the Register for five years after their removal.

Another change through Bill 23 is that municipalities are prohibited from designating a property unless it was already/previously listed on the Heritage Register, and any properties will be required to meet two or more criteria for designation, whereas properties are currently required to meet only one of the three criteria identified in Ontario Regulation 9/06 in order to be designated.

Additional amendments to the OHA will require future Heritage Conservation Districts (HCDs) to meet criteria for determining whether they are of heritage value or interest and will allow for amendments or repeals to Heritage Conservation District by-laws. HCDs are a planning tool that guide the conservation of an historic area or neighbourhood's cultural heritage value. The Town of Halton Hills has designated one Heritage Conservation District under Part V of the OHA. The Syndicate Housing Heritage Conservation District was designated by Council in 2005 and is located along Bower Street in Acton.

Finally, amendments to the OHA through Bill 23 will allow the Minister of Citizenship and Multiculturalism to review, confirm, or revise determinations of cultural heritage value for provincially owned heritage properties, and would allow exemptions for those properties from Heritage Standards and Guidelines for proposals where other major priorities will be advanced.

10. Parkland dedication calculation rate changes

Amendments to the *Planning Act* alter previous legislation regarding alternative parkland dedication calculations. Under Bill 23, the rate has been reduced to 1 hectare/600 units if land is conveyed and 1 hectare/1,000 units for cash in lieu of parkland. The alternative rate is subject to a cap of 10% of the land for lands that are

five hectares (+/- 12 acres) or less and 15% of the land for lands greater than 5 hectares. Both changes came into effect on November 28, 2022, upon Bill 23 receiving Royal Assent.

Parkland dedication rates are also now calculated on the day that a zoning by-law amendment for a development proposal is passed, or the day that a related site plan application is filed, whichever is later. If neither a zoning by-law amendment nor site plan approval is/are required, parkland dedication is calculated on the day that the first building permit related to the development is issued.

In addition, beginning in 2023, municipalities will be required to spend or allocate at least 60% of their parkland reserve funds at the start of each calendar year.

Additional parkland dedication provisions not yet in force under Bill 23 include: the exemption of affordable and attainable units from parkland dedication and cash-in-lieu requirements; encumbered parkland; strata parks (parks built on top of structures, such as rooftops or parking garages); and privately owned publicly accessible open spaces ("POPS") such as small parkettes often found within condominium developments, will be eligible for parkland credits. Landowners will also be permitted to propose which areas of their land they wish to provide towards their parkland contributions. While municipalities will be able to refuse any such offer they deem to be unacceptable, landowners will have the right to appeal those refusals to the Ontario Land Tribunal. These amendments will come into force upon proclamation by the Lieutenant Governor.

As it relates to Town staff observations on the parkland dedication rate changes, broadly speaking, it is estimated that an overall 60-75% decrease in parkland dedication fees could be expected over the next 14 years. This is based on a very preliminary review and is dependent on the number of medium or high-density residential development applications received over that time period. Based on current estimates, this could represent a reduction of \$24 million to \$30 million dollars. It is important to note that a detailed financial analysis would be required in order to fully assess the potential financial ramifications of the reduced parkland contribution impacts from Bill 23. This review would be required in coordination with Finance staff and a review of the Long-Range Financial Plan and 10 Year Capital Forecast.

11. Development Charge (DC) exemptions

Significant amendments were made to the *Development Charges Act* (DC Act) through Bill 23. Some of these changes have come into effect as of November 28, 2022, while other changes await release of updated regulations and/or proclamation by the Lieutenant Governor.

One of the amendments now in effect includes a five-year phasing in of DC rate increases for any DC By-laws passed on or after January 1, 2022. These reductions begin with a 20% reduced fee for year one, with the reduction decreasing by 5% for each year thereafter until the fifth year when the full new rate would apply. This means that the fee at year one would be 80% of the approved DC rate; 85% in year two, 90% for year three and 95% for year four, before the full 100% DC rate could be charged at year five. In addition, DCs are exempt for non-profit housing development and

inclusionary zoning residential units. Bill 23 also provides DC discount of 25% for purpose-built rental housing with 3 or more bedrooms; 20% for 2 bedrooms; and 15% for less than 2 bedrooms.

Additional changes in force as of Royal Assent which may have significant ramifications for the Town include the extension of DC by-law expiry dates from every five years to every ten years; growth related studies (including Secondary Plan Studies, Scoped Subwatershed Studies, Environmental Assessments etc.) and land cost (for services yet to be prescribed) are now excluded from recovery through DCs; interest rates on phased DCs must be capped at prime plus 1% for rental, and institutional developments; and municipalities are now required to spend or allocate at least 60% of their DC reserve funds at the beginning of each calendar year (beginning in 2023) on priority services, such as water, wastewater and roads.

Future regulations regarding "attainable housing units" and the DC exemptions tied to such developments have not yet been released. Additional DC exemptions are also being implemented at a future date for affordable residential units. The impacts of these changes are not yet fully understood given the associated regulations have not yet been released.

Similar to the financial ramifications identified above with respect to the parkland dedication rate changes, the DC Act changes could significantly impact the Town from a financial perspective. Depending on the scenarios related to the attainable, affordable, and non-profit housing forms, the projected DC loss is estimated in the range of \$34 million to \$57 million dollars over the next 10 years (or \$20 million to \$31 million dollars over 5 years). This represents a 12% to 20% reduction in DC revenue over 10 years, as compared to DC revenues projected under the Town's DC by-law prior to Bill 23. Again, it is important to note that a detailed financial analysis would be required in order to fully assess the potential financial ramifications from Bill 23.

Based on the estimated impacts above, staff recommend requesting that the Province provide supplemental funding to offset the reductions in Development Charges and cash-in-lieu of parkland accruing to the Town as a result of Bill 23.

Environmental Registry of Ontario Postings

On October 25, 2022, a series of postings were made on the Environmental Registry of Ontario website (the ERO). Some of these postings were directly tied to changes proposed through Bill 23 (such as amendments to the *Planning Act* and *Development Charges Act*), whereas other postings not discussed within this report or its appendices were not directly tied to Bill 23 (such as the proposed changes to the Greenbelt Plan).

These postings were made available for comment, with deadlines ranging between 30 to 66 days. Appendix 1 to this report provides a table outlining the various Bill 23 related postings and their respective comment timeframes. It also identifies the status of Town staff review. Any staff level comments that have been submitted on the Bill 23 ERO postings as of finalization of this report are attached as Appendix 2.

Key comments submitted through the ERO postings highlight the Town's concerns regarding the sweeping amendments made by Bill 23. These concerns include the following:

- Bill 23 has significant financial implications for the Town. The loss in development charge and cash-in-lieu of parkland revenue is anticipated to be significant and will impact the Town's ability to fund necessary infrastructure improvements and public service facilities such as libraries, community centres and arenas that are an essential component of a complete community.
- Secondary Plans and related supporting studies are required to facilitate new
 development in greenfield and key intensification areas. The inability to fund such
 studies creates significant challenges for municipalities and may slow down the
 delivery of new housing supply.
- Limitations on undertaking urban design as part of the site plan process. Good urban design contributes to a sense of place and is an important consideration in developing complete communities and ensuring compatibility.
- The potential elimination of Green Development Standards plays a vital role in improving energy efficiency and reducing greenhouse gas emissions².
- Significant changes to the *Ontario Heritage Act* that on balance were not considered necessary considering the Town's measured approach to managing cultural heritage resources.
- The scoping of the role of Conservation Authorities to natural hazards only thereby precluding a broader role in providing advice on natural heritage matters. Staff recommended that the Conservation Authorities continue to play a role in environmental plan review subject to appropriate Memorandums of Understanding (MOU) with municipalities.

STRATEGIC PLAN ALIGNMENT:

This report has ramifications for many aspects of the Town's Strategic Plan such as:

- preserve, protect and enhance the Town's natural environment;
- to preserve, protect and promote our distinctive historical urban and rural character through the conservation and promotion of our built heritage and cultural heritage landscapes;
- to achieve sustainable growth to ensure that growth is managed so as to ensure a balanced, sustainable, well planned community infrastructure and services to meet the needs of residents and businesses; and,
- to provide responsive, effective municipal government and strong leadership in the effective and efficient delivery of municipal services.

² The final version of Bill 23 incorporates permissive language with respect to sustainable design which is considered to resolve this concern.

RELATIONSHIP TO CLIMATE CHANGE:

At this time, the impacts to the Town's Climate Change portfolio and initiatives are not fully understood given the magnitude of the legislative changes approved through Bill 23. It is worth noting that from the time of 1st Reading to Royal Assent, amendments were made to Bill 23 which reinstated the ability for municipalities to proceed with the application of Green Development Standards.

PUBLIC ENGAGEMENT:

Public Engagement for Bill 23 is coordinated by the province through the various ERO postings and to a certain extent, through submissions received by the Standing Committee on Heritage, Infrastructure and Cultural Policy. Where possible, at the implementation stages, the Town will ensure the public is provided an opportunity to be engaged and consulted on the required changes to local policies and procedures resulting from Bill 23.

INTERNAL CONSULTATION:

The Recreation and Parks, Finance, Development Review and Planning Policy teams coordinated a review of the Bill 23 changes. Comments from this internal review are included within this report.

FINANCIAL IMPLICATIONS:

Estimated financial impacts associated with implementation of the DC and parkland contribution legislative changes have been identified in this report. It is estimated that an overall 60-75% decrease in parkland dedication fees could be expected over the next 14 years, which based on current estimates, could represent a reduction of \$24 million to \$30 million dollars over that timeframe. With respect to the DC reductions, depending on the scenarios related to the attainable, affordable, and non-profit housing forms, the projected DC loss is estimated in the range of \$34 million to \$57 million dollars over the next 10 years (or \$20 million to \$31 million dollars over 5 years). This represents a 12% to 20% reduction in DC revenue over a 10-year timeframe. A detailed financial analysis would be required in order to fully assess the potential financial ramifications from Bill 23. Based on the estimated financial impacts identified within this report, staff recommend that the Province provide supplemental funding to offset these anticipated funding losses as a result of Bill 23.

Reviewed and approved by,

John Linhardt, Commissioner of Planning & Development

Chris Mills, Chief Administrative Officer

Appendix B – List of References

- Ontario Public Health Association Bill 23 Input to Province
- Canadian Environmental Law Association Written Submission to Standing Committee on Bill 23
- Association of Municipalities of Ontario Unpacking Bill 23
- Ontario Nature Bill 23 What You Need to Know
- An Integrated Approach to Address The Ontario Housing Crisis (amo.on.ca)



Regular Meeting of Council

MOVED BY:

Councillor Kenny

SECONDED BY:

Deputy Reeve Carroll

DATE: December 20, 2022

That Council support the resolution provided from the County of Lanark regarding Renfrew Inquest Recommendations;

And That this resolution be circulated to all municipalities in Ontario, local MPs and MPPs, the Association of Municipalities of Ontario, and the Ministry of the Attorney General, Ministry of Women's Social and Economic Opportunity, and the Federal Ministry of Women and Gender Equality.

DEFEATED REEVE



Regular Meeting of Council

MOVED BY:

Councillor Crabtree

RESOLUTION:18-2023

SECONDED BY:

Councillor Kenny

DATE: January 17, 2023

That Council support World Thinking Day initiative and request staff to purchase a blue flood light and display on World Thinking Day February 22, 2023 at the Municipal Office, And that Council approves the Clerk Administrator to circulate. the request out to Lanark County and lanark County Lower Tier Municipalities.

CARRIED

DEFEATED





OFFICE OF THE CITY CLERK 500 Donald Street East Thunder Bay, ON PTE 5V3

Tel: (807) 625-2230 Fax: (807) 623-5468

Tuesday, January 24, 2023

Hon. Doug Ford, Premier

Hon. Sylvia Jones, Health Minister

Re: Bill 42 - Gender Affirming Healthcare Act

Please be advised that the following resolution was adopted by Committee of the Whole at its meeting held on January 16, 2023 and subsequently ratified by City Council on January 23, 2023.

"WITH RESPECT to the Memorandum from Councillor Kristen Oliver, Chair – Inter-Governmental Affairs Committee, dated January 3, 2023, we recommend that Council support the passing of Bill 42 – Gender Affirming Health Care Act;

AND THAT a copy of this resolution be sent to Premier Doug Ford, Health Minister Sylvia Jones, MPP Kevin Holland, MPP Lise Vaugeois, Rainbow Collective, MPP Kristen Wong-Tam, all Ontario Municipalities and Thunder Pride;

AND THAT any necessary by-laws be presented to Council for ratification."

CARRIED

Should you have any further questions relative to the above, please do not hesitate to contact the undersigned.

Yours very truly.

Dana Earle Deputy City Clerk

/gs

Cc:

MPP Kevin Holland MPP Lise Vaugeois Rainbow Collective MPP Kristen Wong-Tam All Ontario Municipalities Thunder Pride



January 25th, 2023

Minister for Women and Gender Equality P.O. Box 8097, Station T CSC Ottawa, ON K1G 3H6

ATTENTION: Honorable Marci len

Dear Minister len:

RE: Resolution - Violence Against Women

Please be advised that the Council of the Corporation of the Township of Lanark Highlands passed the following resolution at their regular meeting held January 10th, 2023:

Moved by Reeve McLaren

Seconded by Councillor Summers

THAT, the Council of the Township of Lanark Highlands supports the resolution from the County of Lanark regarding Violence Against Women;

AND THAT, this resolution be circulated to all Ontario Municipalities, local MP's and MPP's, the Association of Municipalities of Ontario, and the Ministry of the Attorney General, Ministry of Women's Social and Economic Opportunity, and the Federal Ministry of Women and Gender Equality.

Resolved

Sincerely,



Amanda Noël, Clerk

Encls.

c.c. All Ontario Municipalities
Local MP's and MPP's
Association of Municipalities
Ministry of the Attorney General
Ministry of Women's Social and Econimic Opportunity



All Ontario Municipalities

December 15, 2022

To Whom it May Concern:

On Wednesday December 14th, 2022 Lanark County Council passed the following motion:

MOTION #CC-2022-235

MOVED BY: R. Kidd SECONDED BY: B. Dowdall

Be it resolved that the Lanark County Council recognizes the issues of violence in rural communities as serious to the health and wellness of local families; and

Be it further resolved that the Lanark County Council recognizes the rural Renfrew County Coroner's Inquest as important to all rural communities; and

Based on the statistics of 4815 crisis calls and service provision to 527 women and children in our local community, the Lanark County Council declares IPV (intimate partner violence)/VAW (violence against women) an epidemic as per recommendation #1 of the Renfrew County Coroner's jury recommendations; and

That this resolution be circulated to all municipalities in Ontario, local MPs and MPPs, the Association of Municipalities of Ontario, and the Ministry of the Attorney General, Ministry of Women's Social and Economic Opportunity, and the Federal Ministry of Women and Gender Equality.

Further background on the Renfrew Inquest Recommendations can be found at this link: https://lukesplace.ca/wp-content/uploads/2022/06/CKW-Inquest-Verdict-Recommendations-SIGNED Redacted.pdf

Thank you,

mank you,

Jasmin Ralph, Clerk

Cc: Association of Municipalities of Ontario, Scott Reid, MP, John Jordan, MPP, Ministries of the Attorney General, Justice, Women's Social and Economic Opportunity, and the Federal Ministry of Women's Issues.

To Puslinch Council, and

Sam Pantin, Disability Management Coordinator of Wellington County

From Helmuth Slisarenko, Kate Dewasha and Bruce Taylor of

Concerned Citizens of Puslinch (60 families)

Date 23 January 2023

Subject Improvements to Boreham Park

Summary

Boreham Park contains approximately 1,000 feet of 6-8 feet deep and 30-40 feet across ditches (swales). It is unsafe for children, especially children with disabilities, such as autism and sensory issues, and also for seniors. It also is non-compliant with the "barrier free" and "equal opportunity" Accessibility Act Standards (AODA).

A proper underground drainage system needs to be installed and the ditches filled in, not just around the playground area, but in the whole park, and before new swings and a slide are installed and a pavilion constructed.

The Ontario Trillium Foundation (OTF) provides for extensions of a year or more if necessary, so there is no problem with budgeting for and installing a new underground drainage system first. Councillor Sepulis at the neighbourhood meeting in Boreham Park on September 11 said there was money for improvements to the park if the OTF grant wasn't received. We are pleased the grant has been received. We recommend the money that Councillor Sepulis spoke of, or other money, be used for the installation of a proper underground drainage system.

Lastly, we agree with Sam Pantin, Disability Management Coordinator of Wellington County, who along with colleague Christine Carbone, Human Resources Assistant, visited the park this past October and made this suggestion:

"While the park is accessible – flat, stable surface to enter the park (O. Reg. 191/11: INTEGRATED ACCESSIBILITY STANDARDS (ontario.ca), there are ditches that surround the playground area and separates the park into three sections which can be dangerous for children playing close to the edge and make it difficult for people with mobility and vision issues to move from one area of the park to another without having to go back to the park entrance in order to get to the other side of the ditch. We understand that the Township has plans to upgrade the play area with new swings and slides as well as install a pavilion. You may want to address the ditches before you continue with your plans." (see Appendix 1: Email from Sam Pantin, Disability Management Coordinator of Wellington County, to Jeff Bunn, Deputy Clerk, Puslinch Township of October 11, 2022).

Problem

Safety

1a. The playground area is surrounded on three out of four sides by deep ditches, and the ditches are only 12-15 feet away from slide and swings on two sides. Improvements to the park should not be made until the park is made safe for children and seniors and compliant with the Accessibility Act.

The best model for parks is schools, where safety comes first. Playground areas are levelled to be "barrier free" for the purposes of "equal opportunity." Then playground equipment is installed. That's what should happen in Boreham Park. In conversations with other park officials in Milton, and Halton, and park designers and consultants, such as Parks and Recreation Ontario, the first priority is accessible landscape and drainage.

An excellent model of an accessible municipal park for all abilities and seniors, and compliant with AODA Standards, is "Stait Accessible Playground Park" in Fergus at 210 Garafraxa St W. On the "Let's All Play" sign, "Accessible Playground" is written in the largest font on the sign.

An example of the danger of the ditches in the park occurred on November 7 when a young child drove his electric John Deere tractor along the edge of the ditch and then on to the slope of the ditch. If his father had not run up to him, he almost certainly would have fallen out into the ditch with the tractor possibly on top of him. It was a very close call. One of AODA's Standards is for "barrier free" facilities. Ditches are not "barrier free" and do not provide for "equal opportunity."

1b. The Act was not designed for municipalities to delay accessibility and safety compliance until January 1, 2025, which is only two years away. If you check AODA web sites, there also are earlier deadlines for compliance.

2. Liability

Puslinch Township would be liable for any injuries as a result of the 6-8 foot ditches in the park. The Occupier's Liability Act sets out the responsibilities of an occupier of a property, such as a municipality for its recreational facilities. See also "CAN/CSA Z614:20 A Standard for Children's Playground Equipment and Surfacing".

Simcoe County in 2017 was found liable for an accident that happened at its municipal bike park "Campbell v. Bruce (County)." The Court found that Bruce County failed to ensure that the injured man was reasonably safe while at the bike park, even though Bruce County had posted signs instructing people "to ride within their ability and at their own risk." It was a huge settlement as the married man with two children ended up as a quadriplegic. Negligence against municipalities has been upheld by the courts even for insufficient inspection of playground equipment, "Kelemen v. Corporation of Delta" (BC).

Recommendations

- 1. That safety in Boreham Park, for all children, and especially children with disabilities, and also for seniors, be Council's top priority.
- 2. That Council not delay safety for users of the park, and compliance with the Accessibility Act. Deadlines or not, Puslinch has a responsibility to ensure full accessibility and safety now, and not only in one or more years from now.
- 3. That a proper underground drainage system be installed as soon as possible, not a year or more from now.
- 4. That Council not risk an engineer's assessment that the underground drainage system should have been installed first, and that the least expensive, and most efficient underground drainage systems is under or close to the playground area.
- 5. That Council review the recommendations of accessibility advocacy organizations such as the Canadian Foundation for Physically Disabled Persons (CFPDP), the Rick Hansen Foundation, the Council of Canadians with Disabilities (CCD), Safekids Canada, the Canadian Playground Safety Institute, Parks and Recreation Ontario, and others. The Rick Hansen Foundation's, "A Guide to Creating Accessible Play Spaces," is an excellent resource that shows how to create accessible playgrounds.
- 6. That Council apply for federal funds for improvements to accessibility in municipal parks, available under the "Enabling Accessibility Fund." Municipalities are eligible to apply and playgrounds are listed as eligible projects. The deadline was November 1, 2022. Often monies come around again one year later. There are also often other sources of federal or provincial monies. Michael Chong's office hopefully can be of assistance.
- 7. That Council establish an Accessibility Advisory Committee for Puslinch. If we had such a committee, we wouldn't be in this situation. Every municipality of over 10,000 population is required by the Act to have an Accessibility Advisory Committee composed of a majority of persons with disabilities.

The Act recommends, but does not require municipalities, with less than 10,000 population, to have an Accessibility Advisory Committee. There are reasons, however, why Accessibility Advisory Committees are recommended in Ontario for municipalities with less than 10,000 population. There isn't anything magical about the number 10,000.

8. That "International Accessibility Day" be recognized in Puslinch (May 18, 2023), and "International Day of Persons with Disabilities (December 3, 2023). The theme of the latter, initiated by the UN in 1992, is: "Removing Visible and Invisible Barriers."

Questions

In the application to the OTF:

- 1a. Was there full disclosure of the ditches (swales) in the park? Specifically, was a description of and pictures included of the 6-8 foot deep ditches, 30-40 feet across, surrounding three sides of the playground area, and only 12-15 feet from the playground area?
- 1b. Was a description of and pictures included of the ditches throughout the whole park?
- 2. The Puslinch Recreation and Parks Master Plan of May 2015 recommends that Boreham Park "... could support additional facilities but must remain cognizant of the adjacent residences." Why have the adjacent properties not been consulted? The recommendation is understandable as Boreham Park is situated between two homes, the Masons and the Taylors.

Appendix 1

Email from Sam Pantin, Disability Management Coordinator of Wellington County, to Jeff Bunn, Deputy Clerk, et al, Puslinch Township of October 11, 2022.

Hello Jeff,

We have received detailed emails from a member of the neighbourhood association, Concerned Citizens of Puslinch (58 families) regarding concern about children and senior safety in Boreham Park. They feel that the park is not in compliance with the AODA and would like to see the park be flat and safe before money is invested in new playground equipment and a pavilion.

Christine and I went to take a look at the park last week Thursday. While the park is accessible – flat, stable surface to enter the park (O. Reg. 191/11: INTEGRATED ACCESSIBILITY STANDARDS (ontario.ca)), there are ditches that surround the playground area and separates the park into three sections which can be dangerous for children playing close to the edge and make it difficult for people with mobility and vision issues to move from one area of the park to another without having to go back to the park entrance in order to get to the other side of the ditch.

We understand that the Township has plans to upgrade the play area with new swings and slides as well as install a pavilion. You may want to address the ditches before you continue with your plans.

Let me know if you need anything else. I have attached the emails we received.

Thank you in advance.

Sam Pantin, R.Kin, CSEP-CEP
Disability Management Coordinator
County of Wellington
74 Woolwich Street
Guelph, ON N1H 3T9
T 519.837.2600 x2661
C 226.962.5741
F 519.837.3418

samanthap@wellington.ca





Proposed Changes to the Ontario Heritage Act and its regulations: Bill 23 (Schedule 6) - the Proposed More Homes Built Faster Act, 2022

ERO (Environmental Registry

019-6196

of Ontario) number

Notice type Act

Act Ontario Heritage Act, R.S.O. 1990

Posted by Ministry of Citizenship and Multiculturalism

Notice stageDecision UpdatedDecision postedJanuary 9, 2023

Comment period October 25, 2022 - December 9, 2022 (45 days) Closed

Last updated January 9, 2023

Bill 23, the More Homes Built Faster Act, 2022 was passed by the Legislature and received Royal Assent on November 28, 2022. We have extended the deadline of this posting to enable your feedback to continue to be submitted so that it can help inform the implementation of this proposal as well as future initiatives. You may also want to consider submitting comments on other related postings and/or providing your comments directly to the Ministry at paula.kulpa@ontario.ca.

This consultation was open from:

October 25, 2022 to December 9, 2022

Decision summary

Bill 23, the More Homes Built Faster Act, received Royal Assent on November 28, 2022. The Act amends the Ontario Heritage Act (OHA) and its regulations to reduce red tape and remove barriers that are slowing down housing construction and other priority projects while continuing to conserve heritage properties that matter most to local communities.

Decision details

Changes to the OHA made under the More Homes Built Faster Act, 2022 (Bill 23) and regulatory changes to O. Reg. 9/06 and O. Reg 385/21 are required to implement the legislative changes came into effect on January 1, 2023. The amendments are as follows:

Listing:

- Most of the changes to procedures related to municipal registers, including the process and requirements around removal and inclusion of non-designated properties on the municipal registers.
- Changes to O. Reg. 9/06 Criteria for Determining Cultural Heritage Value or Interest to establish that non-designated properties included on a municipal register must meet one or more of the criteria outlined in the regulation.

Please note: the requirement for municipalities to make their municipal registers available on
a publicly accessible website will not come into force until July 1, 2023 to provide
municipalities with time to ensure compliance.

Designation:

- Limiting the ability to issue a Notice of Intention to Designate on a property subject to a prescribed event to only those properties included on a municipal register.
- Changes to O. Reg 9/06 Criteria for Determining Cultural Heritage Value or Interest to
 establish that a property must meet two or more criteria in the regulation in order to be
 designated. The regulation also includes transitionary provisions to address matters
 underway at the time of the changes coming into force.

Heritage Conservation Districts (HCDs):

- Changes to O. Reg 9/06 Criteria for Determining Cultural Heritage Value or Interest to establish that at least 25% of the properties within an HCD must meet two or more criteria in the regulation in order to be designated. The regulation also includes transitionary provisions to address matters underway at the time of the changes coming into force.
- Bill 23 also included an authority to set out processes to amend and repeal HCD bylaws in regulation; however, this regulation has not been developed yet. The Ministry of Citizenship and Multiculturalism will consult on the development of these processes in 2023.
- The outstanding amendments to the OHA made through Bill 108, the More Homes, More Choice Act, 2019, will also be proclaimed into force on January 1, 2023. These amendments speak specifically to the demolition or removal of an attribute that is not a building or structure within an HCD.

Other key changes:

- Bill 23 established new authorities under Part III.1 of the Act that relate to the Standards and Guidelines for Conservation of Provincial Heritage Properties.
- Regulatory amendments to O. Reg. 358/21 General will come into force on January 1, 2023. These amendments include consequential housekeeping amendments and transition provisions related to the above legislative amendments coming into force.

Bill 23 included some minor housekeeping amendments to the OHA that came into force upon Royal Assent. These included repealing the alternative definition of "alter."

Comments received

Through the registry

By email

By mail

1,244

28

1

View comments submitted through the registry (/index.php/notice/019-6196/comments)

Effects of consultation

Comments received through the Environmental Registry and by email during the comment period were considered by the government in making the decision to amend the Ontario Heritage Act and its regulations.

Commonly expressed themes and the Ministry's responses are as follows:

Standards and Guidelines: The amendments streamline heritage requirements for provincial priority projects by introducing new legislative authorities relating to the Standards and Guidelines for Conservation of Provincial Heritage Properties (S&Gs).

- Some submissions raised concerns about the exemption of properties from the S&Gs and the addition of a new minister's power to review evaluation decisions, noting that the S&Gs already set out a process for managing change in a way that balances provincial priorities.
- These changes are intended to strengthen the processes set out in the S&Gs while balancing provincial priorities. The ministry will engage ministry partners in the development of new processes in 2023.

Listing: The amendments provide clear and transparent requirements to improve municipal practices around the inclusion of non-designated (listed) properties on a municipal heritage register.

- There was significant support for new requirements to make heritage registers available on municipal websites. Some submissions raised concerns about the new timelines for reviewing and making decisions about non-designated properties on the municipal register.
- The purpose of these changes is to provide consistency across municipalities, to ensure that timely decisions are made about properties included on the municipal register and to encourage municipalities to prioritize designating properties that have the most heritage value.

Designation: The amendments provide increased certainty and predictability to proponents by placing further limitations on heritage designation once a prescribed event related to certain planning application under the Planning Act has occurred. In addition, the amendments increase rigour in the designation process by requiring that a property must meet two or more of the criteria for determining cultural heritage value or interest that are prescribed in O. Reg. 9/06.

- Housing and infrastructure stakeholders were supportive of the changes. Some submissions
 from other stakeholders noted that cultural heritage resources are often identified through
 the development process, and that the new requirements for properties to be included on
 the municipal register prior to a prescribed event could place some potential heritage
 properties at risk. Municipal and heritage stakeholders raised concerns that increasing the
 threshold to two criteria could disproportionately impact underrepresented communities.
- The changes to designation process are intended to provide greater predictability where a property is subject to a proposed development.
- The ministry has amended the presentation of O. Reg. 9/06 to clarify that there are nine criteria for determining cultural heritage value or interest and a property must meet two out of the nine. It is expected that this clarification will help to mitigate the concerns raised regarding the protection of properties that are significant to underrepresented communities.

Heritage Conservation Districts: The amendments increase rigour in establishing and managing heritage conservation districts (HCDs). They require municipalities to apply prescribed criteria to determine a district's cultural heritage value or interest and introduce a new regulatory authority to prescribe processes for municipalities to amend or repeal existing HCD designation and HCD plan bylaws.

Some submissions raised concerns that the criteria under O. Reg. 9/06, which are intended to
apply to individual properties, would not translate well to districts. It was recommended that
new criteria be developed that are specific to HCDs. Some submissions responded positively
to the addition of a regulatory process for amending HCDs and requested further
consultation in the development of the regulation.

Many municipalities already refer to the criteria when undertaking HCD studies. The ministry
made minor amendments to the language in order to adapt the criteria to the context of
HCDs. The ministry will be consulting on the new process for amending and repealing HCDs
in 2023.

Consultation: The proposed amendments were posted to the Environmental Registry and Regulatory Registry for 45 days.

- Many submissions, including from Indigenous communities and organizations, raised
 concerns of there was not enough consultation done and the amendments could result in the
 loss of cultural heritage resources. There were also concerns the consultation period was too
 short and that the bill was passed prior to the end of the consultation period.
- The amendments aim to streamline and focus processes for heritage protection while
 reducing approval delays for housing and other projects. The ministry originally posted the
 proposed regulation for 30 days on the Environmental and Regulatory Registries from
 October 25, 2022, to November 24, 2022. The posting was extended for a further 15 days
 until December 9, 2022, to enable continued feedback to help inform the implementation of
 the proposals, as well as future initiatives.

Other comments received: 762 of the total submissions the ministry received on this proposal provided comments that were related to other schedules within Bill 23 and/or other proposals related to the More Homes Built Faster: Ontario's Annual Housing Supply Action Plan 2022-23. These submissions were flagged as "off topic" because they did not include comments that were relevant to the proposed changes to the Ontario Heritage Act and its regulations. However, these submissions were shared with partner ministries for their consideration.

Supporting materials

Related links

Ontario Heritage Act, R.S.O. 1990, c. O.18 (https://www.ontario.ca/laws/statute/90o18)

View materials in person

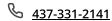
Some supporting materials may not be available online. If this is the case, you can request to view the materials in person.

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

Heritage Branch, Ministry of Citizenship and Multiculturalism 400 University Avenue, 5th Floor Toronto, ON M7A 2R9 Canada

Connect with us

Contact Paula Kulpa



Original proposal

ERO (Environmental Registry

of Ontario) number

019-6196

Notice type

Act

Act Ontario Heritage Act, R.S.O. 1990

Posted by Ministry of Citizenship and Multiculturalism

Proposal posted October 25, 2022

Comment period October 25, 2022 - December 9, 2022 (45 days)

Proposal details

Everyone in Ontario should be able to find a home that is right for them. But too many people are struggling with the rising cost of living and with finding housing that meets their family's needs.

Ontario's housing supply crisis is a problem which has been decades in the making. It will take both short-term strategies and long-term commitment from all levels of government, the private sector, and not-for-profits to drive change. Each entity will have to do their part to be part of the solution to this crisis.

Ontario needs more housing, and we need it now. That's why the Ontario government is taking bold and transformative action to get 1.5 million homes built over the next 10 years.

To support More Homes Built Faster: Ontario's Housing Supply Action Plan 2022-23, the government introduced the More Homes Built Faster Act, 2022, which, if passed, would ensure that cities, towns, and rural communities grow with a mix of ownership and rental housing types that meet the needs of all Ontarians.

These changes are providing a solid foundation to address Ontario's housing supply crisis over the long term and will be supplemented by continued action in the future.

Building on changes from the 2019 Housing Supply Action Plan: More Homes, More Choice, the government is proposing to make the following legislative and regulatory changes to the Ontario Heritage Act as part of the More Homes Built Faster: Ontario's Housing Supply Action Plan 2022-23. The goal of the proposed changes is to renew and update heritage policies, some of which haven't been reviewed in over a decade, to reduce red tape and remove barriers that are slowing down housing construction and other priority projects while continuing to conserve and commemorate key heritage properties that matter most to local communities.

Changes affecting the Standards and Guidelines for **Conservation of Provincial Heritage Properties**

MCM (Ministry of Citizenship and Multiculturalism) is looking to promote sustainable development that respects, the land and buildings that are important to its history and local communities while streamlining approvals and working to support priority provincial projects by proposing changes to the processes and requirements for ministries and prescribed public bodies governed by the Standards and Guidelines for Conservation of Provincial Heritage Properties (S&Gs) issued under the authority of Part III (3).1 of the Ontario Heritage Act.

MCM.(Ministry of Citizenship and Multiculturalism) is proposing to introduce an enabling legislative authority that provides that the process for identifying provincial heritage properties under the S&Gs. (Standards and Guidelines) may permit the Minister of Citizenship and Multiculturalism to review, confirm and revise, the determination of cultural heritage value or interest by a ministry or prescribed public body respecting a provincial heritage property. This process for Ministerial review would be set out through a revision to the S&Gs. (Standards and Guidelines) and may be applied to determinations made on or before the change comes into effect. If Bill 23 is passed, the ministry would develop and consult further on the proposed process under the S&Gs. (Standards and Guidelines).

MCM (Ministry of Citizenship and Multiculturalism) is proposing to introduce an enabling legislative authority so the Lieutenant Governor in Council (LGIC) may, by order, provide that the Crown in right of Ontario or a ministry or prescribed public body is not required to comply with some or all of the S&Gs (Standards and Guidelines) in respect of a particular property, if the LGIC (Lieutenant Governor in Council) is of the opinion that such exemption could potentially advance one or more of the following provincial priorities: transit, housing, long-term care and other infrastructure or other prescribed provincial priorities.

New requirements for municipal registers and the inclusion of non-designated properties on the municipal register

MCM (Ministry of Citizenship and Multiculturalism) is proposing clear and transparent requirements to improve municipal practices around the inclusion of non-designated properties on a municipal register through several changes that would encourage increased information sharing and timely decision making. These proposals include the following legislative changes:

- Requiring municipalities to make an up-to-date version of the information on their municipal
 register available on a publicly-accessible municipal website. <u>MCM (Ministry of Citizenship and
 Multiculturalism)</u> is proposing that, if passed, proclamation of this amendment would be
 delayed by six months to allow municipalities time to make the necessary changes to their
 website.
- Allowing for property owners to use the existing process under the <u>OHA (Ontario Heritage Act</u>) for objecting to the inclusion of their non-designated property on the municipal register regardless of when it was added to the municipal register.
- Increasing the standard for including a non-designated property on a municipal register by requiring that the property meet prescribed criteria. MCM (Ministry of Citizenship and Multiculturalism) is proposing to have the criteria currently included in Q. Reg. (Ontario Regulation) 9/06 (Criteria for determining cultural heritage value or interest) apply to non-designated properties included on the municipal register and is proposing that the property must meet one or more of the criteria to be included, which would be facilitated through a regulatory change. MCM (Ministry of Citizenship and Multiculturalism) is further proposing that this requirement would apply only to those non-designated properties added to the municipal register on or after the date the legislative and regulatory amendments come into force.
- Removal from the register
 - If council moves to designate a listed property but a designation bylaw is not passed or is repealed on appeal, the property would have to be removed from the municipal register.
 MCM (Ministry of Citizenship and Multiculturalism) is further proposing that this requirement would apply where the applicable circumstance outlined in the proposed amendment occurs on or after the legislative amendments, if passed, come into force.
 - Non-designated properties currently included on a municipal register would have to be removed if council does not issue a notice of intention to designate (NOID) within two

- years of the amendments coming into force.
- Non-designated properties included on the register after the proposed amendment comes into force would have to be removed if council does not issue a <u>NOID</u> (<u>notice of intention</u> <u>to designate</u>)within two years of the property being included.
- If removed from the register under any of the above three circumstances, the property cannot be relisted for a period of five years.

An increase in the threshold for designation of individual properties and new limitations on designation for properties subject to proposed development

MCM (Ministry of Citizenship and Multiculturalism) is proposing to provide further rigour in the designation process by increasing the threshold by requiring that a property meet two or more of the criteria prescribed in regulation. This change would be achieved through a regulatory amendment to *Q. Reg. (Ontario Regulation) 9/06* Criteria for determining cultural heritage value or interest. MCM (Ministry of Citizenship and Multiculturalism) is further proposing that this requirement would apply only to properties where the notice of intention to designate (NOID) is published on or after the date the regulatory amendment comes into force.

The *More Homes, More Choice Act, 2019* amended the *Ontario Heritage Act* to establish a new 90-day timeline for issuing a <u>NOID (notice of intention to designate)</u> when the property is subject to prescribed *Planning Act* events. This new timeline was intended to provide improved certainty to development proponents and to encourage discussions about potential designations at an early stage, avoiding designation decisions being made late in the land use planning process. <u>MCM (Ministry of Citizenship and Multiculturalism)</u> is proposing to provide increased certainty and predictability to development proponents by requiring that council would only be able to issue a <u>NOID (notice of intention to designate)</u> where a property is included on the municipal heritage register as a non-designated property at the time the 90-day restriction is triggered. Therefore, if a prescribed event occurs with respect to a property, a <u>NOID (notice of intention to designate)</u> may only be issued if the property was already included in the municipal register as a non-designated property on the date of the prescribed event. The 90-day timeline for a municipality to issue a <u>NOID (notice of intention to designate)</u> following a prescribed event would then apply. This restriction would only apply where the prescribed event occurs on or after the date the legislative amendment comes into force.

Changes to Heritage Conservation Districts

MCM (Ministry of Citizenship and Multiculturalism) is proposing to increase rigour in the process of identifying and protecting heritage conservation districts (HCD) by requiring municipalities to apply prescribed criteria to determine a HCD (heritage conservation districts)'s cultural heritage value or interest. This would include a requirement for HCD (heritage conservation districts) plans to explain how the HCD (heritage conservation districts) meets the prescribed criteria. MCM (Ministry of Citizenship and Multiculturalism) is proposing to have the criteria currently included in *Q. Reg.* (Ontario Regulation) 9/06 (Criteria for determining cultural heritage value or interest) apply to HCD (heritage conservation districts)s and is proposing that the HCD (heritage conservation districts) must meet two or more of the criteria in order to be designated, which would be achieved through a regulatory amendment. MCM (Ministry of Citizenship and Multiculturalism) is further proposing that this requirement would apply only to HCD (heritage conservation districts)s where the notice of the designation bylaw is published on or after the date the legislative and regulatory amendments come into force.

MCM.(Ministry of Citizenship and Multiculturalism) is also proposing to introduce a regulatory authority to prescribe processes for municipalities to amend or repeal existing HCD.(heritage conservation districts) designation and HCD.(heritage conservation districts) plan bylaws. The proposal would help create opportunities to align existing HCD.(heritage conservation districts)s with current government priorities and make HCD.(heritage conservation districts)s a more flexible and iterative tool that can better facilitate development, including opportunities to support smaller scale development and the "missing middle" housing. If passed, MCM.(Ministry of Citizenship and Multiculturalism) would consult on the development and details of the amendment and repeal processes at a later time.

Housekeeping and Commencement

Schedule 6 of the proposed *More Homes Built Faster Act, 2022* also includes proposed minor housekeeping amendments. Included among them are repealing the alternative definition of "alter" in subsection 1(2) of the OHA (Ontario Heritage Act), which was intentionally never proclaimed, and a change within the amended, but not proclaimed, section 42 of the OHA (Ontario Heritage Act) that would facilitate bringing into force the remaining sections of Schedule 11 from Bill 108 that were not proclaimed in 2021. MCM (Ministry of Citizenship and Multiculturalism) is further proposing a transition provision in regulation clarifying that these amendments to section 42, which would speak specifically to the demolition or removal of an attribute within an HCD (heritage conservation districts), would apply where an application for a heritage permit was received by the council of a municipality on or after the date these legislative amendments from Bill 108 come into force.

If the proposed *More Homes Built Faster Act, 2022* is passed and the regulatory proposals approved, <u>MCM (Ministry of Citizenship and Multiculturalism)</u> intends on bringing the legislative and regulatory amendments into force on January 1, 2023, unless otherwise noted.

Regulatory Impact Assessment

If passed, the changes resulting from Schedule 6 of the *More Homes Built Faster Act, 2022* and accompanying proposed regulatory changes would primarily impact municipalities, with some impacts to ministries and prescribed public bodies.

Work is currently underway to analyze possible administrative and other compliance costs to municipalities and other impacted stakeholders that may result from this proposal. To inform this analysis, we encourage you to provide your feedback.

Supporting materials

Related ERO (Environmental Registry of Ontario) notices

<u>Consultations on More Homes Built Faster: Ontario's Housing Supply Action Plan 2022-2023 (/index.php/notice/019-6162)</u>

Related links

Ontario Heritage Act, R.S.O. 1990, c. O.18 (https://www.ontario.ca/laws/statute/90o18)

<u>Standards & Guidelines for Conservation of Provincial Heritage Properties</u>
(http://www.mtc.gov.on.ca/en/publications/Standards Conservation.pdf)

More Homes Built Faster Plan (https://www.ontario.ca/page/more-homes-built-faster)

Bill 23, More Homes Built Faster Act, 2022 (https://www.ola.org/sites/default/files/nodefiles/bill/document/pdf/2022/2022-10/b023_e.pdf)

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.

Heritage Branch, Ministry of Citizenship and Multiculturalism 400 University Avenue, 5th Floor Toronto, ON M7A 2R9 Canada

Comment

Commenting is now closed.

This consultation was open from October 25, 2022 to December 9, 2022

Connect with us

Contact

Paula Kulpa

<u>437-331-2141</u>



paula.kulpa@ontario.ca

Delegate Request - Entry #7907

Type of Meeting Council	
Meeting Date February 8, 2023	
How many delegates are requesting to make this presentation? One (1)	
Type of Delegation This is a request to delegate on a topic on the upcoming agenda	
Identify which agenda item you are requesting to delegate on? Agenda has not been released yet	
Type of Presentation This request is to present a verbal delegation	
Type of Attendance In person	
Name of Delegate Fred Taylor	
Mailing Address of Delegate	
Phone Number of Delegate	
Email Address of Delegate	
Name of Second Delegate Empty	

Empty
Phone Number of Second Delegate
Empty
Email Address of Second Delegate
Empty
Purpose of delegation (state position taken on issue, if applicable)
To answer any questions and provide comments regarding the site located at: 6678 Wellington Road 34.
A formal presentation is being submitted to accompany the delegation
No
File Upload
Empty
The delegation will require the use of audio-visual equipment (power point presentation)
No
Acknowledgement
I (we) have read, understand and acknowledge the Rules and Procedures relating to Delegations as prescribed by the Procedural By-law 2022-046.

Township of Puslinch

Delegate Request - Entry #7908

Type of Meeting	
Council	
Meeting Date	
February 8, 2023	
How many delegates are requesting to make this presentation?	
One (1)	
Type of Delegation	
This is a request to delegate on a topic on the upcoming agenda	
Identify which agenda item you are requesting to delegate on?	
Agenda has not been posted yet	
Type of Presentation	
This request is to present a verbal delegation	
Type of Attendance	
In person	
Name of Delegate	
Steve Edwards	
Mailing Address of Delegate	
Phone Number of Delegate	
Email Address of Delegate	
Name of Second Delegate	
Empty	

Empty
Phone Number of Second Delegate
Empty
Email Address of Second Delegate
Empty
Purpose of delegation (state position taken on issue, if applicable)
To answer any questions and provide comments regarding the site located at: 6678 Wellington Road 34.
A formal presentation is being submitted to accompany the delegation
No
File Upload
Empty
The delegation will require the use of audio-visual equipment (power point presentation)
No
Acknowledgement
I (we) have read, understand and acknowledge the Rules and Procedures relating to Delegations as prescribed by the Procedural By-law 2022-046.

Township of Puslinch

Delegate Request - Entry #7915

Type of Meeting	
Council	
Meeting Date	
February 8, 2023	
How many delegates are requesting to make this presentation?	
One (1)	
Type of Delegation	
This is a request to delegate on a topic on the upcoming agenda	
Identify which agenda item you are requesting to delegate on?	
128 Brock Road South, Puslinch	
Type of Presentation	
This request is to present a verbal delegation	
Type of Attendance	
In person	
Name of Delegate	
Gillian Smith	
Mailing Address of Delegate	
Phone Number of Delegate	
Email Address of Delegate	
Name of Second Delegate	
Empty	

Mailing Address of Second Delegate Empty
Phone Number of Second Delegate Empty
Email Address of Second Delegate Empty
Purpose of delegation (state position taken on issue, if applicable) In support of application
A formal presentation is being submitted to accompany the delegation
File Upload Empty
The delegation will require the use of audio-visual equipment (power point presentation) No
Acknowledgement I (we) have read, understand and acknowledge the Rules and Procedures relating to Delegations as prescribed by the Procedural By-law 2022-046.

Township of Puslinch

Courtenay Hoytfox

From: Sent:

To: Subject:

Type of Meeting	
Council	
Meeting Date	
February 8, 2023	
How many delega	tes are requesting to make this presentation?
Two (2)	
Type of Delegation	n
This is a request to	delegate on a topic on the upcoming agenda
Identify which ago	enda item you are requesting to delegate on?
	ion Community Development

Township of Puslinch <services@puslinch.ca>

Friday, February 3, 2023 9:24 AM

New Entry: Delegate Request

Courtenay Hoytfox

THIS TEX	uest is to present a v	erbal delegat	ion	
Type o In perso	Attendance			
Name (Jim Est	f Delegate			
Mailin	Address of Delegat	te		
Phone	Number of Delegate	:		
Email	Address of Delegate			
Eman 7	iduress of Delegate			
	f Conord Dologoto			
Name (Rob W:	f Second Delegate good			

Mailing	Address of Second Delegate
Phone N	umber of Second Delegate
Email A	ddress of Second Delegate
-	of delegation (state position taken on issue, if applicable) Item 9.3.1 Estill Innovation Community Development
Agenda l	
Agenda] A forma	Item 9.3.1 Estill Innovation Community Development I presentation is being submitted to accompany the delegation egation will require the use of audio-visual equipment (power point

I (we) have read, understand and acknowledge the Rules and Procedures relating to Delegations as prescribed by the Procedural By-law 2022-046.

Sent from Township of Puslinch

Courtenay Hoytfox

From: Sent:

ct:	Courtenay Hoytfox New Entry: Delegate Request
	Type of Meeting
	Council
	Meeting Date
	February 8, 2023
	How many delegates are requesting to make this presentation? Two (2)
	Type of Delegation
	This is a request to delegate on a topic on the upcoming agenda
	Identify which agenda item you are requesting to delegate on? Estill Development
	Type of Presentation

Township of Puslinch <services@puslinch.ca>

Friday, February 3, 2023 8:50 AM

11115 16	quest is to present	a verbal deleg	gation	
Type (f Attendance			
Name Dan Fo	of Delegate restell			
Mailin	g Address of Dele	gate		
Phone	Number of Delega	ate		
Email	Address of Delega	ıte		
Name		P		

vianing	Address of Second Delegate
Phone I	Number of Second Delegate
E mail A	Address of Second Delegate
Purpose Oppose	e of delegation (state position taken on issue, if applicable)
A form No	al presentation is being submitted to accompany the delegation
No	egation will require the use of audio-visual equipment (power point

I (we) have read, understand and acknowledge the Rules and Procedures relating to Delegations as prescribed by the Procedural By-law 2022-046.

Sent from Township of Puslinch

Courtenay Hoytfox

From:

Sent: To: Subject:	Friday, February 3, 2023 10:15 AM Justine Brotherston New Entry: Delegate Request
Follow Up I Flag Status	
	Type of Meeting Council
	Meeting Date February 8, 2023
	How many delegates are requesting to make this presentation? One (1)
	Type of Delegation This is a request to delegate on a topic on the upcoming agenda
	Identify which agenda item you are requesting to delegate on? 9.3.1 Report ADM-2023-005 - Community Infrastructure and Housing Accelerator (CIHA) Request – Estill Innovation Community Development

Township of Puslinch <services@puslinch.ca>

Type of Pre	entation
This request	is to present a verbal delegation
Type of Atto	ndance
In person	
Name of De	egate
Angie Mason	
Mailing Add	ress of Delegate
Mailing Add	ress of Delegate
	per of Delegate
Phone Num Email Addr	

1 1	n to the Estill development proposal; will discuss water supply, noise and ation concerns.
A formal	presentation is being submitted to accompany the delegation
No	
The deleg	gation will require the use of audio-visual equipment (power point ion)
No	
Acknowle	edgement
	_

Sent from Township of Puslinch



REPORT FIN-2023-003

TO: Mayor and Members of Council

PREPARED BY: Mary Hasan, Director of Finance/Treasurer

PRESENTED BY: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: February 8, 2023

SUBJECT: 2022 Completed Capital Projects

File: F05 BUD

RECOMMENDATION

That Report FIN-2023-003 entitled 2022 Completed Capital Projects be received.

<u>Purpose</u>

The purpose of this report is to provide Council with information regarding the 2022 Completed Capital Projects.

The projected balances in the discretionary reserves and restricted reserves from 2022 to 2032 are discussed in Report FIN-2023-004.

Background

This Report provides Council with oversight of completed capital projects and the status of how budgeted projects have progressed as of December 31, 2022. This Report also links to the Township's balances in discretionary and restricted reserves. Certain components of this Report are also required for the purpose of the Township's annual audit.

Engineering Costs as a Percentage of Total Project Costs

Council requested that staff report on engineering costs as a percentage of total project costs for projects which the Township has retained its engineering firm for the purpose of project management/engineering designs, etc.

Outlined below are the engineering costs as a percentage of total project costs for those **completed** construction projects:

Project Description	Engineering	Total	%
	Costs	Costs	
Concession 7 Paving - Asset No. 114	\$89,544	\$931,047	9.6%
Gilmour Culvert - Asset No. 2009	\$58,202	\$510,578	11.4%

Proceeds of Disposal

In 2022, the Township also obtained proceeds for the sale of the following equipment in the Public Works and Fire and Rescue Services departments which funded the replacement of the equipment:

Description	Proceeds
1999 Grader-501 - Asset No. 8002	\$20,100
Self Contained Breathing Apparatus Equipment - Asset No. 6001	\$200
Rescue 35 Truck - Asset No. 5035	\$20,691
Total	\$40,991

Budgeted Capital Expenditures Compared to the Actual Capital Expenditures incurred in 2022

Schedule A to Report FIN-2023-003 provides a breakdown of the budgeted 2022 capital expenditures compared to the actual 2022 capital expenditures (also shown are project deficits and surpluses).

The 2022 capital expenditures outlined in Schedule A are funded by the following types of funding sources:

- Discretionary Reserves (ie. Aggregate Levy, Asset Management, Gravel Roads Improvement, Building Surplus, Capital Carry forward, Corporate Information Technology, etc.)
- Restricted Reserves (ie. Development Charges, Cash in Lieu of Parkland, Canada Community Building Fund, etc.)
- Grants (ie. Rural Economic Development, County Business Retention and Expansion, Investing in Canada Infrastructure Program, County Accessibility, Municipal Asset Management Grant Program, Ontario Community Infrastructure Funding, etc.)
- Proceeds of Disposal (as outlined above)
- Capital Taxation Levy
 - Please note that surpluses associated with projects that were funded by the Capital Taxation Levy that will not be complete in 2022 (ie. County Road Diet through Aberfoyle Peer Review, etc.) have been contributed to the Capital Carry forward Discretionary Reserve.

Fii	nan	cial	lm	ila	cati	ons
				~		••••

As	discussed	throughout	this	Report.
----	-----------	------------	------	---------

Applicable Legislation and Requirements

Municipal Act, 2001

Engagement Opportunities

The Township has incorporated a number of engagement opportunities associated with the 2023 budget process as outlined in Report FIN-2023-006.

Attachments

Schedule A: 2022 Total Capital Expenditures

Respectfully submitted,	Reviewed by:
Mary Hasan,	Glenn Schwendinger
Director of Finance/Treasurer	Chief Administrative Officer

Schedule A - 2022 Total Capital Expenditures

Dayanturant/Dusingt	Develope	A atrual	D:ff
partment/Project	Budget	Actual	Diff
Fire and Rescue			
Fire and Rescue	440.004	67.250	40.700
Structural Firefighter Gear	\$10,991	\$7,258	\$3,733
Rescue 35 Truck - Asset No. 5035	\$562,593	\$585,979	
Power Hydraulic Toolset - Extrication Equipment - Asset No. 6_70FE	\$52,500	<u>\$52,381</u>	\$119
Radio System Update	\$48,235	<u>\$43,085</u>	\$5,150
General Government			
Corporate			
Software System Enhancements or Replacement	\$100,000	<u>\$0</u>	
Fibre Internet	\$9,000	<u>\$0</u>	
Computer Equipment - 4002	\$21,522	<u>\$14,470</u>	
Marketing and Branding Implementation - Phase 2 and Phase 3	\$50,538	<u>\$58,799</u>	
County Road Diet through Aberfoyle Peer Review	\$20,000	<u>\$0</u>	
County of Wellington Study on Additional Employment Lands in the Township of Puslinch	\$30,000	<u>\$0</u>	
401 and Highway 6 Project Review of Hotspots	\$5,000	<u>\$0</u>	\$5,000
Finance			
Service Delivery Review Implementation - Ontario Municipal Modernization Funding	\$437,163	<u>\$25,058</u>	\$412,105
Development Charges By-law Amendment and Parkland Dedication By-law Amendment	\$22,500	<u>\$10,039</u>	\$12,461
Municipal Office			
Security Enhancements	\$4,084	<u>\$1,595</u>	
Space Needs Analysis	\$15,136	<u>\$10,326</u>	\$4,810
Municipal Office HVAC Upgrades - Asset No. 59MC	\$200,000	<u>\$302</u>	\$199,698
Accessible Washroom Upgrades - Asset No. 59MC	\$100,000	<u>\$0</u>	\$100,000
Convert Lighting to LED and Install Motion Sensors	\$17,420	<u>\$0</u>	\$17,420
Power Distribution Equipment (feeders, panels, main disconnect switch) - Asset No. 21MC	\$20,000	<u>\$0</u>	\$20,000
Window and Door Replacement Program and Air Curtain on Front Doors - Asset No. 46MC	\$100,000	<u>\$0</u>	\$100,000
Parks and Recreation			
Parks			
Puslinch Community Centre Park - Back Soccer Fields Construction - Asset No. 3080	\$34,662	<u>\$15,187</u>	\$19,475
Replacement of Benches at Morriston Meadows - Asset No. 3047	\$3,000	<u>\$1,277</u>	\$1,723
Replace Lights and Upgrade Washrooms at Old Morriston Park - Asset No. 3063 and 3064	\$307,509	\$116,153	\$191,356
Replacement of Morriston Meadows Bleachers and 6 Seat High Bleachers - Asset No. 3046, 3052 and 3053	\$20,000	<u>\$7,889</u>	\$12,111
Puslinch Community Centre Park Renovation and Upgrade	\$2,070,399	\$83,370	\$1,987,029
Playground area at Boreham Park (also known as Arkell Park) - Asset No. 3075	\$0	<u>\$3,986</u>	-\$3,986
PCC			
Building Condition Assessment, Arc Flash Study, Infra-red Scanning of Equipment	\$5,000	<u>\$0</u>	\$5,000
Kitchen Renovation including Kitchen Washroom - Asset No. 46PCC	\$66,318	\$78,170	-\$11,852
Convert Lighting to LED	\$10,000	\$0	\$10,000
Roof Inspection	\$5,000	\$0	\$5,000
ORC			
Building Condition Assessment, Arc Flash Study, Infra-red Scanning of Equipment	\$5,000	\$0	\$5,000
Convert Lighting to LED	\$15,000	\$0	
Public Works	7=5,300	<u> 72</u>	,
Public Works			
Kerr Crescent - Stormwater Management Facility - Asset No. 12004	\$550,000	\$0	\$550,000
Storm Sewer Inspections and Cleaning	\$10,000	<u>\$0</u>	
	710,000	<u> </u>	φ±0,000

Schedule A - 2022 Total Capital Expenditures

Department/Project	Budget	Actual	Diff	
Carroll Pond & Lesic Jassal Municipal Drain - Closed Circuit Television Inspection - Asset No. 12009 (Cell 1), 12010 (Cell 2), 12011 (Cell 3)	\$25,000	\$19,46 <u>9</u>	\$5,531	
Little's Bridge - Asset No. 1003	\$25,000	\$3,926	\$21,074	
Gilmour Culvert - Asset No. 2009	\$566,118	\$495,673	\$70,445	
Concession 7 Paving - Asset No. 114	\$920,679	\$914,816	\$5,863	
Grader with Snow Plowing Equipment - 501 - Asset No. 8002	\$0	<u>\$285</u>	-\$285	
Bridge and Culvert Inspections-2023	\$7,500	<u>\$0</u>	\$7,500	Capital Carryforward
Roads Management Plan including Condition Index Updates and Traffic County Study	\$135,000	\$123,413	\$11,587	Capital Carryforward
Concession 1 Culvert - Asset No. 1006	\$14,000	<u>\$0</u>	\$14,000	Capital Carryforward
Carriage Lane - Stormwater Management Facility - Asset No. 12007	\$165,000	\$3,209	\$161,791	Capital Carryforward
Roadside Mower for Grader 502 - Asset No. 8006	\$100,000	<u>\$93,558</u>	\$6,442	
Leslie Road West - Watson Road South to Bridge 5 (Mountsberg) - Asset No. 22	\$20,000	\$32,805	-\$12,805	
Building				
Building				
Septic Reinspections	\$15,000		\$15,000	Capital Carryforward
SUV - Asset No. 7005C	\$36,000	\$31,262	\$4,738	
Grand Total	\$6,957,867	\$2,833,739	\$4,124,128	



REPORT FIN-2023-004

TO: Mayor and Members of Council

PREPARED BY: Mary Hasan, Director of Finance/Treasurer

PRESENTED BY: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: February 8, 2023

SUBJECT: Balances in Discretionary and Restricted Reserves

File: F05 BUD

RECOMMENDATION

That Report FIN-2023-004 entitled Balances in Discretionary and Restricted Reserves be received.

Purpose

The purpose of this report is to provide Council with information regarding the projected balances in discretionary and restricted reserves from 2022 to 2032 based on the 2023 proposed Capital Budget and Forecast.

The 2022 completed capital projects are discussed in Report FIN-2023-003.

Background

This Report provides Council with oversight regarding the projected balances in discretionary and restricted reserves from 2022 to 2032 based on the 2023 proposed Capital Budget and Forecast. This Report also links to the Township's 2022 completed capital projects report. Certain components of this Report are also required for the purpose of the Township's annual audit.

The Budget Development and Control Policy discusses in great detail the significance and purpose of discretionary and restricted reserves and it includes a listing of the Township's approved Operating and Capital Discretionary Reserves.

In summary, 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. Analyzing the balances in the discretionary and restricted reserves from 2022 to 2032 will assist the Township in understanding the amount required to contribute to the reserves in order to fund the Township's long-term forecast. It will also assist in future service level discussions.

Financial Implications

Schedule A – Capital Carry-forward Balance Reconciliation

Schedule A to this report provides a reconciliation of the Township's Capital Carry-forward balance as of December 31, 2022. Capital Carry-forward projects are projects approved in a previous budget funded by tax levy funding or grant funding to be completed in 2023.

Schedule B - Operating Carry-forward Balance Reconciliation

Schedule B to this report provides a reconciliation of the Township's Operating Carry-forward balance as of December 31, 2022. Operating Carry-forward items are items approved to be funded by a prior year surplus or grant funding.

Schedule C – Discretionary Reserves – Balance as of December 31, 2022

Schedule C to this report includes the balance in each discretionary reserve with a total balance of \$5,882,825 in 2021 and \$4,989,011 in 2022. The 2022 balance includes capital carry-forward projects approved in a previous budget funded by discretionary reserves to be completed in 2023.

Schedule D – Restricted Reserves – Balance as of December 31, 2022

Schedule D to this report includes the balance in each restricted reserve with a total balance of \$2,998,850 in 2021 and \$2,241,636 in 2022. The 2022 balance includes capital carry-forward projects approved in a previous budget funded by restricted reserves to be completed in 2023.

Schedule E – Discretionary Reserves – Projected Balances from 2023 to 2032

Schedule E to this report includes the projected balance in each discretionary reserve from 2023 to 2032. The budget contributions and withdrawals entered are based on the Capital Budget and Forecast and the Operating Budget.

2022 Surplus Allocation

Schedule E also includes an estimated 2022 surplus allocation of \$100,000 allocated to the Asset Management (AM) Discretionary Reserve in accordance with Council Resolution No. 2019-347. Clause 11 of the Budget Development and Control Policy provides information regarding the General Corporate Surplus as outlined below:

- A Report is submitted for Council's consideration in April following the fiscal year end for the General Corporate Surplus 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.
- 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.

The 2018 to 2020 general surpluses were fully allocated to the AM Discretionary Reserve. The 2021 general surplus amount of \$569,206 was allocated as follows based on Council Resolution No. 2022-170 at the May 25, 2022 Council Meeting:

- \$494,206 to the AM Discretionary Reserve in accordance with Council Resolution No. 2019-347; and
- \$40,000 to fund the repair of the Tandem Dump Truck 301; and
- \$35,000 to fund the additional costs associated with the Roads Management Plan.

Similar to previous years, Township staff will provide Council with a general status report on the surplus/deficit as of December 31, 2022 based on the results of the 2022 audit in April of 2023.

AM Discretionary Reserve

The Township's AM Program and Capital Budget and Forecast enables the Township to plan effectively for the replacement of current infrastructure. The 2023 Capital Budget and Forecast was prepared taking into consideration the 2019 AM Plan and new and updated information regarding asset conditions and replacement cost estimates (ie. 2021 Storm Water Management Facility Maintenance Inspections etc.).

Based on the 2023 Capital Budget and Forecast, the estimated balances in the AM Discretionary Reserve from 2023 to 2032 are within the minimum target balance of \$2.0 million and a maximum target balance of \$4.0 million as recommended in the 2019 AM Plan:

2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
\$3.1M	\$2.8M	\$2.3M	\$3.3M	\$3.7M	\$2.3M	\$2.9M	\$3.5M	\$4.5M	\$4.8M
							ļ		

Aggregate Levy Discretionary Reserve

At its meeting held on January 18, 2023, Council directed staff to transfer the full aggregate levy from the operating budget to the capital budget with net zero budgeted tax levy impact in order to mitigate the risk associated with keeping the aggregate levy in the operating budget in the event that aggregate production decreases significantly. The increased aggregate levy contribution to the Capital Budget results in more aggregate levy funding and less AM funding for Public Works capital projects from 2022 to 2032.

Schedule F – Restricted Reserves – Projected Balances from 2023 to 2032

Schedule F to this report includes the projected balance in each restricted reserve from 2023 to 2032.

The contributions entered for the restricted reserves are noted below:

- Development Charges (DC) contributions are based on an estimate of \$100,000 received each year.
- Cash in lieu of parkland contributions are estimated at \$40,500 each year.
 - o Based on discussions with County of Wellington Planning Staff in 2020, the number of projected consents in the forecast is difficult to predict due to more restrictive Provincial policy and the fact that eligible properties are only allowed 1 consent since 2005. Therefore, Township staff have assumed a conservative estimate of three consents per year in order to estimate the amount of cash in lieu of parkland to be received in future years.
- Canada Community-Building Fund contributions are based on the agreement between the Township and the Association of Municipalities of Ontario effective April 1, 2014.
 Schedule A2 to the Municipal Funding Agreement provides a schedule of fund payments from 2019 to 2023 (ie. remaining five years of the agreement) based on the 2016 Census.

Below are the DC's collected from 2013 to 2022.

- 2013 \$241K of which 70% of this amount was for a significant commercial development
- 2014 \$105K
- 2015 \$158K
- 2016 \$248K
- 2017 \$266K
- 2018 \$188K
- 2019 \$256K
- 2020 \$754K of which 72% of this amount was for DC's collected from a developer that entered into a DC credit agreement with the Township in 2012.

- 2021 \$318K
- 2022 \$190K

Please note, the following restricted reserves have the following negative balances:

- Administrative Studies DC has a negative balance of \$10.3K in 2025 and remains negative to 2032 due to \$130K of capital withdrawals in various years related to updates to various plans and studies as outlined below:
 - Community Based Strategic Plan 2027
 - o AM Plan and Policy Updates 2029
 - Development Charges Background Study 2029
 - o Fire Master Plan 2025
 - o Recreation and Parks Master Plan 2032
 - o Traffic County Study 2028
 - Road Condition Index Updates 2028
- Parks and Recreation Services DC has a negative balance of \$15.7K in 2023 and then becomes positive in 2025 due to upcoming capital withdrawals in 2023 related to the Puslinch Community Centre Park Renovation and Upgrade and playground area at Boreham Park (also known as Arkell Park) projects.

The withdrawals entered are based on the Capital Budget and Forecast. A municipality is permitted to have a negative balance in a DC restricted reserve only if the municipality is able to obtain sufficient DC's in the future to repay the negative balance.

Township staff are currently working with our municipal partners and Watson & Associates in order to determine the impact of Bill 23 on the Township's development charges.

Schedule G – Discretionary and Restricted Reserves - Projected Balances from 2023 to 2032

Schedule G to this report summarizes the total projected balance in each discretionary and restricted reserve from 2023 to 2032.

Applicable Legislation and Requirements

Municipal Act, 2001

Engagement Opportunities

The Township has incorporated a number of engagement opportunities associated with the 2023 budget process as outlined in Report FIN-2023-006.

Attachments

Director of Finance/Treasurer	Chief Administrative Officer
Mary Hasan	Glenn Schwendinger
Respectfully submitted,	Reviewed by:
Schedule G – Discretionary and Restricted Reserves -	- Projected Balances from 2023 to 2032
Schedule F – Restricted Reserves – Projected Balance	es from 2023 to 2032
Schedule E – Discretionary Reserves – Projected Bala	ances from 2023 to 2032
Schedule D – Restricted Reserves – Balance as of Dec	cember 31, 2022
Schedule C – Discretionary Reserves – Balance as of	December 31, 2022
Schedule B – Operating Carry-forward Balance Reco	nciliation
Schedule A – Capital Carry-forward Balance Reconcil	iation

Schedule A - Capital Carry-forward Balance Reconciliation

Project				
Service Delivery Review Implementation - Ontario Municipal Modernization Funding	\$	412,105		
Fibre Internet	\$	9,000		
ORC - Building Condition Assessment, Arc Flash Study, Infra-red Scanning of Equipment	\$	5,000		
PCC - Building Condition Assessment, Arc Flash Study, Infra-red Scanning of Equipment	\$	5,000		
Storm Sewer Inspections and Cleaning	\$	10,000		
Enabling Accessibility funding for Accessible Washroom Upgrades	\$	68,311		
County Road Diet through Aberfoyle Peer Review	\$	20,000		
County of Wellington Study on Additional Employment Lands in the Township of Puslinch	\$	5,000		
401 and Highway 6 Project Review of Hotspots	\$	5,000		
County of Wellington Accessibility Grant Funding for the Playground Upgrades at Boreham Park				
and PCC Park received in 2022 to be spent in 2023	\$	30,000		
December 31, 2022 Balance	\$	569,416		

Schedule B - Operating Carry-forward Balance Reconciliation

Project		t
2022 One-Time Implementation Costs - Microsoft Office 365 Email Licenses - 2021 Surplus		
Funded	\$	2,519
2023 Full-Time Equipment Operator - 2022 Surplus Funded	\$	27,110
December 31, 2022 Balance	\$	29,629

Schedule C - Discretionary Reserves - Balance as of December 31, 2022

Account	Discretionary_Reserves									
									2023 Capital	
		Opening	2021 Surplus	2022 Budget	Capital	Capital	Operating	Operating	Cfwd Projects	
		Balance	Contribution	Contribution	Contributions	Withdrawals	Contributions	Withdrawals	not yet spent	Ending Balance
01-0013-3150	Bldg Reserve	\$601,700	\$(\$0	\$0	-\$16,850	\$70,037	\$0	-\$117,950	\$536,937
01-0013-3090	Capital Cfwd.	\$598,235	\$1	\$0	\$60,000	-\$88,820	\$0	\$0	-\$569,416	-\$1
01-0013-3120	Corporate Information Technology	\$181,233	\$1	\$10,000	\$0	\$0	\$0	\$0	-\$70,000	\$121,233
01-0013-3115	Election	\$41,250	\$1	\$13,750	\$0	\$0	\$0	-\$55,000	\$0	-
01-0013-3195	Corp. Insur. Conting.	\$83,858	\$1	\$10,000	\$0	\$0	\$0	\$0) \$0	\$93,858
	Corp. Legal Conting.	\$232,163	\$1		\$0		\$0	\$0		
	Operat. Cfwd.	\$51,519	\$1		·	<u>.</u>	\$27,110			
01-0013-3205	Public Works Winter Maint.	\$39,257	\$() \$0	\$0	\$0	\$0	-\$39,257	\$0	\$0
01-0013-3105	Gravel Roads Improvement	\$275,000	\$1	\$207,800	\$0	-\$203,739	\$0	\$0	\$0	\$279,061
01-0013-3180	Aggregate Levy	\$7,874	\$1	\$271,900	\$0		\$0	\$0	-\$7,500	\$13,406
01-0013-3075	Broadband Strategy Implementation	\$7,192	\$1) \$0	\$0	\$0	\$0	\$0) \$0	\$7,192
01-0013-3085	Asset Management	\$3,613,506	\$494,20	\$1,212,300	\$35,000	-\$876,391	\$40,000	-\$41,975	-\$972,594	\$3,504,052
	Outstanding Deposits	\$150,036	\$(\$0		\$21,444	\$0		
Total per abov	e	5,882,825	494,206	1,725,750	95,000	(1,444,669)	158,591	(185,232)	(1,737,459)	4,989,011

Schedule D - Restricted Reserves - Balance as of December 31, 2022

up to December 31, 2022

Account	Restricted_Reserves	Reserve Ty	/pe					2023	
								Capital	
								Cfwd	
						Capital		Projects	
				Opening		Withdrawal	Interest	not yet	Ending
				Balance	Contributions	S	Income	spent	Balance
03-0043-2479	Admin. Studies	DC		\$92,529	\$12,028	-\$57,020	\$1,528	-480	\$48,585
03-0043-2478	Fire Services	DC		\$658,495	\$50,375	\$0	\$14,917	0	\$723,787
03-0043-2475	Parks and Recreation Services	DC		\$94,193	\$24,397	-\$2,562	\$2,293	-99,322	\$19,000
03-0043-2473	Roads and Related Services	DC		\$791,910	\$103,602	-\$290,380	\$15,240	0	\$620,373
03-0043-2476	Cash in Lieu of Parkland	Parkland		\$913,846	\$256,000	-\$69,824	\$21,969	-572,642	\$549,349
03-0043-2474	Canada Community-Building Fun	d Grant		\$388,688	\$232,662	-\$406,579	\$6,583	0	\$221,355
03-0043-2471	Perpetual Maintenance			\$59,188	\$0	\$0	\$0	0	\$59,188
			Total	\$ 2,998,850	\$ 679,064	\$ (826,365)	\$ 62,531	\$ (672,444)	\$ 2,241,636

Schedule E - Discretionary Reserves - Projected Balances from 2023 to 2032

			Budget	Est. 2022 Surplus				
Reserve	Year	Opening Balance	Contributions	Contributions		Operating Contribi Operat	ing Withdrawals	Ending Balance
Bldg Reserve	2023	\$536,937	\$0	\$0	\$3,515	\$0	\$103,910	\$429,512
Bldg Reserve	2024	\$429,512	\$0	\$0	\$24,600	\$0	\$0	\$404,912
Bldg Reserve	2025	\$404,912	\$0	\$0	\$0	\$0	\$0	\$404,912
Bldg Reserve	2026	\$404,912	\$0	\$0	\$5,000	\$0	\$0	\$399,912
Bldg Reserve	2027	\$399,912				\$0	\$0	\$381,900
Bldg Reserve	2028	\$381,900	\$0	\$0	\$93,825	\$0	\$0	\$288,075
Bldg Reserve	2029	\$288,075	\$0	\$0	\$26,100	\$0	\$0	\$261,975
Bldg Reserve	2030	\$261,975	\$0	\$0	\$0	\$0	\$0	\$261,975
Bldg Reserve	2031	\$261,975	\$0	\$0	\$5,000	\$0	\$0	\$256,975
Bldg Reserve	2032	\$256,975	\$0	\$0	\$25,512	\$0	\$0	\$231,463
Capital Cfwd.	2023					<u> </u>	\$0	\$0
Capital Cfwd.	2024					\$0	\$0	
Capital Cfwd.	2025						\$0	
Capital Cfwd.	2026						\$0	\$0
Capital Cfwd.	2027	\$0	\$0		· · · · · · · · · · · · · · · · · · ·	\$0	\$0	
Capital Cfwd.	2028	\$ \$0	\$0				\$0	\$0
Capital Cfwd.	2029	\$0	\$0	·		\$0	\$0	
Capital Cfwd.	2030		<u>'</u>	<u> </u>		<u> </u>	\$0	\$0
Capital Cfwd.	2031	. \$0	\$0	\$0	\$0	\$0	\$0	
Capital Cfwd.	2032	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Corporate Information Technology	2023	\$121,233	\$10,000	\$0	\$0	\$0	\$0	\$131,233
Corporate Information Technology	2024	\$131,233	\$10,000	\$0	\$0	\$0	\$0	\$141,233
Corporate Information Technology	2025	\$141,233	\$10,000	\$0	\$0	\$0	\$0	\$151,233
Corporate Information Technology	2026	\$151,233	\$10,000	\$0	\$0	\$0	\$0	\$161,233
Corporate Information Technology	2027	\$161,233	\$10,000	\$0	\$0	\$0	\$0	\$171,233
Corporate Information Technology	2028			\$0	\$0	\$0	\$0	\$181,233
Corporate Information Technology	2029				· · · · · · · · · · · · · · · · · · ·		\$0	
Corporate Information Technology	2030	\$191,233	\$10,000	\$0	\$0	\$0	\$0	\$201,233
Corporate Information Technology	2031	\$201,233	\$10,000			\$0	\$0	\$211,233
Corporate Information Technology	2032	\$211,233	\$10,000	\$0	\$0	\$0	\$0	\$221,233
Election	2023	\$0	\$13,750	\$0	\$0	\$0	\$0	\$13,750
Election	2024	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2025	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2026	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2027	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2028	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2029	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2030	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2031	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Election	2032	\$13,750	\$0	\$0	\$0	\$0	\$0	\$13,750
Corp. Insur. Conting.	2023	\$93,858	\$25,000	\$0	\$0	\$0	\$10,000	\$108,858
Corp. Insur. Conting.	2024	\$108,858	\$0	\$0	\$0	\$0	\$0	\$108,858
Corp. Insur. Conting.	2025			<u>`</u>	· · · · · · · · · · · · · · · · · · ·		\$0	\$108,858
Corp. Insur. Conting.	2026		<u>.</u>			\$0	\$0	
Corp. Insur. Conting.	2027						\$0	

Schedule E - Discretionary Reserves - Projected Balances from 2023 to 2032

			Budget	Est. 2022 Surplus				
Reserve	Year	Opening Balance	Contributions	Contributions		Operating Contrib Operating \	Withdrawals	Ending Balance
Corp. Insur. Conting.	2028	\$108,858	\$0	\$(\$0	\$0	\$0	\$108,858
Corp. Insur. Conting.	2029	\$108,858	\$0	\$0	\$0	\$0	\$0	\$108,858
Corp. Insur. Conting.	2030	\$108,858	\$0	\$0) \$0	\$0	\$0	\$108,858
Corp. Insur. Conting.	2031	\$108,858	\$0	\$0	\$0	\$0	\$0	\$108,858
Corp. Insur. Conting.	2032	\$108,858	\$0	\$() \$0	\$0	\$0	\$108,858
Corp. Legal Conting.	2023	\$232,163	\$0	\$0	\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2024	\$232,163	\$0	\$() \$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2025	\$232,163	\$0	\$0	\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2026	\$232,163	\$0	\$(\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2027	\$232,163	\$0	\$0	\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2028	\$232,163	\$0	\$(\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2029	\$232,163	\$0			\$0	\$0	\$232,163
Corp. Legal Conting.	2030	\$232,163	\$0	\$(\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2031	\$232,163	\$0	\$(\$0	\$0	\$0	\$232,163
Corp. Legal Conting.	2032	\$232,163	\$0	\$(\$0	\$0	\$0	\$232,163
Operat. Cfwd.	2023	\$29,629	\$0			\$0	\$29,629	\$0
Operat. Cfwd.	2024	\$0	\$0	\$(\$0	\$0	\$0	\$0
Operat. Cfwd.	2025	\$0	\$0	\$(\$0	\$0	\$0	\$0
Operat. Cfwd.	2026	\$0	\$0	\$(\$0	\$0	\$0	\$0
Operat. Cfwd.	2027	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operat. Cfwd.	2028	\$0	\$0	\$(\$0	\$0	\$0	\$0
Operat. Cfwd.	2029	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operat. Cfwd.	2030	\$0	\$0	\$(\$0	\$0	\$0	\$0
Operat. Cfwd.	2031	\$0	\$0	\$0	\$0	\$0	\$0	
Operat. Cfwd.	2032	\$0	\$0	\$0	\$0	\$0	\$0	
Public Works Winter Maint.	2023	\$0	\$0	\$(\$0	\$0	\$0	\$0
Public Works Winter Maint.	2024	\$0	\$0			\$0	\$0	
Public Works Winter Maint.	2025	\$0	\$0	\$(\$0	\$0	\$0	\$0
Public Works Winter Maint.	2026	\$0	\$0	\$() \$0	\$0	\$0	
Public Works Winter Maint.	2027	\$0	\$0	\$(\$0	\$0	\$0	\$0
Public Works Winter Maint.	2028			<u>.</u>		<u> </u>	\$0	
Public Works Winter Maint.	2029	\$0	\$0	\$() \$0	\$0	\$0	\$0
Public Works Winter Maint.	2030	\$0			<u>.</u>	\$0	\$0	
Public Works Winter Maint.	2031	\$0	\$0	\$() \$0	\$0	\$0	\$0
Public Works Winter Maint.	2032	\$0	\$0	\$() \$0	\$0	\$0	
Gravel Roads Improvement	2023	\$279,061	\$270,800	\$(\$0	\$0	\$0	\$549,861
Gravel Roads Improvement	2024	\$549,861	\$270,800	\$(\$0	\$0	\$0	\$820,661
Gravel Roads Improvement	2025	\$820,661	\$270,800	\$() \$0	\$0	\$0	\$1,091,461
Gravel Roads Improvement	2026		\$270,800		<u>.</u>	· · · · · · · · · · · · · · · · · · ·	\$0	1 / / -
Gravel Roads Improvement	2027			<u> </u>		<u> </u>	\$0	
Gravel Roads Improvement	2028	\$1,633,061	\$270,800	\$(\$0	\$0	\$0	\$1,903,861
Gravel Roads Improvement	2029	\$1,903,861	\$270,800				\$0	\$2,174,661
Gravel Roads Improvement	2030	\$2,174,661	\$270,800	\$(\$0	\$0	\$0	\$2,445,461
Gravel Roads Improvement	2031	\$2,445,461	\$270,800	\$(\$0	\$0	\$0	\$2,716,261
Gravel Roads Improvement	2032	\$2,716,261	\$270,800	\$(\$0	\$0	\$0	\$2,987,061

Schedule E - Discretionary Reserves - Projected Balances from 2023 to 2032

			Budget	Est. 2022 Surplus				
Reserve	Year	Opening Balance	Contributions	Contributions		Operating Contribi Operating Withdrawa		nding Balance
Aggregate Levy	2023	\$13,406	\$492,000	\$0		\$0	\$0	\$13,406
Aggregate Levy	2024	\$13,406	\$492,000	\$0		•	\$0	\$13,405
Aggregate Levy	2025	\$13,405	\$492,000	<u> </u>		· · · · · · · · · · · · · · · · · · ·	\$0	\$442,857
Aggregate Levy	2026	\$442,857	\$492,000	\$0		\$0	\$0	\$645,267
Aggregate Levy	2027	\$645,267	\$492,000				\$0	-\$74,413
Aggregate Levy	2028	-\$74,413	\$492,000	\$0	\$375,000	\$0	\$0	\$42,587
Aggregate Levy	2029	\$42,587	\$492,000	\$0	\$472,975	\$0	\$0	\$61,612
Aggregate Levy	2030	\$61,612	\$492,000	\$0		\$0	\$0	\$302,407
Aggregate Levy	2031	\$302,407	\$0	\$0	\$78,517	\$0	\$0	\$223,890
Aggregate Levy	2032	\$223,890	\$0	\$0			\$0	\$223,890
Broadband Strategy Implementation	2023	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2024	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2025	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2026	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2027	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2028	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2029	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2030	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2031	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Broadband Strategy Implementation	2032	\$7,192	\$0	\$0	\$0	\$0	\$0	\$7,192
Asset Management	2023	\$3,504,052	\$955,792	\$100,000	\$1,488,208	\$0 \$	10,000	\$3,061,637
Asset Management	2024	\$3,061,637	\$1,054,324	\$0	\$1,274,253	\$0	\$0	\$2,841,708
Asset Management	2025	\$2,841,708	\$940,460	\$0	\$1,524,611	\$0	\$0	\$2,257,557
Asset Management	2026	\$2,257,557	\$1,175,700	\$0	\$158,844	\$0	\$0	\$3,274,413
Asset Management	2027	\$3,274,413	\$1,232,700	\$0	\$769,829	\$0	\$0	\$3,737,284
Asset Management	2028	\$3,737,284	\$1,125,800	\$0	\$2,546,369	\$0	\$0	\$2,316,714
Asset Management	2029	\$2,316,714	\$1,321,824	\$0	\$697,850	\$0	\$0	\$2,940,688
Asset Management	2030	\$2,940,688	\$1,362,700	\$0	\$755,922	\$0	\$0	\$3,547,466
Asset Management	2031	\$3,547,466	\$1,427,700	\$0	\$458,844	\$0	\$0	\$4,516,322
Asset Management	2032	\$4,516,322	\$1,442,200	\$0	\$1,153,171	\$0	\$0	\$4,805,351
Outstanding Deposits	2023	\$171,480	\$0	\$0	\$0	\$0	\$0	\$171,480
Outstanding Deposits	2024	\$171,480	\$0	\$0	\$0	\$0	\$0	\$171,480
Outstanding Deposits	2025	\$171,480	\$0	\$0	\$0	\$0	\$0	\$171,480
Outstanding Deposits	2026	\$171,480	\$0	\$0	\$0	\$0	\$0	\$171,480
Outstanding Deposits	2027	\$171,480	\$0		\$0		\$0	\$171,480
Outstanding Deposits	2028	\$171,480	\$0	\$0	\$0	\$0	\$0	\$171,480
Outstanding Deposits	2029	\$171,480	\$0	\$0	\$0	·	\$0	\$171,480
Outstanding Deposits	2030	\$171,480	\$0	<u> </u>		•	\$0	\$171,480
Outstanding Deposits	2031	\$171,480	\$0			·	\$0	\$171,480
Outstanding Deposits	2032	\$171,480	\$0	<u> </u>	<u>'</u>	•	\$0	\$171,480
0 -1		, -,	7.5		***	1 -		, ,

Schedule F - Restricted Reserves - Projected Balances from 2023 to 2032

Reserve	Year	Opening Balance	Capital Withdrawals	Contributions	Ending Balance
Admin. Studies	2023	\$48,585	\$21,672	\$6,317	\$33,230
Admin. Studies	2024	\$33,230	\$20,124	\$6,317	\$19,423
Admin. Studies	2025	\$19,423	\$36,000	\$6,317	-\$10,260
Admin. Studies	2026	-\$10,260	\$0	\$6,317	-\$3,943
Admin. Studies	2027	-\$3,943	\$5,000	\$6,317	-\$2,625
Admin. Studies	2028	-\$2,625	\$42,000	\$6,317	-\$38,308
Admin. Studies	2029	-\$38,308	\$20,124	\$6,317	-\$52,115
Admin. Studies	2030	-\$52,115	\$0	\$6,317	-\$45,798
Admin. Studies	2031	-\$45,798	\$0	\$6,317	-\$39,481
Admin. Studies	2032	-\$39,481	\$27,000	\$6,317	-\$60,164
Fire Services	2023	\$723,787	\$0	\$26,457	\$750,244
Fire Services	2024	\$750,244	\$0	\$26,457	\$776,701
Fire Services	2025	\$776,701	\$0	\$26,457	\$803,159
Fire Services	2026	\$803,159	\$0	\$26,457	\$829,616
Fire Services	2027	\$829,616	\$0	\$26,457	\$856,073
Fire Services	2028	\$856,073	\$0	\$26,457	\$882,530
Fire Services	2029	\$882,530	\$0	\$26,457	\$908,987
Fire Services	2030	\$908,987	\$0	\$26,457	\$935,445
Fire Services	2031	\$935,445	\$0	\$26,457	\$961,902
Fire Services	2032	\$961,902	\$0	\$26,457	\$988,359
Parks and Recreation Services	2023	\$19,000	\$47,530	\$12,813	-\$15,717
Parks and Recreation Services	2024	-\$15,717	\$0	\$12,813	-\$2,903
Parks and Recreation Services	2025	-\$2,903	\$0	\$12,813	\$9,910
Parks and Recreation Services	2026	\$9,910	\$0	\$12,813	\$22,724
Parks and Recreation Services	2027	\$22,724	\$0	\$12,813	\$35,537
Parks and Recreation Services	2028	\$35,537	\$0	\$12,813	\$48,351
Parks and Recreation Services	2029	\$48,351	\$0	\$12,813	\$61,164
Parks and Recreation Services	2030	\$61,164	\$0	\$12,813	\$73,977
Parks and Recreation Services	2031	\$73,977	\$0	\$12,813	\$86,791

Schedule F - Restricted Reserves - Projected Balances from 2023 to 2032

Reserve	Year	Opening Balance	Capital Withdrawals	Contributions	Ending Balance
Parks and Recreation Services	2032	\$86,791	\$0	\$12,813	\$99,604
Roads and Related Services	2023	\$620,373	\$299,053	\$54,412	\$375,732
Roads and Related Services	2024	\$375,732	\$235,860	\$54,412	\$194,284
Roads and Related Services	2025	\$194,284	\$56,115	\$54,412	\$192,582
Roads and Related Services	2026	\$192,582	\$63,781	\$54,412	\$183,213
Roads and Related Services	2027	\$183,213	\$118,320	\$54,412	\$119,306
Roads and Related Services	2028	\$119,306	\$94,593	\$54,412	\$79,125
Roads and Related Services	2029	\$79,125	\$63,953	\$54,412	\$69,584
Roads and Related Services	2030	\$69,584	\$36,611	\$54,412	\$87,385
Roads and Related Services	2031	\$87,385	\$44,606	\$54,412	\$97,191
Roads and Related Services	2032	\$97,191	\$9,843	\$54,412	\$141,760
Cash in Lieu of Parkland	2023	\$549,349	\$137,648	\$40,500	\$452,201
Cash in Lieu of Parkland	2024	\$452,201	\$312,500	\$40,500	\$180,201
Cash in Lieu of Parkland	2025	\$180,201	\$90,000	\$40,500	\$130,701
Cash in Lieu of Parkland	2026	\$130,701	\$20,134	\$40,500	\$151,067
Cash in Lieu of Parkland	2027	\$151,067	\$5,000	\$40,500	\$186,567
Cash in Lieu of Parkland	2028	\$186,567	\$162,807	\$40,500	\$64,260
Cash in Lieu of Parkland	2029	\$64,260	\$55,000	\$40,500	\$49,760
Cash in Lieu of Parkland	2030	\$49,760	\$0	\$40,500	\$90,260
Cash in Lieu of Parkland	2031	\$90,260	\$5,000	\$40,500	\$125,760
Cash in Lieu of Parkland	2032	\$125,760	\$0	\$40,500	\$166,260
Canada Community-Building Fund	2023	\$221,355	\$259,200	\$242,778	\$204,933
Canada Community-Building Fund	2024	\$204,933	\$261,221	\$242,778	\$186,490
Canada Community-Building Fund	2025	\$186,490	\$234,273	\$242,778	\$194,995
Canada Community-Building Fund	2026	\$194,995	\$228,495	\$242,778	\$209,277
Canada Community-Building Fund	2027	\$209,277	\$237,573	\$242,778	\$214,482
Canada Community-Building Fund	2028	\$214,482	\$311,397	\$242,778	\$145,863
Canada Community-Building Fund	2029	\$145,863	\$226,800	\$242,778	\$161,841
Canada Community-Building Fund	2030	\$161,841	\$253,169	\$242,778	\$151,451

Schedule F - Restricted Reserves - Projected Balances from 2023 to 2032

Reserve	Year	Opening Balance	Capital Withdrawals	Contributions	Ending Balance
Canada Community-Building Fund	2031	\$151,451	\$204,860	\$242,778	\$189,369
Canada Community-Building Fund	2032	\$189,369	\$62,535	\$242,778	\$369,612
Perpetual Maintenance	2023	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2024	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2025	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2026	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2027	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2028	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2029	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2030	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2031	\$59,188	\$0	\$0	\$59,188
Perpetual Maintenance	2032	\$59,188	\$0	\$0	\$59,188

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Discretionary Reserves										
Bldg Reserve	\$429,512	\$404,912	\$404,912	\$399,912	\$381,900	\$288,075	\$261,975	\$261,975	\$256,975	\$231,463
Capital Cfwd.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Corporate Information Technology	\$131,233	\$141,233	\$151,233	\$161,233	\$171,233	\$181,233	\$191,233	\$201,233	\$211,233	\$221,233
Election	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750
Corp. Insur. Conting.	\$108,858	\$108,858	\$108,858	\$108,858	\$108,858	\$108,858	\$108,858	\$108,858	\$108,858	\$108,858
Corp. Legal Conting.	\$232,163	\$232,163	\$232,163	\$232,163	\$232,163	\$232,163	\$232,163	\$232,163	\$232,163	\$232,163
Operat. Cfwd.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Public Works Winter Maint.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Gravel Roads Improvement	\$549,861	\$820,661	\$1,091,461	\$1,362,261	\$1,633,061	\$1,903,861	\$2,174,661	\$2,445,461	\$2,716,261	\$2,987,061
Aggregate Levy	\$13,406	\$13,405	\$442,857	\$645,267	-\$74,413	\$42,587	\$61,612	\$302,407	\$223,890	\$223,890
Broadband Strategy Implementation	\$7,192	\$7,192	\$7,192	\$7,192	\$7,192	\$7,192	\$7,192	\$7,192	\$7,192	\$7,192
Asset Management	\$3,061,637	\$2,841,708	\$2,257,557	\$3,274,413	\$3,737,284	\$2,316,714	\$2,940,688	\$3,547,466	\$4,516,322	\$4,805,351
Outstanding Deposits	\$171,480	\$171,480	\$171,480	\$171,480	\$171,480	\$171,480	\$171,480	\$171,480	\$171,480	\$171,480
Total Discretionary Reserves	\$4,719,093	\$4,755,364	\$4,881,464	\$6,376,531	\$6,382,509	\$5,265,915	\$6,163,614	\$7,291,987	\$8,458,126	\$9,002,443
Restricted Reserves										
Admin. Studies	\$33,230	\$19,423	-\$10,260	-\$3,943	-\$2,625	-\$38,308	-\$52,115	-\$45,798	-\$39,481	-\$60,164
Fire Services	\$750,244	\$776,701	\$803,159	\$829,616	\$856,073	\$882,530	\$908,987	\$935,445	\$961,902	\$988,359
Parks and Recreation Services	-\$15,717	-\$2,903	\$9,910	\$22,724	\$35,537	\$48,351	\$61,164	\$73,977	\$86,791	\$99,604
Roads and Related Services	\$375,732	\$194,284	\$192,582	\$183,213	\$119,306	\$79,125	\$69,584	\$87,385	\$97,191	\$141,760
Total Development Charges	\$1,143,490	\$987,506	\$995,391	\$1,031,610	\$1,008,290	\$971,697	\$987,620	\$1,051,009	\$1,106,403	\$1,169,560
Cash in Lieu of Parkland	\$452,201	\$180,201	\$130,701	\$151,067	\$186,567	\$64,260	\$49,760	\$90,260	\$125,760	\$166,260
Canada Community-Building Fund	\$204,933	\$186,490	\$194,995	\$209,277	\$214,482	\$145,863	\$161,841	\$151,451	\$189,369	\$369,612
Perpetual Maintenance	\$59,188	\$59,188	\$59,188	\$59,188	\$59,188	\$59,188	\$59,188	\$59,188	\$59,188	\$59,188
Total Restricted Reserves	\$1,859,811	\$1,413,384	\$1,380,274	\$1,451,143	\$1,468,528	\$1,241,008	\$1,258,409	\$1,351,907	\$1,480,719	\$1,764,619



REPORT FIN-2023-005

TO: Mayor and Members of Council

PREPARED BY: Mary Hasan, Director of Finance/Treasurer

PRESENTED BY: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: February 8, 2023

SUBJECT: Ontario Regulation 284/09 – 2023 Budget

File: F05 BUD

RECOMMENDATION

That Report FIN-2023-005 entitled Ontario Regulation 284/09 – 2023 Budget be received; and

That Council adopts Report FIN-2023-005 which meets the requirements of Ontario Regulation 284/09 and outlines the preparation of the 2023 Operating and Capital Budgets to a Public Sector Accounting Board compliant format.

Purpose

Ontario Regulation 284/09 requires municipalities that have excluded expenses in their budgets to prepare a report about those excluded expenses and adopt the report by Council Resolution before approving the Township's budget.

There are no direct financial implications associated with this report. The intent is to describe the conversion of the cash based operating and capital budgets to a Public Sector Accounting Board (PSAB) budget compliant format.

Background

In 2009, accounting standards and financial reporting requirements changed significantly, with the most notable change being that of the requirement to report on tangible capital assets (TCA). However, these new accounting standards do not require budgets to be prepared on the same basis.

The Township, like many municipalities, continues to prepare budgets on the traditional cash basis. These budgets do not include the PSAB requirements of accrual accounting and accounting for non-financial assets such as TCA.

Ontario Regulation 284/09

Allowable excluded expenses as per Ontario Regulation 284/09 can be all or a portion of the following:

- a) Amortization expenses
- b) Post-employment benefit expenses
- c) Solid waste landfill closure and post-closure expenses

The Township excludes amortization expense from its cash based budget. Post-employment benefit expenses (ie. premiums paid for retirees who qualify) are included in the operating budget, therefore no adjustment is required. The Township does not have any landfill expenses and as such, they are not applicable.

The regulation requires the report to contain at a minimum:

- a) An estimate of the change in the accumulated surplus (revenues less expenditures) of the municipality to the end of the year resulting from the exclusion of expenses
- An analysis of the estimated impact of the exclusion of expenses on future TCA funding requirements

In addition to these excluded expenses, the cash based budgets prepared by the Township include certain types of transactions that need to be excluded for PSAB reporting purposes. These are not covered in Ontario Regulation 284/09.

- a) Debenture principal repayments (ie. Carroll Pond debenture which was fully repaid in 2018)
- b) Transfers to discretionary reserves
- c) Contributions from discretionary reserves
- d) Funds from debenture issuances (no new debentures issued for the Township in the 2023 budget)
- e) Fixed Asset/TCA expenditures

Comments

Table 1 below outlines the changes made to convert the balanced 2023 budget prepared under the cash basis of accounting to increase the Township's accumulated surplus in the amount of \$1,443,876. It is important to note that the accumulated surplus is not cash available to the

Township. The most significant portion of the accumulated surplus is investments in tangible capital assets and balances in the Township's discretionary reserves.

Table 1	
2023 Budget – Cash Based	
2023 Operating Budget Tax Levy	\$3,687,530
2023 Operating Budget Other Revenues	\$2,698,748
2023 Operating Budget Net Contributions to Discretionary Reserves	-(\$352,674)
2023 Operating Budget Expenditures	-(\$6,033,604)
Surplus/(Deficit)	\$0
2023 Capital Budget Funded	\$4,704,792
2023 Capital Budget Expenditures	-(\$4,704,792)
Surplus/(Deficit)	\$0
Add Expenditures Excluded from Cash Based Budget	
Amortization Expense – 2021 Audited Financial Statements – Note A	-(\$1,477,772)
Exclusion Impact on Accumulated Surplus/ (Deficit)	-(\$1,477,772)
Remove Non PSAB Items from 2023 Cash Based Budget	
Debenture Principal Repayments	\$0
Transfers to Discretionary Reserves (Capital Budget)	\$1,236,592
Transfers to Discretionary Reserves (Operating Budget)	\$530,750
Contribution from Discretionary Reserves (Capital Budget)	-(\$1,998,213)
Contribution from Discretionary Reserves (Operating Budget)	-(\$178,076)
Funds from Debenture Issuances	\$0
Budgeted Tangible Capital Asset Acquisitions – Note B	\$3,330,595
Total Non PSAB Items Removed from Cash Based Budget	\$2,921,648
Total Impact on 2023 Accumulated Surplus/(Deficit)	\$1,443,876

Note A - Amortization expense of \$1,477,772 has an impact on the 2023 accumulated surplus amount. The amortization expense reduces the surplus amount and also reduces the net book value of the TCA reported on the audited statement of financial position.

Note B – 2023 budgeted TCA purchases of \$3,330,595 is higher than the amortization expense of \$1,477,772. The Township's Asset Management (AM) Program and Capital Budget and Forecast enables the Township to plan effectively for the replacement of current infrastructure. The 2023 Capital Budget and Forecast was prepared taking into consideration the 2019 AM Plan and new and updated information regarding asset conditions and replacement cost estimates (ie. 2021 Storm Water Management Facility Maintenance Inspections etc.). Report FIN-2023-

004 provides information on the estimated balances in the AM Discretionary Reserve from 2022 to 2032 including the forecast years in which the estimated balance is within the minimum target balance of \$2.0 million and a maximum target balance of \$4.0 million as recommended in the 2019 AM Plan.

The Township's projected accumulated surplus at the end of 2023 is as follows:

December 31, 2021 Audited Accumulated Surplus	\$27,624,825
Projected Impact of 2022 Budget as per Report FIN-2022-008 presented	
to Council at the February 9, 2022 Council Meeting	\$1,635,790
Projected Impact of 2023 Budget	\$1,443,876
2023 Estimated Ending Accumulated Surplus	\$30,704,491

Financial Implications

There are no direct financial implications associated with this report. The intent is to describe the conversion of the cash based operating and capital budgets to a PSAB budget compliant format.

Applicable Legislation and Requirements

Ontario Regulation 284/09 of the Municipal Act, 2001

Engagement Opportunities

Attachments

The Township has incorporated a number of engagement opportunities associated with the 2023 budget process as outlined in Report FIN-2023-006.

Respectfully submitted, Reviewed by: Mary Hasan Director of Finance/Treasurer Glenn Schwendinger Chief Administrative Officer



REPORT FIN-2023-006

TO: Mayor and Members of Council

PREPARED BY: Mary Hasan, Director of Finance/Treasurer

PRESENTED BY: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: February 8, 2023

SUBJECT: 2023 Budget - Final

File No. F05 BUD

RECOMMENDATIONS

That Report FIN-2023-006 entitled 2023 Budget - Final be received; and

That Council give 3 readings to By-law No. 2023-009 being a by-law to adopt the Budget for the Corporation of the Township of Puslinch for the year 2023.

<u>Purpose</u>

The purpose of this report is to:

- 1.) Provide Council an update on the items that were discussed at the January 18, 2023 Council Meeting; and
- 2.) Report on the results of the Public Information Meeting (PIM) held on January 25, 2023 as it relates to the 2023 Proposed Budget; and
- 3.) Provide Council with the results of the community engagement survey issued through the Township's Online Engagement Platform, Engage Puslinch; and
- 4.) Seek approval from Council to enact the 2023 Budget By-law.

Background

Council and the Public have received the following reports and presentations to date as part of budget deliberations:

Report	Council Meeting
FIN-2022-029 – 2023 Proposed User Fees and Charges	September 7, 2022 Council Meeting
FIN-2022-031 – 2023 User Fees and Charges By-law	October 19, 2022 Council Meeting
ADM-2022-064 – Budget Process and Service Level Review	November 9, 2022 Council Meeting
FIN-2022-033 – 2023 Municipal Insurance Renewal	December 7, 2022 Council Meeting
FIN-2022-034 - 2023 Proposed Cost of Living Adjustment	December 7, 2022 Council Meeting
FIN-2022-035 – 2023 Proposed Capital Budget	December 7, 2022 Council Meeting
FIN-2022-037 – 2023 Grant Application Program	December 21, 2022 Council Meeting
FIN-2022-038 - 2023 Proposed Changes to Employee Benefits	December 21, 2022 Council Meeting
FIN-2022-040 – 2023 Proposed Operating Budget	January 5, 2023 Operating Budget Meeting
FIN-2023-001 - 2023 Capital and Operating Budget Update	January 18, 2023 Council Meeting
2023 Proposed Budget PIM Presentation and Draft By-law	January 25, 2023 PIM
FIN-2023-003 – 2022 Completed Capital Projects	February 8, 2023 Council Meeting
FIN-2023-004 – Balances in Discretionary and Restricted	February 8, 2023 Council Meeting
Reserves	
FIN-2023-005 – Ontario Regulation 284/09 – 2023 Budget	February 8, 2023 Council Meeting
FIN-2023-006 - 2023 Budget - Final	February 8, 2023 Council Meeting

Public Information Meeting

A PIM was held on January 25, 2023 at 7:00 pm to obtain public input on the 2023 Proposed Budget and Draft By-law.

There were no comments raised at the PIM or following the PIM at the time of writing this Report regarding suggested updates to the 2023 Proposed Budget and Draft By-law. There were no changes to the proposed 2023 Budget based on the results of the PIM. The minutes of the PIM are included in the February 8, 2023 agenda package. Township staff will provide Council with an update should there be any questions received following the PIM at or prior to the Council Meeting scheduled on February 8, 2023.

Community Engagement Survey – Engage Puslinch

Attached as Schedule A to Report FIN-2023-006 are the results of the community engagement survey issued through the Township's Online Engagement Platform, Engage Puslinch for Council's information. The survey was open from January 17, 2023 to January 31, 2023 at 12:00 p.m. There were a total of 35 completed surveys and 139 visits to EngagePuslinch.ca as part of 2023 budget engagement. There were a total of 13 completed surveys and 36 visits to

<u>EngagePuslinch.ca</u> as part of 2022 budget engagement. The Township has seen an increase in 2023 budget engagement.

The following information was presented to Council to summarize the proposed Capital and Operating Budget at the January 18, 2023 Council Meeting.

Description	2022 Approved Budget	2023 Proposed Budget	Difference
Total Capital Tax Levy	\$1,460,100	\$1,503,000	\$42,900
Total Operating Tax Levy	\$3,203,288	\$3,466,329	\$263,041
Total Municipal Tax Levy	\$4,663,388	\$4,969,329	\$305,941

Capital Budget Updates based on Council Direction at the January 18, 2023 Council Meeting regarding Report FIN-2023-001 – 2023 Capital and Operating Budget Update

Council Direction	Staff Update	Budget Impact
Council directed staff to redirect	Township staff have	This change does not
\$50,000 of the contribution to the	reallocated \$50K of tax levy	have a tax levy impact as
Asset Management (AM)	contributions which were	it is a reallocation of tax
Discretionary Reserve to the	previously contributed to the	levy funding between
Gravel Roads Improvement	AM Discretionary Reserve.	two discretionary
Discretionary Reserve annually	This is a \$50K reallocation to	reserves.
due to the increase in the OCIF	the Gravel Roads	
grant of \$50,000 which has the	Improvement Discretionary	
effect of reducing the contribution	Reserve from 2023 to 2032	
to the AM Discretionary Reserve	based on Council's direction.	
by the same amount.		
Council directed staff to transfer	Township staff have	This change does not
the full aggregate levy from the	reallocated \$192K of	have a tax levy impact as
operating budget to the capital	aggregate levy funding from	it is a reallocation of tax
budget with net zero budgeted tax	the Operating Budget to the	levy funding between the
levy impact in order to mitigate	Capital Budget. The increased	Operating Budget and
the risk associated with keeping	aggregate levy contribution to	Capital Budget. The
the aggregate levy in the	the Capital Budget results in	capital tax levy
operating budget in the event that	more aggregate levy funding	contribution to the AM
aggregate production decreases	and less AM funding for Public	Discretionary Reserve is
significantly.	Works capital projects related	reduced by \$192K.The
	to Little's Bridge and Roszell	operating tax levy
	Road.	required is increased by
		\$192K.

Operating Budget Updates based on Council Direction at the January 18, 2023 Council Meeting regarding Report FIN-2023-001 – 2023 Capital and Operating Budget Update

Council Direction	Staff Update	Budget Impact
Council directed staff to phase in a further base budget increase of \$5,705 to the operating budget tax levy for Cambridge Fire starting in 2023 to 2026, until 50% of the contract is achieved. Council directed staff to increase the operating budget	Township staff have incorporated an amount of \$5,705 in the Fire and Rescue Services contract services account. Township staff have incorporated an amount of	This results in a tax levy increase of \$5,705 from the previous version of the budget presented on January 18, 2023. This results in a tax levy increase of \$24,000 from the
to hire a full time equipment operator due to the challenges in regards to winter maintenance staff resources and the ability to hire seasonal workers. Council directed staff that this position be funded as follows: • \$27,110 from the 2022 surplus; and • \$25,521 by reducing the number of seasonal equipment operators from two to one seasonal equipment operator; and • \$24,000 as a 2023 operating tax levy increase.	\$76,631 in the Public Works (40%) and Parks (60%) salaries and benefits accounts for the full-time equipment operator position. The Public Works salaries and benefits accounts have also reduced by \$25,521 due to the reduction in the number of seasonal equipment operators from two to one seasonal equipment operator. There is also a utilization of the operating carryforward discretionary reserve of \$27,110 as a portion of this operating budget increase is being funded by the 2022 surplus.	previous version of the budget presented on January 18, 2023.
N/A	Due to the increase in operating taxes levied for the two items outlined above, there is an increase in payment in lieu of taxes to be collected of \$504.	This results in a tax levy decrease of \$504 from the previous version of the budget presented on January 18, 2023.

Financial Implications

Outlined in the table below is the current proposed tax levy impact based on the items discussed in this Report including Council direction at the January 18, 2023 Council Meeting regarding Report FIN-2023-001 – 2023 Capital and Operating Budget Update.

As part of the Budget PIM held on January 25, 2023, the following table was presented to the Public to summarize the proposed Capital and Operating Budget.

Description	2022 Approved Budget	2023 Proposed Budget	Difference	Notes
Total Capital Tax Levy	\$1,460,100	\$1,311,000	-(\$149,100)	Note A
Total Operating Tax Levy	\$3,203,288	\$3,687,530	\$484,242	Note A
Total Municipal Tax Levy	\$4,663,388	\$4,998,530	\$335,142	

The following tables outlines the 2023 budget compared to the 2022 budget:

Description	2022 Budget	2023 Budget	Notes
Operating Budget			
Operating Revenues	\$2,507,927	\$2,698,748	
Operating Contributions from Discretionary	\$273,047	\$178,076	
Reserves			
Operating Contributions to Discretionary	\$295,650	\$530,750	Note A
Reserves			
Operating Expenditures	\$5,688,612	\$6,033,604	
Total Operating Tax Levy	\$3,203,288	\$3,687,530	Note A
Capital Budget by Funding Source			
Capital Tax Levy	\$1,460,100	\$1,311,000	Note A
Canada Community-Building Fund (CCBF)	\$476,058	\$259,200	Note B
Discretionary Reserves	\$1,334,712	\$1,998,213	Note C
Restricted Reserves	\$394,378	\$505,903	
Other (grants)	\$794,701	\$630,477	Note D
Total Capital Budget	\$4,459,949	\$4,704,792	
Total Tax Levy	\$4,663,388	\$4,998,530	

Note A - Please note, the decrease in the capital tax levy and the increase in the operating tax levy from the 2022 approved budget to the 2023 proposed budget relates to the transfer of the full aggregate levy from the operating budget to the capital budget with net zero budgeted tax levy impact in order to mitigate the risk associated with keeping the aggregate levy in the operating budget in the event that aggregate production decreases significantly.

Note B – the decrease in the CCBF funding source in the 2023 Capital Budget relates to a one-time top-up payment received in 2021 of \$223,665 which was utilized in 2022 for the Gilmour Culvert Replacement project.

Note C – the increase in the Discretionary Reserve funding source in the 2023 Capital Budget relates to a greater utilization of the Aggregate Levy Discretionary Reserve and AM Discretionary Reserve for asset replacement/rehabilitation projects.

Note D - The decrease in the Grants funding source in the 2023 Capital Budget relates to the one-time Investing in Canada Infrastructure Program Funding that the Township budgeted in 2022 for the Puslinch Community Centre Park Renovation and Upgrade project.

The discretionary reserve contributions in the 2023 budget compared to the 2022 budget are outlined below:

Discretionary Reserve	2022 Budget	2023 Budget	Notes
Insurance Contingency	\$10,000	\$25,000	Note F
Legal Contingency	\$0	\$0	The current balance in the reserve is
			reasonable at \$232K.
Elections	\$13,750	\$13,750	
Asset Management	\$1,212,300	\$955,792	Note E
			Report FIN-2023-004 provides
			information on the estimated
			balances in the AM Discretionary
			Reserve from 2022 to 2032 including
			the forecast years in which the
			estimated balance is within the
			minimum target balance of \$2.0
			million and a maximum target
			balance of \$4.0 million as
			recommended in the 2019 AM Plan.
Information Technology	\$10,000	\$10,000	
Gravel Roads Improvement	\$207,800	\$270,800	Note E
Aggregate Levy	\$271,900	\$492,000	Note E
Total	\$1,725,750	\$1,767,342	

Note E – the decrease in the contribution to the AM Discretionary Reserve and the increases in contributions to both the Gravel Roads Improvement Discretionary Reserve and Aggregate Levy Discretionary Reserve relates to the following items as previously outlined in this Report:

- increased OCIF formula funding which has been reallocated from the AM Discretionary Reserve to the Gravel Roads Improvement Discretionary Reserve; and
- the transfer of the full aggregate levy from the operating budget to the capital budget

Note F - This increase is in line with the primary liability deductible increase of \$25K to \$50K as approved by Council at their December 7, 2022 Council Meeting.

Municipal Property Assessment Corporation (MPAC) 2023 Returned Assessment Roll

Based on the 2023 MPAC returned assessment roll and the current tax levy impact as reported in this Report, approximately each additional \$48,200 of taxes levied results in a 1% tax rate increase for the Township portion of taxes on the Median/Typical Single Family Home.

Similar to previous practice, the 2023 returned assessment roll obtained from MPAC in mid-December is compared to the 2022 returned assessment roll to determine the assessment change for the median/typical properties in the Township. The Township verifies the median/typical property assessment changes to the Ontario Property Tax Analysis tool that was made available to Township staff on December 20, 2022. The assessment change is incorporated in the calculation of the tax rate impact for the median/typical properties as further outlined in the tables below in this Report.

The education tax rates are based on correspondence received from the Ministry of Finance dated December 19, 2022 and remain unchanged from what was previously presented at the Budget PIM on January 25, 2023. The County of Wellington (County) adopted its 2023 budget on January 26, 2023 and there are very minimal changes in the County tax impacts from what was previously presented at the Budget PIM on January 25, 2023. Both the Township and County tax rates are also subject to change based on the County Tax Policy which will be adopted by County Council in approximately April of 2023.

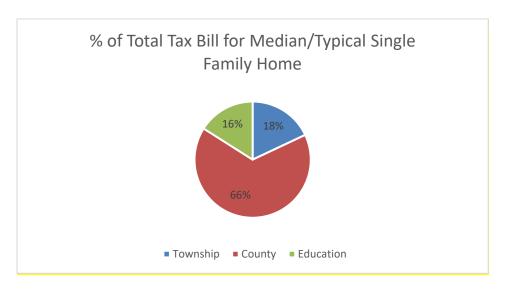
The 2023 returned assessment roll continues to be based on January 1, 2016 assessed values due to the Province's continued postponement of the 2021 assessment update as a result of the COVID-19 pandemic. Property assessments for the 2023 property tax year will continue to be based on January 1, 2016 assessed values. As a result of the reassessment cycle being postponed again until 2024, the 2021 assessment values are deemed for 2023. There is however new assessment growth as outlined below.

The Township's 2023 new weighted assessment growth is approximately 3.42% or \$90M (ie. new construction and renovations). If there had not been any new assessment growth in the Township, the proposed 2023 budget would have resulted in a Township tax increase of 8.07% and \$87 and a blended tax increase of 4.70% and \$274 on the median/typical single family home.

Median/Typical Single Family Home

The following table shows that the proposed 2023 budget results in a Township tax increase of 4.50% and \$48 and a blended tax increase of 4.04% and \$236 on the median/typical single family home (2022 Assessment - \$605,000; 2023 Assessment - \$610,000).

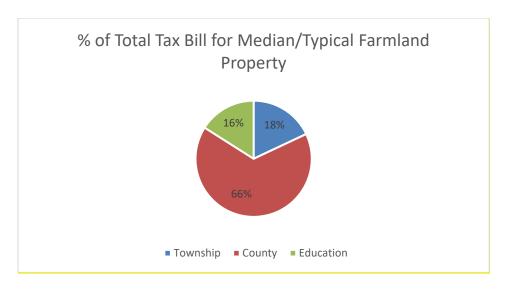
Description	% of Total	2022	2023	\$ Change	% Change
	Tax Bill			from 2022	from 2022
Median Assessment		\$605,000	\$610,000	\$5,000	0.83%
Yearly Township Taxes	18%	\$1,072	\$1,121	\$48	4.50%
Yearly County Taxes	66%	\$3,840	\$4,020	\$180	4.68%
Yearly Education Taxes	16%	\$926	\$933	\$8	0.83%
Yearly Blended Taxes	100%	\$5,838	\$6,073	\$236	4.04%
Yearly Township Taxes per \$100K Assessment		\$176	\$184	\$8	4.50%
Yearly Blended Taxes per \$100K Assessment		\$957	\$996	\$39	4.04%



Median/Typical Farmland Property

The following table shows that the proposed 2023 budget results in a Township tax increase of 3.64% and \$11 and a blended tax increase of 3.19% and \$53 on the median/typical farmland property (2022 Assessment - \$694,400; 2023 Assessment - \$694,400).

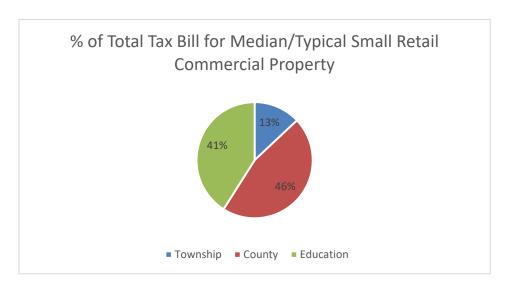
Description	% of Total	2022	2023	\$ Change	% Change
	Tax Bill			from 2022	from 2022
Median Assessment		\$694,400	\$694,400	\$0	0%
Yearly Township Taxes	18%	\$308	\$319	\$11	3.64%
Yearly County Taxes	66%	\$1,102	\$1,144	\$42	3.83%
Yearly Education Taxes	16%	\$266	\$266	\$0.00	0.00%
Yearly Blended Taxes	100%	\$1,675	\$1,728	\$53	3.19%
Yearly Township Taxes per \$100K Assessment		\$44	\$46	\$2	3.64%
Yearly Blended Taxes per \$100K Assessment		\$241	\$249	\$8	3.19%



Median/Typical Small Retail Commercial Property

The following table shows that the proposed 2023 budget results in a Township tax increase of 3.64% and \$50 and a blended tax increase of 2.19% and \$240 on the median/typical small retail commercial property (2022 Assessment - \$523,000; 2023 Assessment - \$523,000).

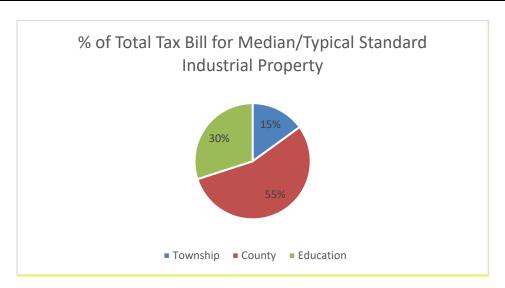
Description	% of Total	2022	2023	\$ Change	% Change
	Tax Bill			from 2022	from 2022
Median Assessment		\$523,000	\$523,000	\$0	0%
Yearly Township Taxes	13%	\$1,382	\$1,433	\$50	3.64%
Yearly County Taxes	46%	\$4,949	\$5,138	\$189	3.83%
Yearly Education Taxes	41%	\$4,602	\$4,602	\$0.00	0.00%
Yearly Blended Taxes	100%	\$10,934	\$11,173	\$240	2.19%
Yearly Township Taxes per \$100K Assessment		\$264	\$274	\$10	3.64%
Yearly Blended Taxes per \$100K Assessment		\$2,091	\$2,136	\$46	2.19%



Median/Typical Standard Industrial Property

The following table shows that the proposed 2023 budget results in a Township tax increase of 16.89% and \$849 and a blended tax increase of 15.73% and \$5,253 on the median/typical standard industrial property (2022 Assessment - \$1,181,000; 2023 Assessment - \$1,332,000). 12.79% of the increase relates to the increase in the median assessment determined by MPAC as outlined in the table below:

Description	% of Total	2022	2023	\$ Change	% Change
	Tax Bill			from 2022	from 2022
Median Assessment		\$1,181,000	\$1,332,000	\$151,000	12.79%
Yearly Township Taxes	15%	\$5,024	\$5,873	\$849	16.89%
Yearly County Taxes	55%	\$17,989	\$21,065	\$3,076	17.10%
Yearly Education Taxes	30%	\$10,393	\$11,722	\$1,329	12.79%
Yearly Blended Taxes	100%	\$33,406	\$38,660	\$5,254	15.73%
Yearly Township Taxes per \$100K Assessment		\$377	\$441	\$64	16.89%
Yearly Blended Taxes per \$100K Assessment		\$2,508	\$2,902	\$394	15.73%



Reviewed by:

Applicable Legislation and Requirements

Municipal Act, 2001

Engagement Opportunities

The Township has incorporated a number of engagement opportunities associated with the 2023 budget process as outlined below:

- Advisory Committee Budget Input
- Social Media Posts and/or Advertisements at <u>Facebook.ca/TownshipofPuslinch</u> and <u>Twitter.com/TwpPuslinchON</u>
- Township Website Banner and Budget Page at <u>puslinch.ca/government/budget/</u>
- Community Engagement Survey at EngagePuslinch.ca
- Puslinch Today

Respectfully submitted:

- Public Information Meeting on January 25, 2023
- Media releases related to EngagePuslinch.ca survey and final budget highlights.
- Community Newsletter regarding final budget highlights which will be sent with the final tax bill in August 2023.

Attachments

Schedule A - Engage Puslinch Community Engagement Survey Results

Mary Hasan	Glenn Schwendinger
Director of Finance/Treasurer	Chief Administrative Officer

2023 Proposed Budget

SURVEY RESPONSE REPORT

17 January 2023 - 31 January 2023

PROJECT NAME: 2023 Proposed Budget



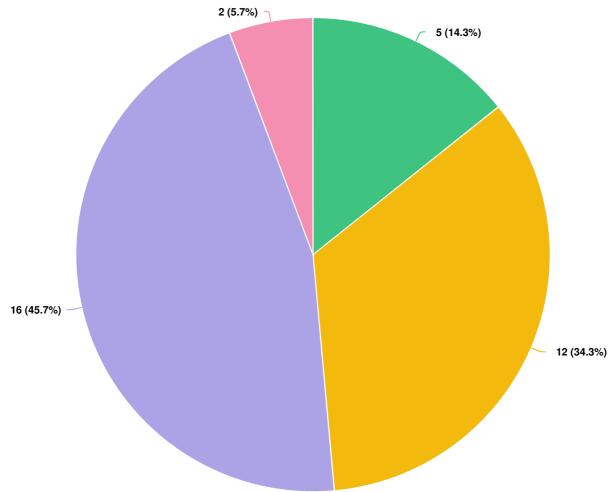
SURVEY QUESTIONS

Q1 Which of these action items do you see as the highest overall priorities that you would like Council to consider for the **Township? Rank in order of priority with 1 being the highest.**

OPTIONS	AVG. RANK
More Paved Roads	3.30
Economic Development	3.82
Increased Service Levels - Public Works	4.33
Increased Service Levels - Fire	4.90
Access to Recreation Programming	5.16
Additional Recreation Facilities	5.59
Innovations and Partnerships	5.81
Increased Service Levels - Planning	6.42
Increased Service Levels - Building	6.67
Growth	6.97

Optional question (35 response(s), 0 skipped)
Question type: Ranking Question

Local governments must balance the cost of delivering services with taxation, and the cost of providing services continue to rise as a result of inflation and other factors. Adding or enhancing services such as expanded recreation amenities further adds to costs. Which of the following options would you most prefer for the Township to implement in order to balance increasing costs.

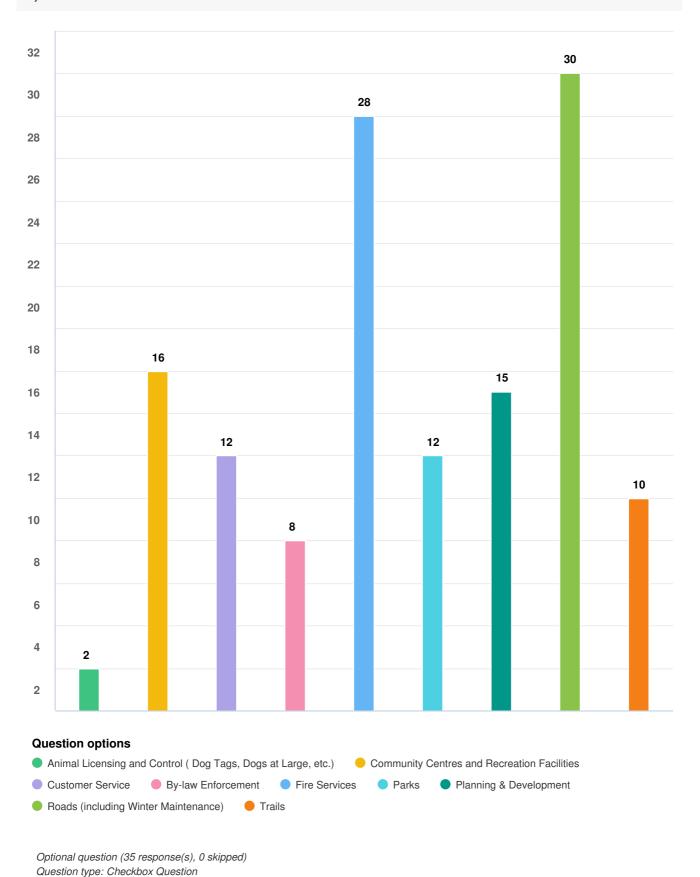


Question options

- Increase taxes a little above the rate of inflation to provide for enhanced service levels such as expanded recreation amenities, without the need to cut services elsewhere to offset.
- Increase taxes by the rate of inflation; if services are enhanced in one area, these should be offset by a reduction to services elsewhere.
- Reduce existing service levels to have a tax increase below the rate of inflation.
 Don't know

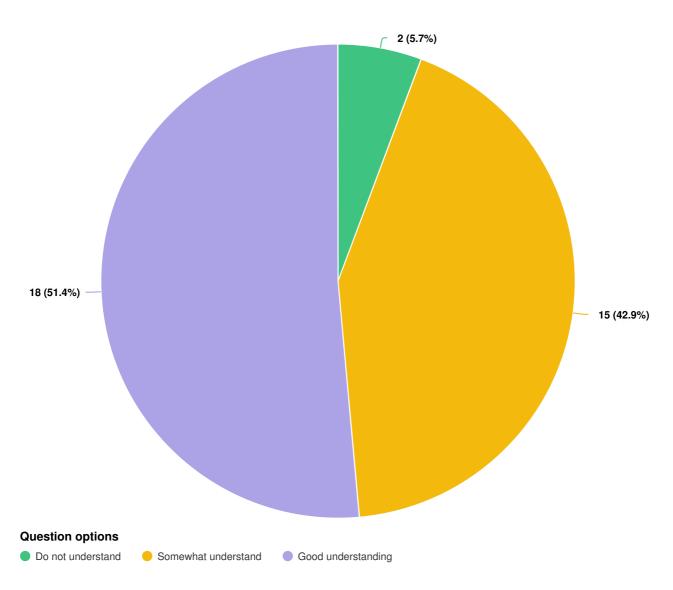
Question Options	Responses
Increase taxes a little above the rate of inflation	5
to provide for enhanced service levels such as	
expanded recreation amenities, without the need	
to cut services elsewhere to offset.	
Increase taxes by the rate of inflation; if services	12
are enhanced in one area, these should be offset	
by a reduction to services elsewhere.	
Reduce existing service levels to have a tax	16
increase below the rate of inflation.	
Don't know.	2

Optional question (35 response(s), 0 skipped) Question type: Radio Button Question Q3 The Township strives to balance excellent service delivery while maintaining affordable tax rates. Which of the following Township services are most important to you? (select up to 5)



Question Options	Responses
Animal Licensing and Control (Dog Tags, Dogs at	2
Large, etc.)	
Community Centres and Recreation Facilities	16
Customer Service	12
By-law Enforcement	8
Fire Services	28
Parks	12
Planning & Development	15
Roads (including Winter Maintenance)	30
Trails	10

Q4 Do you feel that you understand how your tax dollars are used within the Township budget?



Question Options	Responses
Good understanding	18
Somewhat understand	15
Do not understand	2

Optional question (35 response(s), 0 skipped) Question type: Radio Button Question

Q5 Do you have any comments or feedback that you would like Council to consider on the proposed 2023 Budget?

Anonymous

1/18/2023 03:06 PM

if staff new the township better, and people felt they were part of the

community might help

Anonymous

1/18/2023 08:00 PM

We are struggling please do not add to our burden with a high tax

increase. I cannot afford to live here anymore.

Anonymous

1/18/2023 11:02 PM

I definitely do not feel we need more recreational facilities. It is more important to maintain what we have and to have recreational

programming so our current facilities are utilized by more citizens.

Despite people complaining on social media, the roads are

maintained to a high standard.

Anonymous

1/19/2023 12:13 PM

I believe that services should help the majority of the taxpayer. We can't support every initiative that comes to the table. Government

spending needs to be reined in. Every time I turn around someone is picking my pocket. As someone who now has to live on a budget and has no ability to add to my income anymore, extra spending needs to

be tightened.

Anonymous

1/19/2023 09:09 PM

Would like to see more Puslinch tax dollars kept in our community.

VERY high taxes with little return. Too much spread out into county.

Anonymous

1/20/2023 08:31 AM

Increase efficiency in the township office. Me and my husband have lived her for over 30 years and far fewer people in the office got a lot

more accomplished. I feel they under deliver with customer service

based on the sheer number of people employed.

Anonymous

/21/2023 04:00 PM

Expedite the highway 6 bypass, PLEASE

Anonymous

1/22/2023 06:34 AM

Please put in the budget for speed signs and no large truck traffic on

watson rd south into guelph.

Anonymous

1/22/2023 07:27 PM

There has to be better ways to spend more efficiently without always

increasing taxes and slashing services

Anonymous

1/23/2023 01:40 PM

I don't see environmental protection in any of the priorities. The quantity and quality of our water should be #1 in the list of priorities.

Anonymous

1/23/2023 03:47 PM

There should be more availably to residents on weeknights for free skate/shinny. More open gym times on weeknights and PD Days

Anonymous

1/25/2023 04:05 PM

Township needs to scale back on spending. Municipal offices do not need to be renovated/expanded. Maybe spend some of that money on a consultant to come in and see how efficiently the township offices/departments are operating. It was done for the fire department why not the offices and staff.

Anonymous

1/28/2023 02:06 PM

What is the Puslinch Township share of the Wellington County contribution to Long term Care Home? What proportion of LTC beds in the County are at that Home? Do any former Puslinch Residents reside there?

Anonymous

1/28/2023 05:37 PN

Please try to keep tax increase to a minimum . Many are concerned.

Anonymous

1/28/2023 07:53 PM

No tax increase our salary are not matching on cost of leaving. Foods, insurance, gas, electricity are expensive

Anonymous

1/28/2023 08:15 PM

The taxes in Puslinch are far too high given the lack of public works services we're provided. Our neighbours in Halton hills are considerably lower. Why is Puslinch so high? Now talking to rate hikes... Understand, inflation... but raising rates will compound municipality tax gains once mpac catches up from the obscure nonlinear house price gains we've seen in the last 2 yrs. Frankly, do whatever you need to do to decrease the rate.

Anonymous

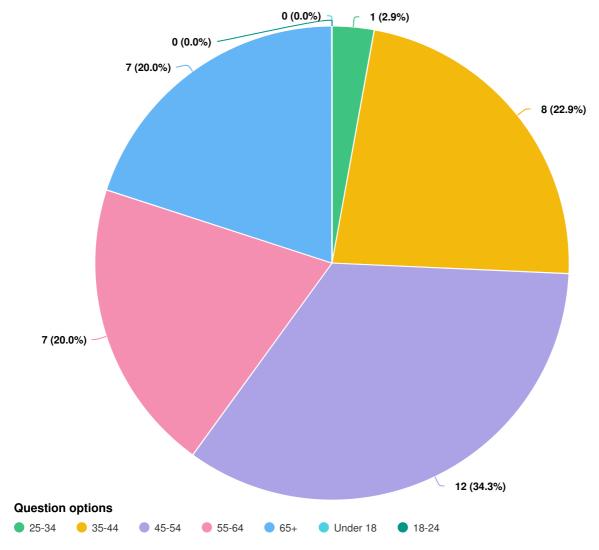
1/29/2023 08:11 PM

Cut the fat

Optional question (17 response(s), 18 skipped)

Question type: Essay Question

Q6 What is your age?



Question Options	Responses
Under 18	0
18-24	0
25-34	1
35-44	8
45-54	12
55-64	7
65+	7

Optional question (35 response(s), 0 skipped) Question type: Radio Button Question



REPORT FIN-2023-007

TO: Mayor and Members of Council

PREPARED BY: Sarah Huether, Taxation and Customer Service Supervisor

PRESENTED BY: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: February 8, 2023

SUBJECT: Shop Local Puslinch Gift Certificate Program

File: A03 - SHO

RECOMMENDATIONS

THAT Report FIN-2023-007 entitled Shop Local Puslinch Gift Certificate Program be received; and

THAT Council directs staff to discontinue the program effective April 1, 2023 due to the program's underutilization.

Purpose

This report provides an overview of the Shop Local Puslinch gift certificate program launched on July 21, 2020. This program was launched in partnership with Wellington-Waterloo Community Futures. The initial intent of the program was to help support local Puslinch businesses by purchasing gift certificates online due to the impacts that COVID-19 had on local businesses. This initiative was an excellent initiative to support and provide good benefit for local businesses during very difficult times, but it appears to have run its course at the Township due to its underutilization as further outlined in this Report. This is consistent with other municipal partners who are looking to conclude this program as well.

Background

At the June 17, 2020 Council Meeting, Council received Report ADM-2020-021, in regards to the Gift Certificate program to Support Local Business. Council directed staff to proceed with the

implementation of the program in partnership with Wellington-Waterloo Community Futures, to help support local businesses with a platform to sell gift certificates for their services, during the COVID-19 pandemic. Wellington-Waterloo Community Futures is responsible for receiving the funds collected by Shopify for the purchase of gift certificates and transferring the funds to the local businesses.

The table below outlines the statistics for gift certificate purchases from 2020 to 2022:

	No. of Gift	No. of Gift	Value of Gift	Value of Gift
	Certificates	Certificates	Certificates	Certificates
	Purchased –	Purchased –	Purchased –	Purchased –
	Non-Township	<u>Township</u>	Non-Township	<u>Township</u>
		<u>Service</u>		<u>Service</u>
		<u>Recognition</u>		<u>Recognition</u>
		<u>Policy</u>		<u>Policy</u>
2020	36	20	\$2,225	\$1,750
2021	6	20	\$350	\$1,550
2022	4	19	\$350	\$1,400
Total	46	59	\$2,925	\$4,700

The table above outlines the following:

- The program has been underutilized in 2021 and 2022 by the public.
- The majority of gift certificates are purchased by the Township as part of the Township's Service Recognition Policy.
- In 2021, only 6 gift certificates with a total value of \$350 were purchased by the public.
- In 2022, only 4 gift certificates with a total value of \$350 were purchased by the public.

This underutilization is consistent with Centre Wellington and Minto who also implemented the program in 2020 due to COVID-19. The Township received confirmation from Centre Wellington that they are also in the process of concluding this program. The Township received confirmation from Minto that they concluded the use of this initiative last year and have put efforts into other initiatives for local businesses through their economic development department.

As well, there have been vendor concerns identified as outlined below:

- Vendor profiles are not being maintained by the local businesses (ie. businesses are listed that are no longer in operation, etc.).
- Incorrect or outdated banking information was being provided by some businesses.

• There have been instances of businesses that no longer want to be part of the program as the individual that initially registered the vendor with the program is no longer with them. This has resulted in the Wellington-Waterloo Community Futures having to return funds to the purchaser of gift certificates.

Below is a list of the current active local businesses listed on the Shop Local Puslinch website:

- 1. Aberfoyle Family Chiropractic
- 2. Aberfoyle Mill
- 3. Aberfoyle Snowmobiles
- 4. Accents For Living
- 5. CatNap Cottages
- 6. Change of Pace Restaurant
- 7. Crieff Hills
- 8. Penwood Furniture
- 9. Picard's Peanuts
- 10. Sunrise Therapeutic Riding
- 11. The Danish Place
- 12. The Eye's the Limit
- 13. The Folklore Barber
- 14. The Great Wall Restaurant
- 15. Victoria Park East & Valley Golf Club

There are currently 7 inactive businesses listed.

Based on the underutilization of the program and the lack of maintenance of vendor profiles from local businesses, it is recommended that this program be discontinued effective April 1, 2023.

Financial Implications

The Township has continued to fund the program annually, absorbing the program subscription fees of approximately \$550 annually. This is incorporated in the Township's operating budget.

There is also Township staff time associated with addressing business and public inquiries or concerns, assisting businesses with profile management, processing payments to Shopify, creating the necessary advertisements for the program, etc.

Applicable Legislation and Requirements

None

Engagement Opportunities

Should Council approve the discontinuation of the program effective April 1, 2023, the Township will provide the appropriate notice to:

- OSIM and Shopify; and
- Wellington-Waterloo Community Futures thanking them for their work on the Township's behalf; and
- Registered local businesses by telephone and/or email; and
- A media release will also be published on social media and the Township's website.

Attack	ments
--------	-------

None

Respectfully submitted,

Mary Hasan

Director of Finance/Treasurer

Reviewed by:

Glenn Schwendinger
Chief Administrative Officer



REPORT ADM-2023-005

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Municipal Clerk

PRESENTED BY: Courtenay Hoytfox, Municipal Clerk

MEETING DATE: February 8, 2023

SUBJECT: Community Infrastructure and Housing Accelerator (CIHA) Request –

Estill Innovation Community Development Proposal

File: D14/DAN

RECOMMENDATION

That Report ADM-2023-005 entitled Community Infrastructure and Housing Accelerator (CIHA) Request – Estill Innovation Community (hereinafter the "developer") Development Proposal be received; and

That Council does not support the developer's request for a municipally requested Minister's Order under Subsection 34.1 of the *Planning Act*, known as a CIHA;

Or

Whereas the Township of Puslinch recognizes the importance of protecting agriculture lands while maintaining a balanced approach to sustainable growth and economic development; and

Whereas the Township currently has limited opportunities for growth and economic development; and

Whereas the Township continues to support growth opportunities where proper land use planning is demonstrated and where sufficient public consultation has occurred;

Therefore be it resolved:

That Council supports the conceptual development proposal in principal only; and

That Council shall make a decision in respect to the developer's request for a municipally requested Minister's order under Subsection 34.1 of the *Planning Act*, subject to the developer demonstrating proper land use planning by submitting all documentation requested by the

Township and that the documentation be peer reviewed to the satisfaction of the Township; and

That the developer, in consultation with the Township, fulfill all public engagement to the satisfaction of the Township including an initial public information meeting held on February XX, 2023; and

That the developer be responsible for all costs associated with the development proposal process and that these fees be paid to the Township in full prior to Council making a decision on the proposal; and further

That Council direct staff to prepare a planning recommendation report, including a draft bylaw for Council's consideration, once all required studies have been satisfactorily peer reviewed and public engagement has been completed in order for Council to make a decision on the developer's request for a municipally requested Minister's order under Subsection 34.1 of the *Planning Act*.

Purpose

The purpose of this report is to provide Council with information relating to the request for a municipally requested Minister's order under Subsection 34.1 of the *Planning Act* and to respond to Councils' direction from the December 21, 2022 Council meeting.

Background

Council heard a delegation by Jim Estill regarding the Estill Innovation Community development proposal and the use of newly implemented legislation (Subsection 34.1 known as a CIHA) under the *Planning Act* at the December 21, 2022 Council meeting. The development proposal, as presented to Council, includes the re-zoning of Agricultural lands located at 4631 Sideroad 20 N to Industrial lands through the use of Subsection 34.1 of the *Planning Act*, referred to as the Community Infrastructure and Housing Accelerator tool. Following the delegation on December 21, 2022, the below resolution was approved by Council:

That Council receives the Delegation by Jim Estill and Dave Aston to provide Council with information relating to The Estill Innovation Community development proposal; and

That Council direct staff to report back on the differences between an Official Plan Amendment process and the Community Infrastructure and Housing Accelerator tool and the additional information/questions provided by Council; and

Whereas the proponent has not undertaken community engagement on their development proposal; and

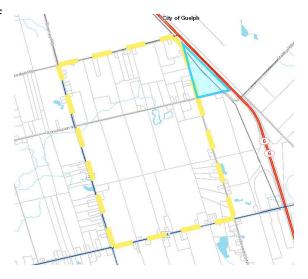
Whereas the Township is committed to ensuring the community has access to information and is consulted on development proposals within the Township;

Therefore, Council directs staff to send correspondence to all potentially affected property owners seeking input and providing relevant information regarding the proponent's proposal; and further

That Council direct staff to schedule a Public Information Meeting in early February 2023 to solicit community feedback on the proposal subject to the proponent confirming, by way of written agreement, to pay all Township costs associated with the Public Information Meeting and necessary review undertaken by Township staff and/or consultants in the form of a security deposit.

The developer has provided responses to Council's questions and are attached as Schedule "A" to this report. The developer also drafted a cost recovery agreement which is currently under review by the Township's solicitor. The agreement includes the security deposit in the amount of \$25,000 to cover costs incurred by the Township should the development proposal proceed. These costs include legal fees, expert peer review fees, staff costs associated with facilitating the review and public consultation.

Following the December 21, 2022 Council meeting, staff distributed a public notice to affected residents in the area of the subject property. The notice included reference to the Township's website where more detail on the proposal is available for viewing. The notice included directions to the Province's website where more information on the Community Infrastructure and Housing Accelerator tool is available. Finally, the notice included instructions for residents to provide initial feedback on the proposal. To date, the Township has received public comments from from twenty two (22) individuals in addition to comments from the City of Guelph. Public feedback is attached to this report as Schedule "C". The map to the right shows the geographic area that was notified of the proposal.



Council directed staff to provide more information regarding the new legislation referred to in the December 21, 2022 delegation. The *More Homes for Everyone Act, 2022* made changes to the *Planning Act* to create a minister's order authority known as the Community Infrastructure

and Housing Accelerator tool. This authority gives the Minister of Municipal Affairs and Housing the power to make orders to respond to municipal requests for expedited zoning outside of the Greenbelt Area.

Subsection 34.1 was added to the *Planning Act* in 2022 and relates specifically to a municipality's powers regarding zoning by-laws which is detailed under Subsection 34 of the *Act*. Staff have provided a comparison between Subsections 34 (Council's authority to amend the Zoning by-law) and Subsection 34.1 (Community Infrastructure and Housing Accelerator tool). A comparison was not made between and Official Plan Amendment and Subsection 34.1 because the intent for the Minister's order under Subsection 34.1 is to request the Minister to make an order affecting the zoning of specific land(s).

The chart below outlines the applicable legislation regarding the Community Infrastructure and Housing Accelerator tool and compares the process to a Zoning Amendment Application made in accordance with Subsection 34 of the *Act*:

	Zoning By-law Amendment (Subsection 34)	Community Infrastructure and Housing Accelerator tool (Subsection 34.1)
Pre-consult requirements	Applicant is required by by-law to preconsult with the Township regarding the re-zoning application. A list of supporting documents is established through consultation with Township staff, consultants, and regulatory agencies.	None
Prescribed material for a complete application	The applicant shall provide the prescribed information and material relating to the application and any other information or material that council considers it may need, but only if the official plan contains provisions relating thereto including the applicable application fee.	None. After Council receives a request under Subsection 34.1 Council may pass a resolution requesting the Minister to make an order to amend the zoning bylaw for specified land(s). Further, despite any Act or regulation, the following do not apply to the making of an order:
	The municipality has 30 days upon receiving the application, supporting material and applicable fee to determine if the application is deemed complete. A non-decision by the municipality is appealable by the applicant to the	 A policy statement. A provincial plan. An official plan.

	Tribunal. The applicant may also appeal the municipality's decision to refuse an application to the Tribunal.	
Required Fees	A Zoning By-law Amendment Application must be accompanied by the applicable fee as set out in the Township's User Fees and Charges By-law. If timelines for processing the zoning amendment application are not met, the municipality shall provide prorated refund fees back to the applicant as set out in the More Homes for Everyone Act, 2022.	None. The Township may require the developer to enter into an agreement that may include provisions such as cost sharing, cost recovery or securities.
Public Consultation Requirements	The municipality shall ensure sufficient information and material is made available to enable the public to understand the zoning proposal. The municipality shall ensure that at least one public information meeting is held for the purpose of giving the public and opportunity to make representations in respect of the proposed zoning by-law. The public meeting shall be held no earlier than 20 days after public notice has been given. All properties within 120 metres of the subject property shall be provided notice of the zoning proposal, in addition to all public bodies and regulatory agencies as prescribed. Every person who attends the public meeting shall be given an opportunity to make representations in respect to the zoning proposal.	Before passing a resolution requesting the Minister to make an order to amend the zoning by-law for specified land(s), the municipality shall, (a) give notice to the public in such manner as the municipality considers appropriate; and (b) consult with such persons, public bodies and communities as the municipality considers appropriate.

Notice Notice of the passing of the by-law shall Within 15 days after passing a resolution, requirements for be provided within 15 days to the the municipality shall forward to the passing a byfollowing: Minister: law/resolution (a) a copy of the resolution; (a) to the person or public body that (b) a description of the public made the application, if any; consultation; (b) to each person and public body that (c) a description of any licences, permits, filed a written request to be notified of approvals, permissions or other matters the decision: and that would be required before a use that (c) to any prescribed person or public would be permitted by the requested body. order could be established; and (d) any prescribed information and material. Appeal process / No later than 20 days after giving notice The Minister may, in an order, impose or Minister imposed of passing, an appeal of Council's remove such conditions on the use of conditions decision may be made to the Tribunal land or the erection, location or use of by: buildings or structures as in the opinion of the Minister are reasonable. 1. The applicant. An order shall apply to the lands 2. A person or public body who, requested by the municipality with such before the by-law was passed, modifications as the Minister considers made oral submissions at a public appropriate. meeting or written submissions to the council. The Minister's order is not appealable. 3. The Minister.

In summary of the chart above, the key differences between a Zoning By-law Amendment application Subsection 34 and the Minister's order under Subsection 34.1 of the *Act* are as follows:

- The requirements for public consultation:
 - Unlike a Zoning By-law Amendment process, there is no prescribed public consultation requirement for a CIHA request to the Minister. The municipality is responsible to determine the public consultation that should take place. This places the burden on the municipality to ensure the public consultation is adequate.
- Prescribed material requirements:
 - Unlike a Zoning By-law Amendment process, there are no prescribed documents that are required in order to make a request for a CIHA to the Minister.

- Requirement to comply with Provincial Policy Statement and Official Plan:
 - Unlike a Zoning By-law Amendment process, when a municipality makes a request to the Minister for a CIHA order, the proposed zoning for the subject property <u>does not</u> need to adhere to the Provincial Policy Statement or the Official Plan.
- Required fees:
 - Unlike a Zoning By-law Amendment process, there is no required fee for a CIHA request. The municipality is responsible to establish an agreement with the developer to determine cost sharing or cost recovery.
- Minister's ability to impose conditions or apply modifications to an order after it has been submitted for approval by the municipality;
 - When Council approves a site specific zoning by-law amendment through the provisions set out in Subsection 34 of the Planning Act, Council has control over setting the provisions of the zoning by-law they are approving. When the by-law is approved, the only way Council's decision can be challenged is through the appeal process set out in the Planning Act under Subsection 34. This appeal process involves an appeal to the Tribunal and both the appellant(s) and the municipality are involved in the appeal and settlement process. The appeal process is transparent and involves all parties. The CIHA process differs substantially. Once Council has made the request to the Minister and provided the draft by-law for approval, the Minister may impose or remove any conditions to the zoning that the Minister deems reasonable. This includes any conditions on the use of land or the erection, location or use of buildings or structures the Minister deems reasonable. The Minister also has the ability to modify the order by expanding or contracting the extent of the zoning boundaries to other lands as the Minister deems reasonable.
- Ability to appeal:
 - Unlike a Zoning By-law Amendment process, there is no appeal process for the municipality or the developer once the Minister has issued an order.

It is important to note that the developer did participate in the Township's pre-consultation process in August 2022. The pre-consultation process resulted in a prescribed list of application requirements as outlined by Township staff, consultants and regulatory agencies. The pre-consultation comments are attached to this report as Schedule "B". Staff recommend that the developer prepare the required list of documents for review by the Township, should Council proceed with the development proposal process.

The developer has provided additional information that is now available on the Township website. Please note that none of the documents located on the Township website at the link below have been peer reviewed by Township staff, consultants or applicable regulatory agencies.

https://puslinch.ca/CIHA/

The additional information provided by the developer is listed as follows and is available on the Township website:

- Economic Impact of the Estill Innovation Community
- Phase 1 Environmental Site Assessment (prepared by GHD)
- <u>Land Use Compatibility Assessment for Air/Dust/Odour/Noise/Vibration Emissions</u> (prepared by GHD)
- Electrical and Gas Service Availability Assessment (prepared by GHD)

Finally, Township staff have discussed the process to include lands during the Municipal Comprehensive Review (MCR) process with the County Planning staff. County Planning staff have provided the following comments:

As part of Official Plan Amendment 119 (which implements part of the Phase 1 MCR technical work) the County identified a Regionally Significant Economic Development Study Area (RSEDSA) in Puslinch. The RSEDSA was purposely oversized to give options for the Township and County to study the best location for future employment and other uses. Flexibility was also built into the policy to allow for minor refinements to the study area limits before the study begins. OPA 119 has been adopted by County Council but has remained with the Province for a decision since June 2022. The RSEDSA is therefore not yet in effect. We note that the CIHA property is not within the current RSEDSA boundary.

Since then, and as part of the County's Phase 2 MCR Land Needs Assessment, Puslinch was forecast approximately 70% of the County's rural employment growth to 2051. Puslinch is the only municipality in the County with a shortfall of rural employment land. Watson has identified that the Township requires approximately 30 ha (74 ac) of additional rural employment land. As part of the RSEDSA, the Township and County will identify the best location for this approximately 30 ha of land.

It is suggested that the Township consider confirming with MMAH staff that the proposed CIHA development would **not** count toward the Township's rural employment land need. Otherwise, there would be no need to designate additional rural employment land as part of the MCR.

Financial Implications

Detailed throughout the report.

Applicable	Legislation	and Red	uirements
, ibbilonsic	-chioiation	4114 11CC	W

Planning Act, R.S.O. 1990

Fnga	geme	nt On	portur	ities
LIIga	igeille	IIL OD	poi tui	111163

Township Website;

Public Information Meeting;

Print Notices;

Planning and Development Advisory Committee Referral

Attachments

Schedule "A" Estill responses to Council questions and supporting documentation regarding delegation at the December 21, 2022 Council meeting Schedule "B" August 2022 Pre-Consultation Comments Schedule "C" Public Feedback

Respectfully submitted,	Reviewed by:
Courtenay Hoytfox,	Glenn Schwendinger,
Municipal Clerk	CAO

DANBY RESPONSE TO PUSLINCH COUNCIL QUESTIONS

- 1. What are the next steps in the process to bring this proposal to realization and when will there be the opportunity for public involvement?
 - We have prepared a complete overview of the CIHA process and steps involved. The details are attached in a separate document "CIHA Process Overview".
 - A "Public Information Meeting" will be held in February to get public involvement, this needs to be scheduled by the Township.
- 2. Contact the County of Wellington Planners regarding the MCR process and adding lands.
- 3. As part of the process will there be a study like an Environmental Assessment to identify, and assess local natural environment, social, and economic impacts and propose mitigation measures for review by the public?
 - Yes, these would be details in the site plan application. Also, studies that have been completed to first determine the feasibility and viability of the project
- 4. Some of the areas to consider during construction (where applicable) and operation of the facility could be (a) Environment

Loss of secondary agricultural land to the Township

• This is a "limited impact" given the quality of the land and the nature of the zoning on a portion of the land (former gravel operation). The lands are in the Secondary Agriculture Area.

Noise, air quality, light overspill

- Staging of the building adjacent to the Hanlon Expressway and away from the adjacent spaces limits the impact.
- Air Quality, Danby does not have air pollutant contribution for their manufacturing, warehouse, or Ag Hub process.
- Light overspill is quired to be zero as per the requirements of the Site Plan Agreement and review by City staff
- These are site plan details that will be further addressed at that stage in the process
- Danby currently gets about 25 trucks per day in and out. Our trucks are light weight transports. UCFP currently has 17 trucks that leave in the morning and return at night. In addition, they get a few trucks delivering to them daily. Our plan is to ask MTO to leave Con 4 southbound open to reduce traffic. The new cloverleaf is less than 2 km (from our site and we will minimize the distance trucks need to travel. We are not like a gravel operation with trucks leaving and coming back an hour later for another load. We are doing a full traffic study.

Residential Wells

There is a township / County limit on water taking that we will be below the limit

(b) Social

Quality of Life

• Improved stewardship of the wetlands, abandoned house, issues with the alternate potential development, and potential more aggressive future uses

(c)Economic

Effect on current farms such as the poultry farm across the road

- None, the main buildings will be located adjacent to the Hanlon, the greatest distance away from the chicken farm
- the uses are not 'sensitive land uses' therefore there is no impact on the existing use or potential for expansion of the agricultural use

Property values

• Given the proximity to Guelph and the related designated employment zones on adjacent lands, significant increase is potential.

3. On the flip side will there be an assessment of the benefits to the Township to weigh against any impacts identified in the study noted above?

• See attached Economic Report and Present Value Calculation

4. What would be the order of magnitude of the hard and soft costs to be borne by the Township? (a) Hard Costs

Assuming the proponent is unsuccessful in gaining access from the Hanlon for the development traffic local roads will need to be upgraded for truck traffic and increased traffic. If the associated costs are borne by the Township what would be the approximate cost increase to our Capital Budget?

Are there any other hard costs to consider?

- Road to the Interchange only. Not certain we are in a position to provide that cost
- None, Electrical power, as per the Mayor's question, is a cost to the developer

(b) Soft Costs

Consultant costs associated with review of proposal, studies and design, and public meetings

- This would be like any development on any of the Puslinch sites
- There are no major anticipated costs now other than the public meeting costs and review of the By-law and coordination of the package to the Minister. After the CIHA zoning, the costs are typical for the site plan review process

Increase in road maintenance costs ie. snow ploughing etc

• This would be equal to the current winter maintenance elements

Are there any other soft costs to consider?

• None that we are aware of

5. Development Charges

Will current legislation affect the quantum of development charges to be realized?

We see this as no, the Development Charges would be as per any other development in Puslinch

6. Local Employment

What is the estimated number of employees that would live in Puslinch?

• This is difficult to estimate, but we assume that 10 to 20% of employees will move to Puslinch, especially those who work for Upper Canada Forest Products.

CIHA Process Overview

Innovation Centre, Township of Puslinch

Township requirement for CIHA:	How can Proponent Assist?
a copy of the Council resolution in support of the CIHA	 Township to coordinate and provide a copy the Council resolution Proponent will package the material required for submission to the Minister, including the Council resolution
a description of the consultation undertaken including engagement with Indigenous communities	Proponent to provide list of consultation undertaken to date, including consultation with Indigenous communities
a map showing the location of the lands to which the order would apply	 Proponent can provide a map showing the location of the lands to which the order will apply Proponent will also confirm the lands not in area where CIHA not to be considered (i.e., Greenbelt area)
a description of any licences, permits, approvals, permissions or other matters that would be required before a use that would be permitted by the order could be established	 The description of licenses, permits, approvals, permissions include: Site Plan Approval, Development Agreement and Letter of Credit - Township of Puslinch - Fill Permit - GRCA Building Permit - Township of Puslinch Access Permit – MTO Building and Land Use Permit – MTO Source Water (Section 59 Notice) – County of Wellington
a copy of a draft zoning by-law amendment to facilitate provincial consideration of the request	Proponent to provide the draft zoning by-law amendment
 any prescribed information and material 	Not applicable
• the municipality also provides the Minister with a certificate or attestation that the draft zoning bylaw (if approved) would provide the necessary zoning relief to facilitate the proposed development. This document should be signed by a municipal official whose responsibilities include land use planning or a lawyer.	Proponent can coordinate with the Township CAO or Planner on the certificate or attestation letter that the draft Zoning By-law will provide the appropriate zoning relief



Comment Summary – 4631 Sideroad 20 N.

Consultant	Comments
County of Wellington	See letter attached
GM BluePlan	See letter attached
Stan Denhoed-Township Hydrogeologist	There are no sewage services at the site. There is not a lot of room left for the septic system. A groundwater study will be necessary to confirm that on-site and nearby natural environment features are not impacted by the development. We recommend that the applicant undertake a Procedure D5-5 Water Supply analysis for the site to confirm adequate quantity and quality for their needs. It is likely that an ECA will be required for the sewage system and thus the MECP will be involved. We would like to be copied on any application for an ECA.
Ecology Comments	See letter attached
Township of Puslinch Fire Department – Brent Smith	Comments pending
Township of Puslinch Building Department – Andrew Hartholt, CBO	At this stage and level of detail of the pre-consultation submission my comments/questions are as follows:
	 No septic system(s) or on-site water supply for firefighting appears to be shown in the proposed? If septic system(s) total daily design flow is greater than 10,000L/day, separate approvals will be required from the MECP. Will the buildings be sprinklered? Separate building permits will be required for each building and sign(s) being proposed. Will the proposed buildings be a phased approach?



	If the applicant is to proceed to the site plan stage, be sure to include the following information so more detailed comments can be made: 1. Ontario Building Code matrix 2. Building Height and storey's proposed for each building. 3. Hydrant location(s). OBC B.3.2.5.7. to be located within 90 meters of every portion of a building perimeter that is required to face a "street". 4. Show designated fire routes 5. Principal entrances to buildings to be identified. 6. Sizing, calculations and location of on-site water storage. 7. Full extent proposed septic system, including detailed calculations. 8. Conceptual elevations and floor plans of proposed buildings. 9. Identify snow storage locations 10. Will Roof drainage flow control be used as part of the stormwater management? 11. Provide preliminary spatial separation calculations between buildings and property lines.
Township of Puslinch Public Works – Mike Fowler	No comments received
Source Water	This site is located in a Wellhead Protection Area D (WHPA-D) with a low vulnerability score of 2, a Significant Groundwater Recharge Area (SGRA), and a draft Wellhead Protection Area for Quantity (WHPA-Q) with a significant risk level. See attached maps. The proposed development would require the following during the site plan process:
	 Completion of the Drinking Water Threats Screening Form. This form is an important tool that the Risk Management office uses to determine how Source Protection Plan policies may affect the property.



- Depending on answers to screening form, a chemical management plan (CMP) for fuel, chemical and / or waste handling and storage may be recommended. At minimum, we will request that a site plan condition be required for any temporary fuel storage during construction.
- Due to the amount of impervious surface proposed, we would strongly recommend that a Salt Management Plan be submitted for the property to manage winter maintenance activities.
- Confirmation of stormwater management design for the property and whether an Environmental Compliance Approval (ECA) is required.
- Confirmation of sewage works capacity for the property and whether an Environmental Compliance Approval (ECA) is required. If capacity is in excess of 10,000L per day, Ministry approval is required.
 - Please provide the location of proposed septic system in future submissions as it is not shown on the current concept plan
- Please discuss if any Permits to Take Water are required or are currently subject to the property. If water takings exceed 50,000L per day, Ministry approval is required.
- In relation to consumptive water taking, we encourage that properties within the WHPA-Q install a flow meter to monitor water usage. Its not a legal requirement yet but when the policies become in legal effect, it may be required by the township. During the site plan process, we will provide best management practices for the recharging and infiltration of clean water.
 - It is important to note that depending on when site plan is submitted, these draft policies may be in legal effect.
- Details on any excavation, deep cassions or piers, geothermal, existing wells and other potential transport pathways proposed.
- Please ensure that site data (lot, building, asphalt, concrete, and landscaped percentages) details are included in future submissions. This information is important to review with regards to recharge to the aquifer. As long as the impervious surface percentage after construction



	is below the 80% threshold value used in the Tier 3 water quantity studies, it will likely be acceptable as the water quantity policies are not legally in effect at this time. Furthermore, we strongly support the Township Hydrogeologists comments that a groundwater study will be necessary to confirm that on-site and nearby natural environment features are not impacted by the development and that the applicant should undertake a Procedure D5-5 Water Supply analysis for the site.
GRCA	 GRCA has reviewed the pre-consultation request and offer the following comments: Development will require an Environmental Impact Study (EIS) demonstrating no negative or adverse hydrological or ecological impacts on the Provincially Significant Wetland (PSW) on the property. GRCA EIS Guidelines can be found online here: https://www.grandriver.ca/en/Planning- Development/resources/Documents/Planning Policies Wetlands EIS.pdf As part of the EIS, the applicant will need to demonstrate that the PSW hydroperiod is maintained or enhanced. A pre- and post-development wetland water balance assessment will be required to demonstrate that the development will not negatively impact the hydrologic or ecological function of the wetland. GRCA requests that a Terms of Reference (TOR) be circulated for approval prior to initiation of the EIS. It is requested that Stormwater Management and grading plans be circulated to GRCA for review and comment.

ADMINISTRATION CENTRE
74 WOOLWICH STREET
GUELPH, ONTARIO
N1H 3T9

July 29th, 2022

Township of Puslinch 7404 Wellington Road 34 Guelph, ON NOB 2J0

Dear Ms. Lynne Banks:

Re: Pre-consultation Request – 4631 Sideroad 20 N

Thank you for circulating the request for pre-consultation comments for the above-noted property. As part of the pre-consultation, we have reviewed the following submitted items:

- Conceptual development proposal
- Conceptual site plan

Based on our review of the above information, and in our capacity as the Township's Planning consultants, we offer the following planning comments for consideration:

Proposal:

- To create an innovation community that includes Danby, Upper Canada Forest Group, Puresource/Now Foods, the Farley Group, TrafficSoda, and HumbleSnacks.
- To permit office space, a refugee centre, a community park and potentially manufacturing uses.
- It is noted that the information package identifies subdivision of land; however, this has not been considered as part of the preliminary review considered by planning staff.

Provincial Policy:

- The Planning Justification will need to considered the Provincial Policy Statement (2020) and the Provincial Growth Plan. The subject lands are not located within the current Greenbelt Plan boundaries.
- The Growth Plan provides the most direction regarding growth and employment uses.
 Due to the location and land use designation of the subject lands, the site would be subject to the Rural Area and Rural Lands policies. These policies will need to be reviewed.
- The Growth Plan also provides other policies that direct where different forms of growth should be considered. For example (i) the Growth Plan provides direction that "major offices", which are 4 000 m² or more in floor area or generate 200 jobs or more, are to be directed to urban growth centres, major transit areas or other strategic growth



ADMINISTRATION CENTRE
74 WOOLWICH STREET
GUELPH, ONTARIO
N1H 3T9

areas with existing or planned frequent transit services and (ii) recognizes existing employment areas. The subject lands are not located within any of the aforementioned areas.

- The County is undergoing a Municipal Comprehensive Review. Through the first phase,
 OPA 119 has proposed a Regionally Significant Economic Development Study Area.
 These lands were not identified as part of this study area. The County is also completing
 a review of the Agricultural System which may impact this property.
- The Growth Plan also directs that a vegetative buffer no less than 30 metres is required from a key hydrologic feature (i.e. wetland); however, an Environmental Impact Study will be required and will also need to determine if a setback of 30 m is appropriate.

County of Wellington Official Plan:

- The subject lands are primarily designated as Secondary Agricultural. There is also Core
 Greenland System designation on-site to identify a Provincially Significant Wetlands.
 Further, a small portion of the site appears to contain Rural Employment Area
 designation.
- The primarily land use designation only permits "small-scale" development; however, this development would not be considered to be small scale. As such, the subject development is not permitted in the Official Plan.
- Section 6.8 outlines the need to be considered if proposing to introduce a Rural Employment Area designation, including that these areas are required to be: (i) dry uses; (ii) only limited commercial uses may be considered; and (iii) the need to consider land use compatibility.
 - Section 6.8.4 establishes policies for new Rural Employment Areas; however, the County is currently undertaking a provincial policy and growth conformity exercise.
- Rural Servicing development on this site will be subject to private services (well and septic) and only "dry" uses are permitted. The Official Plan identifies "dry" uses as uses "...which do not use significant amounts of water in their operation and which do not produce significant amounts of effluent, consistent with rural servicing levels which rely on private water and sewage systems".
 - Section 11.2.6 Rural System Servicing will need to be reviewed and considered.
 No information regarding servicing or details of the manufacturing uses are provided. MOE approval may be required based on the septic requirements.
- Part 5 will need to be reviewed and the applicable policies demonstrated to be met.

Source Water Protection:

 The subject lands are identified as a Wellhead Protection Area D with a vulnerability score of 2. The subject lands are also part of a WHPA Q1 & Q2 and a



ADMINISTRATION CENTRE
74 WOOLWICH STREET
GUELPH, ONTARIO
N1H 3T9

- significant groundwater recharge area. Comments from the Risk Management Official are required.
- Any development applications will also need to demonstrate consistency with Section 4.9.5 of the Official Plan. A Drinking Water Threat Disclosure Report will be required as part of a complete application per section 4.9.5.4 of the Official Plan.

Paris Galt Moraine Policy Area & Mill Creek Watershed:

- A hydrogeological assessment is required to address policies within Section 4.9.7
 of the Official Plan to ensure the objectives of these policies are maintained.
- The above noted assessment will also need to demonstrate how Section 4.10.1 are addressed
- Section 4.9.5.6 is also required for large scale development on individual on-site water services, including demonstration of adequate water supply.

Township Zoning By-law:

- The subject lands are zoned as Agriculture (A) Zone, with some Future Development (FD
 3) Zone and Natural Environment (NE) Zone, including the Environmental Protection Overlay.
- The uses are <u>not</u> permitted within the existing permissions of the Zoning By-law. A
 detailed zoning review has not been completed at this time.
- Any future conceptual plans will need to updated to reflect the various Zoning By-law requirements, including snow storage and garbage collection.

Planning Act Applications Required:

- County of Wellington Official Plan amendment;
- Township Zoning By-law amendment and
- Township Site Plan application

Supporting Studies Required for Official Plan and Zoning By-law Amendment:

Included below is a preliminary list of potential supporting studies that are required for any future application submissions. The list of studies/assessments identifies minimum requirements.

- A detailed Planning Justification Report prepared by a qualified professional that reviews local and provincial policy, including a detailed review of the Growth Plan policies, the zoning by-law, land use compatibility, minimum distance separation etc.;
- Compatibility Assessment that looks at noise and dust impacts, including the MOE-D Series Guidelines due to proximity to sensitive land uses;
- Design Brief demonstrating compliance with the Township's Design Guidelines;



ADMINISTRATION CENTRE
74 WOOLWICH STREET
GUELPH, ONTARIO
N1H 3T9

- Environmental Impact Study a terms of reference is to be prepared in advance and reviewed by the Township's consulting ecologists;
- Source Water Protection Screening Form & Drinking Water Threat Disclosure Report
- Archaeological Assessment;
- Additional studies identified by the Township's consultants and other commenting agencies (Servicing Feasibility, Hydrogeological, Traffic Impact Assessment, Stormwater Management, etc.)
- Additional Items detailed concept/site plan and architectural renderings/elevation plans.

All studies/assessments are required to meet (at a minimum) the requirements set out in Section 4.6 *Impact Assessment* of the Official Plan. All studies/assessments are to be completed and signed by a qualified professional.

Additional Planning Comments:

- The information package provided included a project summary and a conceptual plan. It is challenging to review the development potential based off of a conceptual business plan. It is recommended that a Planner be retained and provide a detailed project summary to assist with the review of this development proposal and that a subsequent pre-consultation meeting be scheduled. More information will be helpful to assess some of the potential uses (i.e. a refugee centre and a community park) and to determine potential off-site impacts that will need to be assessed, including water/sanitary needs.
- There are concerns that there are existing provincial policy constraints that limit the consideration of a developer driven amendment to introduce additional Rural Employment Area lands.
- The subject lands are located within 1 km of the City of Guelph limits. It is anticipated that the City will have comments and potential concerns with this development. There are also policies within the County Official Plan (Section 4.7 Urban Area Protection) that will need to be considered to ensure an urban and rural transition.
- As mentioned within the Provincial Policy section of these comments, the subject lands are located outside of lands that have been identified by the County of Wellington as the Regionally Significant Economic Development Study Area through the MCR process.
 The Township will further need to consider the strategic location of any additional employment lands to address future land needs identified through the MCR process.

COUNTY OF WELLINGTON



PLANNING AND DEVELOPMENT DEPARTMENT
Meagan Ferris, RPP MCIP, Manager of Planning and Environment
TEL: (519) 837-2600 ext. 2120
EMAIL: meaganf@wellington.ca

ADMINISTRATION CENTRE
74 WOOLWICH STREET
GUELPH, ONTARIO
N1H 3T9

- A conceptual plan has been included as part of the pre-consultation package; however, a detailed review of the Zoning By-law with respects to setbacks, lot coverage, parking (including accessible parking and bike parking), loading space, landscape and buffering.
- There are multiple design elements that need to be considered including architectural elements; layout of parking, loading areas, location/size/setback of dry services, landscaping etc.
- Development shall be subject to the Township's Urban Design Guidelines. Information regarding landscaping (including plant materials) and building design are included in this Guideline -- Microsoft Word - 1 PDG Cover Feb1-10 FINAL.doc (puslinch.ca). There is a concern with the visual impacts of truck parking along the Hanlon that would not be in keeping with the Township's design vision.
- Comments from the MTO are required with respects to this development proposal, setbacks, and traffic. It is understood that there are access limitations proposed for the Hanlon which may have impacts for any future development of this site. The County Roads Division may wish to review any terms of reference.

These comments have been prepared without the benefit of reviewing detailed comments from other consultants or agencies and based on a conceptual proposal. These comments may change as the development progresses and as more details are provided.

I trust these comments will be of assistance if you have questions please contact the County of Wellington Planning and Development Department.

Yours truly,

Meagan Ferris, RPP MCIP
Manager of Planning and Environment



July 20, 2022 Our File: 122006-013

Township of Puslinch 7404 Wellington Road 34 Guelph, ON N0B 2J0

Attention: Ms. Lynne Banks

Re: Pre-Consultation 4631 Sideroad 20 North, Township of Puslinch

Dear Ms. Banks,

An email was received on July 14 30, 2022 requesting pre-consultation comments for future development applications related to a proposed future commercial development, on the subject lands located at 4631 Sideroad 20 North, in the Township of Puslinch.

In support of the identification of the engineering requirements for future development applications, the following documents and drawings were received and reviewed:

- Estill Innovation Community Request for Proposal, dated March 16, 2022.
- Concept Plan and Aerial Imagery.

Based on our review of the site and provided documents, we provide the following engineering requirements to support future a future zoning bylaw amendment application:

- Geotechnical and Hydrogeological Studies, prepared by qualified individuals (professional geoscientist, professional engineer and/or professional hydrogeologist) providing information on site setting, desktop review of geologic and hydrogeologic information, results of field investigation programs, nitrate impact analysis, and recommendations related to design and construction of structures and buildings, including foundations; stormwater management systems; septic system design; and availability of potable groundwater.
- Functional Servicing and Stormwater Management Report, detailing:
 - The original (pre-development) conditions of the site and the nature of the proposed development.
 - o How the site is to be serviced by potable water, fire water and wastewater treatment/disposal.
 - How stormwater management is to be provided for the site including water quality, water quantity, water balance, and erosion mitigation, as required by the Township Development Standard, and GRCA and MTO requirements.
 - o The legal drainage outlet for the proposed SWM facility.
 - o Grading and drainage considerations for the site.
 - o Geotechnical and hydrogeological considerations.





OUR FILE: 122006-013

- **Concept Plan**, generally showing the proposed limits of development and setbacks, entrances and sightlines for entrances, proposed buildings, driveways, parking areas, loading areas, sidewalks, and locations of well, septic system and stormwater management facility.
- Traffic Impact Study, taking into account the proposed phasing and timing of the MTO Highways 6 and 401 Improvements project. The Terms of Reference for the TIS should be reviewed by the Township, County and MTO before commencement of the study.

Should the proposal proceed to site plan approval, the above-mentioned documents and drawings would need to be updated as required to reflect the final design of the development, and the following additional documents and drawings would be required:

- **Site Plan**, generally showing the proposed above ground infrastructure and services including but not limited to buildings, curbs, parking areas, loading areas, turning areas, entrances, easements, fire routes and fire protection infrastructure, signage, fencing, lighting, sidewalks, catchbasins, and potable water well.
- Site Grading and Servicing Plan, generally showing the existing and proposed site grading, and proposed underground infrastructure and services, including but not limited to storm sewers, water and sanitary lines, septic system and stormwater facilities.
- **Erosion and Sediment Control Plan**, providing provisions for the control of sediment and potential erosion during construction.
- **Landscaping Plan and Tree Preservation Plan,** designed to illustrate existing and proposed plantings onsite and required restoration works for the property.
- **Photometric Plan**, demonstrating how the site is to be illuminated in accordance with Township Standards.
- Spills Management Plan, to document the control of potential spills for the subject property.
- An Itemized Construction Cost Estimate, which includes 15% for engineering and contingencies.

If you have any questions or require additional information, please do not hesitate to contact us.

Yours truly,

GM BLUEPLAN ENGINEERING Per:



ABOUD & ASSOCIATES INC. Consulting Arborists • Ecologists • Landscape Architects







3-5 Edinburgh Road South Guelph . Ontario N1H 5N8

519.822.6839 info@aboudtng.com www.aboudtng.com

URBAN FORESTRY

ARBORIST REPORTS
MANAGEMENT PLANS
TREE PRESERVATION PLANS
TREE RISK ASSESSMENT
GIS TREE INVENTORIES
TREE APPRAISALS
MONITORING

ECOLOGICAL RESTORATION NATURAL SYSTEMS DESIGN

HABITAT RESTORATION
EDGE MANAGEMENT PLANS
RAVINE STEWARDSHIP PLANS
NATURALIZATION PLANS
INTERPRETIVE DESIGN
MONITORING
CONTRACT ADMINISTRATION

ENVIRONMENTAL STUDIES

SUBWATERSHED STUDIES
ENVIRONMENTAL IMPACT
STATEMENTS
ECOLOGICAL LAND
CLASSIFICATION
WETLAND EVALUATION
VEGETATION ASSESSMENT
BOTANICAL INVENTORIES
WILDLIFE SURVEYS
MONITORING

LANDSCAPE ARCHITECTURE

MASTER PLANNING
RESIDENTIAL COMMUNITIES
COMMERCIAL/INDUSTRIAL
HEALTHCARE AND EDUCATION
STREETSCAPES
PARKS AND OPEN SPACES
TRAIL SYSTEMS
GREEN ROOFS
CONTRACT ADMINISTRATION

EXPERT OPINION

LPAT TESTIMONY LEGAL PROCEEDINGS PEER REVIEW RESEARCH EDUCATION August 10, 2022

Our Project #: AA21-049A-011 Sent by email: jbunn@puslinch.ca

Jeff Bunn, Deputy Clerk Township of Puslinch 7404 Wellington Rd. 34 Puslinch, ON N0B 2J0

Re: 4631 Sideroad 20N, Township of Puslinch Ecological Constraint Review, Pre-Submission Application Proposed Estill Innovation District

Dear Mr. Bunn:

Aboud & Associates Inc. has been retained by the Township of Puslinch to complete an Ecological Constraint Review of the pre-submission documents for a proposed Innovation District located at 4631 Sideroad 20N. We have reviewed the following documents as part of our assessment:

- Estill Innovation Community Request for Proposal, Danby Appliances, undated,
- Danby Development Concept Puslinch 2, undated,
- Aerial photography of the subject site, Google satellite imagery, April 2017, and June 2019,
- Wellington County Official Plan (July 20, 2021, consolidation), including Section 5.0 Greenlands Systems policies,
- Township of Puslinch Comprehensive Zoning Bylaw No. 023-18 (May 2021 consolidation) including Map A-4, Schedule A, and section 12.4 NE Zone requirements,
- The Provincial Policy Statement, Ministry of Municipal Affairs and Housing, 2020,
- A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020 office consolidation,
- Wellington County Draft Natural Heritage System Mapping, accessed July 2022,
- GRCA mapping (accessed July, 2022) of natural heritage features (e.g., regulation limit, GRCA and OMNR wetlands, ANSI's, and MNR Woodlands), and
- Natural Heritage Information Center, Make-a-Map, accessed July, 2022.

Our review has identified the following regarding the presence of ecological constraints or concerns, as they relate to the proposed development at 4631 Sideroad 20N.

- Significant Natural Heritage features are present within the property limits, including a portion of the Cranberry Oil Well Bog Provincially Significant Wetland Complex.
- The Wellington County Official Plan Schedule A7 identifies Core Greenlands and Secondary Agricultural lands within the property limits.
- The property includes lands within the GRCA regulated area.
- The MNDMNRF Natural Heritage System mapping does not identify any additional natural heritage features.
- The Wellington County Draft Natural Heritage System mapping identifies proposed enhancement linkages within the property limits.
- Our Species at Risk review of the NHIC 1km squares, Ontario Reptile & Amphibian Atlas, Ontario Breeding Bird Atlas, and Atlas of the Mammals of Ontario, has determined that habitat for Species at Risk is possible within the property limits, specifically within the wetland and adjacent lands, and the vegetated areas to the northwest. Agricultural areas may also provide habitat for grassland breeding birds, depending on the type of agriculture present. Species of conservation concern identified in the background review include Blanding's Turtle, Northern Map Turtle, Snapping Turtle, Midland Painted Turtle, Eastern Ribbonsnake, Milksnake, Jefferson Salamander, Bobolink, Eastern Meadowlark, Common Nighthawk, Red-headed Woodpecker, Eastern Wood-pewee, Wood Thrush, Bank Swallow, Grasshopper Sparrow, Barn Swallow, Chimney Swift, and American Burying Beetle. These species should be considered when scoping the Environmental Impact Study to ensure compliance with the ESA.
- The site is within the boundaries of the Growth Plan for the Greater Golden
 Horseshoe and includes lands within the natural heritage system identified as Key
 Hydrologic Features. Key Hydrologic Features are described as the following:
 Permanent streams, intermittent streams, inland lakes and their littoral zones,
 seepage areas and springs, and wetlands.
- Per the Growth Plan for the Greater Golden Horseshoe, outside of settlement areas, development or site alteration is generally not permitted in Key Hydrologic Features,

and proposals for new development or site alteration within 120 metres of Key Hydrologic Features must identify a vegetation protection zone (VPZ). The VPZ must be no less than 30m from the outside boundary of the Key Hydrologic Feature.

- Per the Wellington County Official Plan, development is not permitted within Core Greenlands. Adjacent Lands are identified as lands within 120m of Provincially Significant Wetlands.
- Per the Wellington County Official Plan, where development is proposed on Adjacent Lands, the County or local municipality shall require the developer to:

 identify the nature of the features potentially impacted by the development;
 prepare, where required, an environmental impact assessment to ensure that the requirements of this Plan will be met and consider enhancement of the natural area
 - where appropriate and reasonable. c) address any other relevant requirements set out in Section 4.6.3 Environmental Impact Assessment.
- Per the Township of Puslinch Zoning By-law, the subject property includes lands designated as Natural Environment.

Our review of the pre-submission documents and background information has determined that, with respect to ecological considerations, the proposed development, as shown in the Danby Development concept 2, may conform to the Natural Heritage policies of the PPS, Growth Plan for the Greater Golden Horseshoe, Wellington County Official Plan and Township of Puslinch Zoning By-law. The following should be completed for the site to ensure conformity with the policies.

- Completion of a Natural Heritage Evaluation or Hydrologic Evaluation per the Growth Plan for the Greater Golden Horseshoe.
- Wetlands must be staked in the field and confirmed with the GRCA to determine current limits.
- The Development plan must ensure a minimum VPZ of 30m from the Provincially Significant Wetland feature on the subject property.
- The Development limits should be evaluated to determine if any areas or features meet criteria for significant woodlands, provide significant wildlife habitat, or habitat for species at risk.

- The site should be reviewed for additional wetlands and natural or naturalized vegetation communities through the completion of Vegetation Assessments utilizing the Ecological Land Classification system.
- Consideration should be given to adjust the site plan to maintain or provide linkages to adjacent Natural Heritage Features per the Wellington County Draft Natural Heritage Mapping enhancement linkages.

Given the above, it is expected that a scoped EIS that satisfies the requirements of the Growth Plan for the Greater Golden Horseshoe, Wellington County Official Plan, Township of Puslinch Zoning By-law and the GRCA will be required to move forward with the proposed development on the subject lands. A proposed Terms of Reference should be submitted prior to completing any studies to ensure the scope of study is adequate for the site.

Please contact the undersigned should you require additional information of the above.

Yours truly,

ABOUD & ASSOCIATES INC.



Cheryl-Anne Ross, B. Sc. F.W.T. Ecology Lead & Wildlife Ecologist

S:\A+A Projects\2021\Approved\21-049A Puslinch Peer Review\AA File\21-049A-011 4631 Sideroad 20 N\Report\AA Ecological review 21-049A-011 final.docx



February 1, 2023

CAO Schwendinger Township of Puslinch 7404 Wellington Rd. 34 Puslinch, ON NOB 2J0

RE: Proposed Estill Innovation Community – Community Infrastructure Housing Accelerator Request

City of Guelph Comments:

It is important to note that these are preliminary comments as a formal request for comment has not been received from the Township.

The City of Guelph has concerns with the proposed Estill Innovation Community. The submitted materials are insufficient to adequately review the proposed request. At a minimum, the City of Guelph requests that the following information be considered, and studies be prepared prior to the Township making the proposed Community Infrastructure and Housing Accelerator order request or considering such a request or approving any related development applications.

Community infrastructure and housing accelerator orders

It is our opinion that the Community infrastructure and housing accelerator order is not a tool that could be used at this time. As per the guidelines (https://www.ontario.ca/page/community-infrastructure-and-housing-accelerator) the required components have not been provided:

The minister will only consider an exemption from provincial and local land use policy requirements if the subsequent approval is needed to facilitate the proposed project, and the municipality provides a plan that would, in the opinion of the minister, adequately mitigate any potential impacts that could arise from the exemption. This includes, but is not limited to, matters dealing with:

- community engagement
- Indigenous engagement
- environmental protection/mitigation

Based on the process outlined by the applicant in the presentation document, these works are not complete, and the required studies are not available nor contemplated at this time to determine the environmental impacts. The site

City Hall 1 Carden St Guelph, ON Canada N1H 3A1

T 519-822-1260 TTY 519-826-9771 is located in a WHPA for quality and also the WHPA-Q for quantity. The sanitary loading from the proposed facility has not also been evaluated as a private septic system, thus the environmental protection and mitigation impacts have not been provided.

We require additional information to understand how any new water taking requiring a PTTW within the WHPA-Q as a drinking water threat and request that this information is provided before decisions are made as the information provided has an inadequate regard for water quality. The City relies on clean groundwater as do the residents of the Township and this has not been evaluated at this time, nor have any groundwater monitoring programs been presented.

- WHPA-D Analysis and Ground Water Study that evaluates the impact of the proposed development on the City of Guelph and the Township of Puslinch's drinking water supply considering the proposal would not be on municipal water or wastewater services.
- The estimated water taking is significant and would require a
 permit from the Ministry of Environment Conservation and Parks.
 This approval should be arranged prior to any rezoning as the
 proposed use is contingent on sufficient well and septic capacity
 being available.
- A Traffic Impact Study should be prepared and approvals from the MTO received before a rezoning is approved within proximity to Highway 6.

Staff also have concerns that the proposal does not demonstrate conformity with the Provincial Policy Statement, the Growth Plan and the County Official Plan.

Compliance with the Provincial Policy Statement (2020):

More than 90% of the subject lands would be classified as Rural in the PPS. The proposed use does not conform with the permitted uses in rural lands [1.1.5.2]

Policy 1.1.3.8 states: A planning authority may identify a settlement area or allow the expansion of a settlement area boundary only at the time of a comprehensive review and only where it has been demonstrated that:

- a) sufficient opportunities to accommodate growth and to satisfy market demand are not available through intensification, redevelopment and designated growth areas to accommodate the projected needs over the identified planning horizon;
- b) the infrastructure and public service facilities which are planned or available are suitable for the development over the long term, are

financially viable over their life cycle, and protect public health and safety and the natural environment;

- c) in prime agricultural areas:
 - 1. the lands do not comprise specialty crop areas;
 - 2. alternative locations have been evaluated, and
 - i. there are no reasonable alternatives which avoid prime agricultural areas; and
 - ii. there are no reasonable alternatives on lower priority agricultural lands in prime agricultural areas;

This request for a CIHA has not demonstrated reasonable alternatives, has not been undertaken via a comprehensive review and is contrary to Wellington County OPA 119.

Policy 1.3.2.2 states: At the time of the official plan review or update, planning authorities should assess employment areas identified in local official plans to ensure that this designation is appropriate to the planned function of the employment area.

The appropriate time to evaluate this is at the time of the OP review.

Policy 1.1.5.4 states that "Development that is compatible with the rural landscape and can be sustained by rural service levels should be promoted".

Without the previously mentioned studies the City cannot assume that the proposal can be sustained by rural service levels.

Policy 1.6.6.4 states "Where municipal sewage services and municipal water services or private communal sewage services and private communal water services are not available, planned or feasible, individual on-site sewage services and individual on-site water services may be used provided that site conditions are suitable for the long term provision of such services with no negative impacts."

Compliance with this policy cannot be confirmed until the appropriate studies and reviews by relevant approval authorities are completed.

Policy 2.1.1 states: "Natural features and areas shall be protected for the long term."

The existing features onsite have not been evaluated

Section 2.0 – Water: Planning authorities shall protect, improve or restore the

quality and quantity of water by:

- a) using the *watershed* as the ecologically meaningful scale for integrated and longterm planning, which can be a foundation for considering cumulative impacts of development;
- b) minimizing potential *negative impacts*, including cross-jurisdictional and cross*watershed* impacts;
- d) identifying water resource systems consisting of *ground water features*, *hydrologic functions*, *natural heritage features and areas*, and *surface water features* including shoreline areas, which are necessary for the ecological and hydrological integrity of the *watershed*;
- g) planning for efficient and sustainable use of water resources, through practices for

water conservation and sustaining water quality;

The above polices of the PPS have not been met or provided with the information that is available.

PPS Section 3.0 - Protecting Public Health and Safety:

The proposal fails to adequately address concerns regarding public health and human safety.

PPS Section 2.1.4 - 2.1.8: Municipalities are to protect, improve or restore quality and quantity of water resources through watershed planning, minimizing impacts, identifying water resource systems, maintaining linkages and other considerations.

The proposal has not demonstrated the protection water resources

PPS Section 2.2 - Development in or near sensitive surface and groundwater features is to be restricted:

The concept will have impacts on sensitive surface and groundwater features which have

not been adequately addressed.

Non-Conformity with the *Growth Plan for the Greater Golden Horseshoe*, 2020

The proposal is also not in conformity with the Growth Plan for the Greater Golden Horseshoe, 2020 (the "**Growth Plan**") as required by the *Planning Act*, as it does not conform with or adequately address, without limitation, the following sections:

Water and Wastewater Systems – s. 3.2.6.4 - Municipalities that share an inland water source or receiving water body will co-ordinate their planning for potable water, stormwater, and wastewater systems based on watershed planning or equivalent to ensure that the quality and quantity of water is protected, improved, or restored.

We would be happy to work with the applicant on a terms of reference for the studies required.

Water Resource Systems – s. 4.2.1 - Upper-and single-tier municipalities, partnering with lower-tier municipalities and conservation authorities as appropriate, will ensure that watershed planning is undertaken to support a comprehensive, integrated, and long-term approach to the protection, enhancement, or restoration of the quality and quantity of water within a watershed.

We would be happy to work with the applicant on a terms of reference for the studies required.

Non - conformity with the Township OP policies:

9.8.3 Puslinch Industrial Policy

a) Areas designated Rural Industrial in Puslinch are permitted to have the following additional

uses:

- complementary commercial uses such as automotive uses, restaurants, motels and limited retail
- offices, including a head office and/or research centre
- b) Two large parcels of land to both the east and west of the Hanlon Expressway have been designated Rural Industrial. These lands have lower priority for development than the industrial lands in the "Puslinch Economic Development Area". Existing properties will not be further fragmented by severance or subdivision until a detailed concept plan is developed, in cooperation with the City of Guelph, which provides an appropriate connection between the City's industrial lands to the north and the proposed interchange on the Hanlon Expressway. This restriction will be reviewed periodically to determine if these lands should be available for development or whether the designation should be expanded to include additional lands. The sequence of development shall be further controlled so that the eastern side of the Hanlon develops first. Development immediately adjacent to the Hanlon shall be restricted in the degree and location of open storage and type of uses. The area to the west of the Hanlon Expressway will only be considered should no other suitable site be available

It is our understanding that a comprehensive review to determine other suitable lands has not been considered and is contrary to the County's recent OPA 119.

Economic Development Comments

We have an interest particularly in how this private accelerator can strengthen our regional assets while protecting the groundwater assets of Guelph through additional study and information prior to moving forward.

We reserve our right to raise such further areas of concerns once a formal response is requested of the Municipality.

Sincerely,

John Regan EcD (f), CEcD.

General Manager

Economic Development and Tourism

City of Guelph

T 519-822-1260 extension 3567

E John.Regan@guelph.ca

From: Township of Puslinch <services@puslinch.ca>

Sent: Tuesday, January 17, 2023 6:51 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name Andrew Vanderkooy Email Phone Address 4505 Sideroad 20 N Guelph, ON N1H 6J3

Comments/Concerns regarding the proposed Estill Innovation Community

With access to the Hanlon soon to be cut off from the addition of an on-ramp at 34 and the Hanlon, all traffic trying to go onto the Hanlon or onto the 401 from any industrial infrastructure would be forced to go down side road 20 N to 34 and immensely increasing traffic in this residential area. This is a street in which many

people run along the side of the road, bike during the summer months, or walk their dogs. An increase in traffic on side road 20 N would cause all of these things to become MUCH more dangerous especially considering the hills on this road where drivers have poor line of site. Please, I urge you, keep this area a residential area.

Sent from Township of Puslinch

Hillary Miller

From:

Sent: Sunday, January 15, 2023 8:23 PM

To:

Admin

Subject:

Re: Puslinch Zoning Maps

Hi Hillary,

Can you confirm when the special council meeting will be held to discuss the proposed development at 4631 Sideroad 20N with the community? We plan to attend but have been unable to find the date/time details on your website. Our neighbours are also not sure when the meeting is.

Thanks Angie

Angie & Mike Mason

From: Admin <admin@puslinch.ca>

Date: Monday, January 9, 2023 at 11:43 AM

To: The Masons <masonfamilyguelph@gmail.com>

Subject: RE: Puslinch Zoning Maps

Good morning Angie,

The majority of the properties around 4631 Sideroad 20 N are zoned as Agricultural and Natural Environment. However, there is a property diagonal from 4631 Sideroad 20 N (on the corner of Concession 7 and Maltby Rd W) that is partially zoned as Industrial. I have attached a zoning map for your reference.

Kind regards,



Hillary Miller Legislative Assistant Township of Puslinch 7404 Wellington Rd. 34, Puslinch, ON NOB 2J0

P: 519-763-1226 ×207/Fax: 519-763-5846 www.puslinch.ca

From: The Masons

Sent: Friday, January 06, 2023 11:59 AM

To: Admin <admin@puslinch.ca>

Cc: Courtenay Hoytfox <choytfox@puslinch.ca>

Subject: Re: Puslinch Zoning Maps

Thank you kindly! Can you confirm whether there are any areas zoned commercial or industrial in this area?

Angie Mason

From: Admin <admin@puslinch.ca>

Sent: Friday, January 6, 2023 10:50:37 AM

To: The Masons

Cc: Courtenay Hoytfox < choytfox@puslinch.ca>

Subject: RE: Puslinch Zoning Maps

Good morning,

Please see the attached zoning map for the area around 4631 Sideroad 20 N. The zoning is Agricultural with sections of Natural Environment.

More information about this application can be found on the website here:

https://puslinch.ca/ciha/

Should you have any further questions about this development, please reach out to the Clerk, Courtenay Hoytfox, cc'd here on this email.

Kind regards,



Hillary Miller Legislative Assistant Township of Puslinch 7404 Wellington Rd. 34, Puslinch, ON NOB 2J0

P: 519-763-1226 x207/Fax: 519-763-5846 www.puslinch.ca

From: The Masons

Sent: Thursday, January 05, 2023 10:13 PM

To: Admin <admin@puslinch.ca>
Subject: Puslinch Zoning Maps

Please accept this request for a zoning map for Puslinch Township. I have been unable to find a comprehensive version on your website that shows sufficient detail at the parcel level. Specifically, we are interested in zoning for the property and surrounding areas for a proposed development application at 4631 Sideroad 20N.

Thanks in advance,

Angie & Mike Mason

Township of Puslinch 7404 Wellington Rd 34, Puslinch, ON N0B 2J0 From: Brian Crawley

Sent: Monday, January 23, 2023 12:06 PM

To: jgoyda@puslich.ca; John Sepulis; Sara Bailey; Russel Hurst; Admin

Subject: Fwd: Estill proposal

----- Forwarded message -----

From: **Brian Crawley**

Date: Mon, Jan 23, 2023 at 11:59 AM

Subject: Estill proposal To: <jseeley@puslinch.ca>

The proposal for a development on SR.20 is seriously flawed for a number of reasons. Firstly it is a residential area bounded by many houses that will be impacted by a proposed 600 worker force with it,s attending traffic noise & congestion that is incompatible with a rural residential road. Secondly there are no services eg. hydro,sewer & gas & water. The water issue is extremely important as this area has been shown to have low tolerance to heavy water use. For those outside of the immediate area there would be major road congestion eg at my corner of concession 4 & Downey Rd as well as Forestell Rd going to Downey during the times of incoming & outgoing traffic. This plan is definitely out of place in a residential area that should be in a commercial area of which Puslinch has one & the City of Guelph has just to the east over Hwy 6. I would hope that our council will deny this unreasonable request.

Brian Crawley 6890 concession 4

From: Daniel Forestell

Sent: Wednesday, January 11, 2023 10:57 AM

To: James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin

Subject: Proposed Estill Innovation Community @4631 Sideroad 20N

Proposed Estill Innovation Community @4631 Sideroad 20N

I am opposed to the proposed Estill Innovation Community Development at 4631 Sideroad 20 North, Puslinch for the following reasons:

- Sideroad 20 N and Concession 4 aren't suitable to accommodate the traffic generated by the proposed 600 employee facility and the associated truck traffic. Both of these roads are quiet residential roads, on which people walk with their families, cycle, walk their dogs etc. These roads are hilly with limited site lines, they run through environmentally sensitive wets lands and a variety of wildlife cross these roads daily including deer, coyotes and turtles. Both of these roads have changed little since the 1840s when Puslinch was settled. They are lined with old sugar maples, cherry trees, white cedar, spruce, pine etc. These are historically significant roads in Puslinch and are part of our communities heritage.
- Sideroad 20 and Concession 4 have half load restrictions in March and April. How does Mr. Estill propose to get truck traffic to this development during these months?
- This proposed development will increase traffic significantly on Concession 4 and Sideroad 20 and this will only get worse once Concession 4 is closed at the Hanlon Expressway as part of the highway 6 redevelopment.
- This proposed development will impact the residents in the area with light, noise and air pollution and the possible decline in property values.
- This is a residential area not an industrial area.
- Isn't there restrictions on development close to functioning livestock production areas? I believe there is a functioning farm boarding the west side of this proposed development.
- Who is responsible for paying for the infrastructure to service this proposed development ie water, sewers, gas, roads etc?

- The More Homes for Everyone Act, 2022 is misleading. This proposal has nothing to do with affordable housing.
- How does this proposal align with the proposed County of Wellington Official Plan Amendment (OPA) No.120? Shouldn't the (OPA) be approved first before even considering the proposed development at 4631 Sideroad 20 north?
- I makes no sense to pave over viable agricultural land. This land could be used to produce food for the marginalized members of our community.

Recommendations:

This development isn't congruent with the residential communities on Sideroad 20 and Concession 4. The developer should pursue other options, which might include purchasing land zoned for industrial purposes in the City of Guelph. This serviced development land is directly east of the proposed 4631 Sideroad 20 development, bordered by the Hanlon Expressway on the west, Maltby Road on the south and Gordon Street on the east. It will have the roads to support this proposed development and direct access to the 401 via the new interchange on the Hanlon Expressway , just south of Maltby Road.

Sent from my iPad

Hillary Miller

From: Township of Puslinch <services@puslinch.ca>

Sent: Wednesday, January 11, 2023 11:58 AM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name	
Danie	Forestell
Email	
Phone	
A 11	
Addro	ess Sideroad 20 N
Guelp	
N1H6	J3
Comn	nents/Concerns regarding the proposed Estill Innovation Community
	Forestell Wed, Jan 11, 2023 at 10:48 AM
	ed Estill Innovation Community @4631 Sideroad 20N

I am opposed to the proposed Estill Innovation Community Development at 4631 Sideroad 20 North, Puslinch for the following reasons:

Sideroad 20 N and Concession 4 aren't suitable to accommodate the traffic generated by the proposed 600 employee facility and the associated truck traffic. Both of these roads are quiet residential roads, on which people walk with their families, cycle, walk their dogs etc. These roads are hilly with limited site lines, they run through environmentally sensitive wets lands and a variety of wildlife cross these roads daily including deer, coyotes and turtles. Both of these roads have changed little since the 1840s when Puslinch was settled. They are lined with old sugar maples, cherry trees, white cedar, spruce, pine etc. These are historically significant roads in Puslinch and are part of our communities heritage.

Sideroad 20 and Concession 4 have half load restrictions in March and April. How does Mr. Estill propose to get truck traffic to this development during these months?

This proposed development will increase traffic significantly on Concession 4 and Sideroad 20 and this will only get worse once Concession 4 is closed at the Hanlon Expressway as part of the highway 6 redevelopment.

This proposed development will impact the residents in the area with light, noise and air pollution and the possible decline in property values.

This is a residential area not an industrial area.

Isn't there restrictions on development close to functioning livestock production areas? I believe there is a functioning farm boarding the west side of this proposed development.

Who is responsible for paying for the infrastructure to service this proposed development ie water, sewers, gas, roads etc?

The More Homes for Everyone Act, 2022 is misleading. This proposal has nothing to do with affordable housing.

How does this proposal align with the proposed County of Wellington Official Plan Amendment (OPA) No.120? Shouldn't the (OPA) be approved first before even considering the proposed development at 4631 Sideroad 20 north?

I makes no sense to pave over viable agricultural land. This land could be used to produce food for the marginalized members of our community.

Recommendations:

This development isn't congruent with the residential communities on Sideroad 20 and Concession 4. The developer should pursue other options, which might include purchasing land zoned for industrial purposes in the City of Guelph. This serviced development land is directly east of the proposed 4631 Sideroad 20 development, bordered by the Hanlon Expressway on the west, Maltby Road on the south and Gordon Street on the east. It will have the roads to support this proposed development and direct access to the 401 via the new interchange on the Hanlon Expressway , just south of Maltby Road.

From: Dr. Dan Neundorf

Sent: December 30, 2022 6:51 PM

To: James Seeley < <u>iseeley@puslinch.ca</u>>;

Cc: Glenn Schwendinger <gschwendinger@puslinch.ca>;

Subject: RE: New Entry - Email Mayor James Seeley

Appreciate the response.

My main concerns are traffic, property values and noise. We are in the process of rallying the community so we can be prepared for the February meeting. 600 cars and trucks on Sideroad 20N per day is not conducive to a comfortable Puslinch residential lifestyle. Based on the presentation at Council there are too many unknowns. I trust the Council will make a decision when you have all the information, including the concerns of the affected residents.

Also the link in the letter sent (information related to the proposal on Puslinch website) doesn't work. When will this be accessible?

Dan



From: James Seeley

Sent: December 30, 2022 6:23 PM **To:**

Cc: Glenn Schwendinger

Subject: Re: New Entry - Email Mayor James Seeley

Hello Dan,

I believe our entire Council has significant concerns with this proposal.

All of these concerns need to be addressed at the appropriate time to the satisfaction of Council with the input from our residents.

As for your statement about using farmland for growth, the unfortunate reality is that most growth or at least significant growth is on secondary agricultural lands.

If we as a Township were to strictly rely on residential growth to support the Township future needs for tax assessment, that is a scary scenario.

Industrial/commercial lands pay a significantly higher amount of taxes to Puslinch and this reduces the burden on the residential tax base could be significant and unaffordable to the local resident.

With that being said, I am not saying I support or do not support this proposal.

This proposal is just that, a proposal nothing more.

I have very significant concerns about many aspects of the proposal, at this time I am content with hearing the advice from our lawyers and staff.

I believe a more concrete direction will be established in the new year.

Also I apologize for the late response, I lost access to my email which I restored today. Happy new year. James

James Seeley

519-400-7984
Puslinch Mayor
Chair TAPMO
Wellington County Councillor

From: Dan Neundorf

Sent: Tuesday, December 27, 2022 5:02:35 PM
To: jseeley@puslinch.ca
Subject: New Entry - Email Mayor James Seeley

Your Name		
Dan Neundorf		
Your Email		
Your Address		
4632 Sideroad 20N		
Puslinch, ON N1H6J3		
Subject		
Proposed industrial complex		
Your Message		
Hi James:		
l am	and we met at the all candidates meeting.	

We live directly across the street from the above proposal. We understand that council needs to entertain all proposals - but this monstrosity? I find it frustrating that we pay taxes to a township that is considering flipping agricultural land that is farmed yearly to a 60 acre concrete jungle. We moved to Puslinch to live in a rural community and we support a council that respects this. We are concerned about trucks, noise, security, water supply, and overall mental health. Would any of the council members want to live adjacent to this - especially having lived in beautiful surrounds for 15 years? With MY council behind me I hope this is truly a David and Goliath ending.

My understanding from the Morriston bypass proposal is that there is no access to Concession 4 from the Hanlon. So where exactly would traffic enter this complex? We see an entrance from Sideroad 20N as inevitable. And as you said at the council meeting, traffic can be told to go a certain way and they won't follow advisement. With both of us working at home looking at "this beautiful building" (give me a break), all magic of living here will be gone.

Dan

Sent from Township of Puslinch

Township of Puslinch 7404 Wellington Rd 34, Puslinch, ON NOB 2J0 P 519 763-1226 F 519-763-5846 www.puslinch.ca

This message (and any associated files) is intended only for the use of the individual or entity to which it is addressed. The content of the message may contain information that is confidential, subject to copyright and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient you are notified that any dissemination, distribution, copying or modification of this message is strictly prohibited. If you have received this message in error, please notify the sender immediately, advising of the error and delete this message without making a copy. (Information related to this email is automatically monitored and recorded and the content may be required to be disclosed by the Township to a third party in certain circumstances). Thank you.

From: Donna Christie

Date: January 2, 2023 at 10:52:52 AM EST

To: James Seeley < jseeley@puslinch.ca >, Jessica Goyda < jgoyda@puslinch.ca >, John Sepulis

<jsepulis@puslinch.ca>, Sara Bailey <sbailey@puslinch.ca>, Russel Hurst

<rhurst@puslinch.ca>

Cc:

Subject: proposal for 4631 Side Road 20 N.

Dear Mayor Seeley,

We are sending our initial response to the notice of the proposed development on Side Road 20 North, received two days before Christmas. It did not make for a very merry Christmas but was more like receiving a large lump of coal.

We have now been able to watch the council meeting video. We are still digesting this bombshell that has been dropped but for now, a few immediate comments/concerns please

Mr. Estill states that he is "looking to get this done quickly" before his purchase offer expires. We, the neighbours, respectfully request that this not be rushed in terms of giving residents ample time to become informed, comprehend and respond. This is a massive undertaking that hugely impacts a mature, well established residential area, with many properties and long time residents affected. The announcement broke right at Christmas time when people are busy and distracted and many away - some for the winter - and township offices are closed. This is a development of a grand scale that will permanently destroy our residential neighbourhood and would normally go through a neighbourhood planning process to see if it is suitable. Lots of public scrutiny.

We know this destruction is avoidable, with options available that are suited to this kind of build right across the Hanlon, for just one example - Southgate Business Park along Crawley Road and Southgate Drive - 50 acre parcels with the proper designation and access are coming for sale. No residential neighbourhoods to be impacted and destroyed. We were extremely disappointed in Mr. Estill's comments about NIMBYism and not to worry because the benefits would far outweigh the opposition from residents. That comment speaks volumes - he does not sound like the kind of corporate neighbour anyone would want.

On the other hand, we do want to say that we appreciated the thoughtful and supportive concerns presented by you and nearly every councillor. Councillor Sepulis' question list indicates a lot of careful thought. We know that any government is always grateful to have extra tax dollars but It was reassuring to hear your points raised and we believe that you are representing us and have our best interests at heart.

We, the neighbours, as we get through this holiday season are wanting to come together and coordinate but that takes time. We will not get into all the specific issues here but will say that PROPERTY VALUES, NOISE AND LIGHT

POLLUTION, TRAFFIC, AND WATER are of huge concern. The impact on our property values is nothing short of devastating with many life-altering implications. It is obvious that this will impact residents all along Side Road 20 North, as well as Concession 4 between Downey and Side Road 20 and Forestell from Downey to Side Road 20 as traffic chooses their route, depending upon the direction they are travelling to and from. And there is so much more.

Bottom line - this issue is not a case of NIMBYism - this monstrous project with so many unknowns simply does not fit nor belong in a well established residential neighbourhood.

Thank you for all the careful consideration from council.

Donna and Jim Christie

From: Donna Christie

Sent: Saturday, January 28, 2023 3:10 PM

To: James Seeley; Jessica Goyda; John Sepulis; Russel Hurst; Sara Bailey

Cc: Admin

Subject: proposed Side Road 20 industrial development

Dear Mayor Seeley, Councillors Sepulis, Goyda, Hurst and Bailey,

We have stated our strong objection to the proposed industrial development but realize now it is important to provide some information to explain our concerns, in the hope that you will find it helpful. We sincerely appreciate you taking time to read and digest this letter, knowing that you have great demands upon your time.

We realize that one cannot possibly understand all that is at stake here and is to be lost if this project is passed, unless one actually lives in the area. A great many residents have lived here for 3, 4, and 5 decades. Driving along the roads impacted, it is not only what you see but what you don't see. We wish to point out that a great many of the properties have large acreages, not visible from the roadway, that boast woodlots, forests, wetlands, ponds, meadows, fields, farmyards and more. All of this is safe habitat and refuge for abundant wildlife and the farms are a tranquil setting for livestock and crops.

We ourselves have been devoted stewards of the land with our 18 acres for 51 years now and live in harmony with nature. We have an old growth forest, woodlots we have planted over the years, a membership with Ontario Woodlot Association and enrollment in the Managed Forest Program, a designated provincially significant wetland, a pond, a tranquil setting for our horses and more. You are more than welcome to come and walk our properties to experience first hand these gems of nature in the Puslinch environment.

All of this will be so drastically impacted - for example, by the noise and light pollution that will be generated by the proposed development. Both are relentless and travel a great distance. There are many studies that document serious harm from industrial noise pollution and artificial light pollution that span several types of ecosystems, including terrestrial and aquatic, right down to the frogs in the wetlands, including the significant wetland located on the development site. (A proposed "buffer" does not protect from light and noise). The owls that roost by day in our ancient Hemlocks will have their nocturnal cycle disrupted as they lose the darkness they need to survive and thrive. All nocturnal animals are affected by light pollution and all animals are affected by noise pollution. At the same time, that same harm is inflicted upon humans, impacting both physical and mental health. This type of stressful impact has already been experienced by some residents, as night and noise pollution have travelled from industrial buildings across the Hanlon all the way to their properties, homes and even into their bedrooms. The health and well being of the people living here will be impacted. We can very honestly tell you that residents are right now feeling negative effects from the stress and worry all are living under since the proposal was announced.

There is a global movement in place to combat both noise and light pollution, as the harm from both is now well recognized.

These points do not seem to be taken seriously as a valid issue. We all know that the environment is in distress and each of us is being asked to take responsible steps to protect it. There is an ongoing call for the development of effective regulations to ensure that industry grows in a way that minimizes/eliminates negative impact on people and the environment. Mr. Estill has sites available that are suited to industry and would not result in the destruction that would occur here. Any gains realized by placing industry on this site would come with

grave, irreversible costs. Industry clashes with nature, rural, humans they cannot coexist nor ever be good neighbours.

We feel confident that you will not dismiss our concerns as NIMBYism, as Mr. Estill has done. We are advocating for the health of the environment as well as our own health. We feel strongly that we all have an obligation to do the right thing - treat the environment, nature, farmland with respect. The future of the planet is in our hands. This is not the kind of legacy any of us want to leave. We truly believe that residents and council alike want to keep Puslinch a place to be proud of, known for doing the right thing as stewards of the land. We feel that council, residents and all recognize that ANY site in such close proximity to and with impact on the humans and the environment is not suitable for industry.

Concerns of the neighbours are many and are about a lot more than just traffic. A brief list in point form

- Quality of life
- Environment, nature
- Noise pollution
- Light pollution
- Farmland
- Water (a great concern some (including us) have had wells drop and also go dry unknowns
- Traffic
- Property values

We do apologize for the length of this letter but we hope the information is insightful and helpful. We hope that we can showcase Puslinch as doing the right thing for our precious parcels of nature, farmland, the environment and all the animals and people who live there.

PLEASE LET'S SET A PRECEDENT and pave the way for proper, safe industrial growth for the benefit of all - a beginning to the development of EFFECTIVE REGULATIONS that are being called for to REDUCE THE NEGATIVE IMPACT OF INDUSTRY ON BOTH THE ENVIRONMENT AND HUMANS.

We truly appreciate you taking time to read this and think it through.

Jim and Donna Christie 4652 Side Road 20 N.

From: Donna Christie

Sent: Tuesday, January 17, 2023 10:50 AM

To: Courtenay Hoytfox <<u>choytfox@puslinch.ca</u>>; Admin <<u>admin@puslinch.ca</u>>; James Seeley <<u>jseeley@puslinch.ca</u>>; Jessica Goyda <<u>jgoyda@puslinch.ca</u>>; John Sepulis <<u>jsepulis@puslinch.ca</u>>; Sara Bailey <<u>sbailey@puslinch.ca</u>>; Russel Hurst <<u>rhurst@puslinch.ca</u>>

Subject: proposed industrial development 4631 Side Road 20 N.

Hello Courtney,

We are sending this message to create awareness of something we feel you would appreciate knowing.

It has come to our attention that the notice sent to Puslinch residents regarding the proposed "Estill Innovation

Community" was misinterpreted by an unknown number of recipients. The letter refers to the "Community Infrastructure and Housing Accelerator Order" and also mentions the "More Homes for Everyone Act". There is no information given to clarify that this proposed development is to be industrial. We are just discovering that some impacted property owners are only now learning the truth. We believe that this mistake is an easy

one to make. We ourselves initially thought "houses". These acts are new to all of us and when one reads "Housing" and "Homes" it is only natural to assume that some houses might be built. Not everyone reads the Wellington Advertiser and, oddly enough, the week of the announcement many of us did not receive delivery of the paper.

The lack of important detail in the township notice and a delivery just a couple of days before Christmas have made for a poor and most unfortunate introduction to this proposal. We do not know how many people remain misinformed.

Thank you for taking this into consideration.

Donna and Jim Christie

From: Township of Puslinch <services@puslinch.ca>
Sent: Thursday, January 26, 2023 2:35 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name Erin Mares **Email Phone** Address 7000 Concession Road 4 Puslinch, ON N0B 2J0 Comments/Concerns regarding the proposed Estill Innovation Community This is not a proposal for an "innovation community" this is a project to build a huge factory in a residential community, this should not be allowed nor considered. This project will destroy the lives of the people who live here. From light pollution to noise to extreme traffic on our roadways to negative environmental impacts. We

will be disturbed 24/7! Would you want this in your backyard? Beside your house? This property is not suitable for this project in so many ways.

From: Erin Mares

Sent: Thursday, January 26, 2023 6:17 PM

To: James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin

Cc: Marcus Mares

Subject: Say No to the Proposed Estill Innovation Community!

Dear James and elected councillor members,

Happy New Year! I am writing to you to express my strong opposition to the Ellis Innovation Centre proposal/project. This development will destroy what we have here in our little rural community, in so many ways - lifestyle, environment, emotional and mental health, property values...we and the community are heartsick over this.

This is not a proposal for an "innovation community" this is a project to build a huge factory in a residential community, this should not be allowed nor considered. This project will destroy the lives of the people who live here. From light pollution to noise to extreme traffic on our roadways to negative environmental impacts. We will be disturbed 24/7! Would you want this in your backyard? Beside your house? This property is not suitable for this project in so many ways.

We will be disturbed 24/7 by the traffic, by the noise, by the light pollution. And it will cause irreversible damage. What about the effects on our health? Some neighbours on sideroad 20 are disturbed by the light and noise from the well.ca building and it is across the Hanlon. What kind of disturbance will it cause when it is across the street?

Please do not allow this to happen. Imagine you had a property here. Would you want it in your backyard?

There are many other commercial properties further south that are more suitable for this project. Check out Maltby road or Mclean Road or the already established industrial park off of Laird road. They need a parcel of land that will have less impact on the community and the environment and our roadways. I just read about the 140,000 litres of water they will need daily. What will happen to our wells? What chemicals or pollutants will result from their operations? What odours will they produce? This property is not serviced to support such a development without having detrimental side effects to the people and land.

What will this cost the city? Taxpayers?

This is not an innovation centre it is a gigantic factory, not suitable for this parcel of land nor the community. There's no infrastructure to support this. It will demand too much of our resources. The strain on the ecosystem, on wildlife, on us. Does the county really need another factory? **A factory in a residential community.**

The enormous traffic and congestion that this will cause on our roads with 600+ employees** and trucks driving up and down our little country roads to get to work will wreak havoc on the area for the people, for the wildlife, for the environment. I can't even imagine how anyone would think this is feasible or a good idea. The amount of large heavy trucks running in and out of the Danby plant 24/7, down sideroad 20, concession 4, 34, 35; this is ridiculous. A massive disruption. How can this project even be considered?

What about our investments/our property values? We have muli-million dollar homes and beautiful expansive properties here. This development will harm all we have worked for. We all moved here for country living and

invested a lot of money to own these properties. Some of us have horses and chickens and trails throughout our properties to be connected to nature. We do not want to be beside a factory or large scale building. This is a residential community.

Why don't you build a small High School or library or community centre (like in Aberfoyle) with some tennis or pickle ball courts, less traffic, no trucks, substantially less lights, less impact on resources and it benefits the community. Give us some walking trails or a dog park. Anything that has trucks coming and going should not be allowed, especially to this magnitude; this property does not lend itself to that.

Or sell more 1-3 acre lots for housing. Housing is what we really need and is more fitting to the area. These guys are trying to get this approved using the housing act (CIHA)? Why? How come? We need time to do due diligence and proper studies i.e. environmental impact, NDS calculations, impact on our well water (some of our neighbours have already had to re-dig their wells), etc Are they afraid if proper studies are done it will prove the project unsuitable or have them change their plans subsctantial; maybe even cost more money to do it right? What is the rush? Why Puslinch? I think it has to do with money and not what is best for the county or community.

Isn't there a significant wetland/pond area on the property? Isn't it protected by the city, by the province? Probably a huge water source for the wildlife in the area. This cannot be disturbed. I think in the plans it looks like it will be paved over. What the heck?

I hope that you listen to the people and not follow the money. Do what's best for the people, for the community, not what's best for an investor who doesn't care about the impact they have on the area.

**I would like to remind you that among staffing challenges we are not in need of new jobs to this region, especially not encroaching on green space. The Government of Canada cites a recent (Dec 2022) survey that near 40% of companies respond that the number 1 concern for them to stay in business is staffing. With the ample factories that are being built, is it laughable that you propose we need another one?

In greenspace and agricultural land. I am genuinely questioning your motives - we do not have enough homes, yet you propose we create more factories instead of housing? And you (poorly) cite a housing act to build a factory. Have you seen the current Danby set-up? Does it look innovative to you? Why do they not want to address environmental assessment of the area? To me that is pretty important here.

Have a great day and even better tomorrow!

Erin, Marcus, Dylan (9) and Beckham (11) Mares - 7000 Concession Road 4

From: Township of Puslinch <services@puslinch.ca>

Sent: Thursday, January 12, 2023 2:29 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name

Friedrich and Lisbeth Brunnmeier

Email

Phone

Address

6982 Concession 4 Puslinch, ON N0B 2J0

Comments/Concerns regarding the proposed Estill Innovation Community

The Estill Innovation Community proposal raises concerns for us.

Our first concern is the inevitable increase in traffic, which will be greatly compounded due to the closure of Concession 4 to the Hanlon. Secondly we are very concerned about the increased water use, since some of our wells are already

drying up.

Thirdly the noise and light pollution will greatly reduce our quality of life in our area.

Fred and Lisbeth Brunnmeier

Sent from $\underline{\text{Township of Puslinch}}$

Gary & Christine Mason 4668 Side road 20N RR6, Guelph, Ont. N1H6J3

January 5, 2023

Courteny Hoytfox, Municipal Clerk Township Of Puslinch

Re: Proposed Estill Innovation Community ($60 \, \text{Acre Industrial Development}$) @ $4631 \, \text{Side road}$ 20N

We are the property owners of the twenty acre parcel of land on the corner of Puslinch side road 20N and Forestell Road. We have lived here for 26 years. Our property is zoned Agricultural and is actively farmed. Our comments and concerns regarding the above noted proposal are as follows;

- How will this affect the value of our property? Should we have a property
 assessment prior to this development, if it moves forward, and will we be
 compensated if the property value decreases?
- What impact will this development have on the water level and quality in our well?
 What measures will be taken if problems arise? The installation of storm and sanitary sewers, commercial septic and well systems will lower and possibly contaminate the water table.
- How will this affect our livestock? Light pollution, noise pollution, etc. Complaints regarding smells from our animals. Isn't there a restriction for commercial development within so many meters of a barn.
- Side road 20 hasn't been constructed for heavy traffic both volume and weight.
 When the MTO closes the access from Concession Road 4 to Hwy 6 where will the commercial traffic travel? MTO intends to start construction in 2023.
- What will the buildings look like? Do they have any preliminary sketches?
- How does this development fit into the "More Homes for Everyone Act" maybe the property should be residential.

At this time we both appose this development. Since we wont be able to attend the meeting we are delegating our son Michael Mason as our representative.

Hopefully the above questions can be answered and will be addressed. Further comments and concerns will probably crop up as we receive more detailed information. Thank you for giving us the opportunity to comment on this proposal.

Gary & Christine Mason Land owners From: Township of Puslinch <services@puslinch.ca>
Sent: Tuesday, January 17, 2023 7:11 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name Gerry Amodeo **Email Phone** Address 4513 Sideroad 20N Puslinch, ON N1H 6J3 Comments/Concerns regarding the proposed Estill Innovation Community Good evening, I am the owner of the home located at 4513 Sideroad 20N in Puslinch. I am completely against the proposed Estill development. on my street and anywhere in my neighborhood. These are residential areas, no matter what kind of land the government wishes to call them. I invested in a home and a property

surrounded by neighbors with similar interests and investments and all of us wanting to be surrounded by farmland and forests versus warehouses, office buildings and parking lots. Do the residents of this street get to vote? I am hopeful, a decision will be made preventing industrial development on this street and in our neighborhood.

Sincerely,

Gerry Amodeo

4513 Sideroad 20N

Puslinch, Ontario

From: Sent: To: Subject:	James Mitchell Sunday, January 15, 2023 11:42 AM James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin Fwd: Comment Received regarding Comments regarding proposed Estill Innovation Community
Good morning	Mayor Seeley and council of Puslinch,
Apologize for a checking email	Sunday morning email (and hopefully you're out enjoying a wonderful winter day rather than s!)
	contains the submission we have made on the Puslinch website just so everyone is aware. We out the offer that we are more than happy to discuss further should anyone be interested.
Thanks, James and Mar 4636 Sideroad	
From: Townsh Date: Sat, Jan 1	rded message ip of Puslinch <services@puslinch.ca> 4, 2023 at 9:01 AM sent Received regarding Comments regarding proposed Estill Innovation Community</services@puslinch.ca>
Th on	ank you for contacting the Township regarding the Estill Innovation Community. e Municipal Office is closed for holidays from December 26, 2022 until 9:00 a.m. January 3, 2023. Staff will contact you with receipt of your comment following the fice opening after the holidays. Thank you for your understanding.
	mes Mitchell
En	nail

We'd

Phone

Address

4636 Sideroad 20N Puslinch, ON N1H 6J3

Comments/Concerns regarding the proposed Estill Innovation Community

As concerned members of the Township of Puslinch (our property is directly across from the proposed site), we would like to provide some comments. If given the opportunity, we would be happy to share these as part of any council proceedings.

- 1. Environmentally sensitive area The wetland on the property is part of the Cranberry Oil Well Bog Wetland complex this wetland complex is identified in the "Mapping of a Natural Heritage System in Wellington County" with a wetland score of 854 the second highest score in the county next to the Luther Marsh. Clearly, significant due diligence is required here before accepting any development proposals
- 2. Loss of farmland The Ontario federation of Agriculture is currently tackling the issue of loss of farmland and yet here we are contemplating the loss of yet more productive farmland. In addition, this proposal puts at risk agricultural operations directly adjacent to this property. We respectfully request that council ensure appropriate Minimum Separation distances be calculated and that an Agricultural Impact Assessment be conducted and that these documents be shared with us and other property owners
- 3. We have serious concerns with the Ministry of Municipal Affairs and Housing Community Infrastructure and Housing Accelerator Orders. We need council to

demonstrate to us that these tools are in the best interest of property owners and the municipality and not just a tool to satisfy developers in thwarting due process.

4. We request further information from council on the various issues including but not limited to traffic (how Sideroad 20 post Hanlon improvements can handle increased traffic); Noise (including effects on livestock in the area); Light (we already have issues from the other side of the Hanlon and Services (hydro, electricity and the logistics of getting 600 employees to the site). On the issue of transit, we are aware that city of Guelph will NOT provide public transit outside city boundaries - an issue that Mr. Estill has with his current site just outside of city boundaries in Guelph/Eramosa.

Respectfully Submitted, James and Marcia Mitchell

From: Township of Puslinch <services@puslinch.ca>
Sent: Wednesday, January 25, 2023 9:13 PM
To: Planning
Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name Jennifer Toering **Email Phone** Address 6996 Concession 4 Puslinch, ON N0B2J0 Comments/Concerns regarding the proposed Estill Innovation Community We are vehemently opposed to the proposed Innovation Park. Everyone on Side Rd 20 and Concession 4 lives here to be a part of nature, remove themselves from the city, and be part of a small and quiet community. This proposal threatens natural habitats and will road traffic, noise, light pollution, pull water from our well and

disrupt our community. We are a hard NO for this proposal & will fight with our neighbours to stop this development.

From: John Sepulis

Date: December 23, 2022 at 2:51:13 PM EST

To: Justin Wilson

Subject: Re: Proposed Development at 4631 Sideroad 20N

Thank you Justin for email. I am copying the Mayor and CAO in the reply so that your email can be added to the public record.

John

John Sepulis Councillor Township of Puslinch

On Dec 23, 2022, at 2:46 PM, Justin Wilson wrote:

Hi John,

My wife and I made a significant investment in this area approximately six years ago, knowing that this area would provide a rural lifestyle and an excellent area to raise a family, something that we felt we benefited from growing up on farms ourselves. Before we purchased, we targeted a quiet road and reviewed land use and planning documents to ensure that our rural home would remain just that. We settled in the municipality of Puslinch, outside of the City of Guelph, knowing that the Mayor and Councillors would have similar values to us knowing the benefits of residing in rural communities. Our family has now grown and we love our rural lifestyle, taking daily walks and bike rides along the road, which often take much longer than expected due to interactions with friendly neighbours.

We have many concerns with the Proposed Development at 4631 Sideroad 20N and I am sure much of the neighbourhood would feel similar, as this plan would have a considerable impact on all our lifestyle, including our children's safety. Within the last six years, the area and road has already been dealing with the expansion of Guelph's Hanlon Creek Business Park right to the edge of Puslinch's borders and the coinciding installation of a berm to the north of Sideroad 20N. The area is already imminently being impacted by the Ontario Ministry of Transportation that will be constructing the Highway 6/Hanlon Expressway Midblock Interchange. This will create an access ramp to the Hanlon in behind many backyards of residents on the east side of Sideroad 20N. This interchange will increase traffic noise, reduce the agricultural footprint, impact wetlands, and reduce our rural lifestyle, which we exhaustively searched out when investing in this area. This year, we also received notification that the 2022 Official Plan for the County of Wellington had placed lands in close proximity to Sideroad 20N and Concession 4 as a Regionally Significant Economically Development Study Area. We are tired of notifications of planning changes, all indicating that our rural area is changing and it needs to STOP now. Current business' located in the immediate area are a Christmas tree farm, a donkey sanctuary, a transfer station, and an at-home nutritional specialist, and now we are looking to add a 600 employee headquarters for Danby and Upper Canada Forest. This is incredibly disappointing to even consider!

There are many other current concerns about the proposed development at 4631 Sideroad 20N:

- At least 90% of the proposed land was designated as 'secondary agriculture' in the 2022 Official Plan for the County Wellington which was projected to 2051 (small section near Hanlon not included)
- The proposed land is a 'candidate area' for agriculture uses as per the Provincial Agricultural Land Base
- One third of the land has a protected wetland or is regulated by the GRCA
- It is designated as an intake protection zone for protecting rivers and streams with a vulnerability score of 2 out of 10 as per Wellington Source Water Protection
- One third of the land includes a Natural Heritage System area that was created so further growth plans as part of the Places to Grow Act includes natural heritage features and areas linked by natural corridors to maintain

biological and geological diversity, natural functions, and viable populations of indigenous species and ecosystems.

-Within the MTO plan for the Highway 6/Hanlon Expressway, there is a closure of Concession 4 onto the Hanlon; therefore it would be assumed that this business would plan on using Sideroad 20 N or Concession 4 for the operation of this business. These roads would not be safe with 600 added vehicles (as there are 600 jobs) due to sightlines and hidden driveways.

Please let me know if you think a petition from the neighbourhood would be beneficial at this time to appeal the decision by council to submit a CIHA proposal. It is a quiet road, it is a rural lifestyle and the Headquarters for these likely billion dollar firms does not belong here.

We trust that Council will not proceed with this application.

Justin

From: Township of Puslinch <services@puslinch.ca>

Sent: Wednesday, February 01, 2023 10:59 AM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name Laurie Ball **Email** Phone **Address** 6968 Concession 4 Puslinch, ON N0B 2J0 **Comments/Concerns regarding the proposed Estill Innovation Community** Puslinch Township In regards to the proposed Estill Innovation development at 4631 Sideroad 20 North, I would like to express my opposition.

I do not understand this constant need to try and place commercial developments next to people's homes. This is completely unnecessary as there are many areas that have already been developed for commercial use and are sitting waiting for businesses to move in. Proper zoning of areas are done for good reasons.

Applying for this rezoning does nothing more than create time consuming and costly proceedings for Puslinch Council and for the Community Groups that need to form and fight just to protect their homes in established residential areas.

I suspect Mr. Estill's location choice has more to do with taking advantage of the proximity to Guelph but enjoying the lower development, taxes and building costs of Puslinch.

Mr. Estill is being disingenuous and insulting when speaking about NIMBYism and the type of commercial business this is going to be. With a little research it is obvious this will be a large manufacturing facility with:

- Environmental Damage and Loss of Farm Land
- At a time when we are being taxed beyond belief and told that the more money we give the better that climate change can be stopped, it is hypocritical to watch governments destroy farmland and nature. Stats Canada reports between 2016 and 2021, 319 acres of farmland were lost every day in Ontario.
- Noise, Dust, Pollution and Bright Lighting
- Imagine never being able to open your windows again.
- Extensive traffic flow from the suggested 600 employees
- Our country roads have enough dangerous traffic with commuters using it at 401 speeds, an issue that has been left unresolved for many years. The future closure of the Hanlon/Conc 4 intersection will just push their large employee traffic onto these secondary roads.
- Massive Water Usage
- The most important issue in Puslinch Township with gravel pits and Guelph's desire to take our water.

This development needs to be built in an established appropriately zoned commercial area.

Sincerely,

Laurie Ball

6968 Conc 4

Puslinch, Ontario

N0B 2J0

From: Township of Puslinch <services@puslinch.ca>

Sent: Sunday, January 22, 2023 5:28 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name

Marcella and Angelo Venerus

Email

Address

4508 Sideroad 20 North Guelph, ON N1H 6J3

Comments/Concerns regarding the proposed Estill Innovation Community

We say NO to a proposed industrial development on Sideroad 20 North. We believe this to be a terrible idea as there are other potential industrial zones in Puslinch and that's where the proposed plant should go, not in agriculturally designated land and a residential area.

Why is Community Infrastructure and Housing Accelerator order even being considered for this project? This has nothing to do with building more houses but has everything to do with someone wanting to rezone the property to make good on their investment as quickly as possible.

For many years Wellington/Puslinch has had a history of controlling growth by limiting severances for residential use but it is now prepared to change zoning

bylaws to accommodate the building of an industrial park on agricultural land? We are not against progress. That's a given. However, if this project gets approved, the lives of residents and long term tax payers will be irreparably changed for the worse, property values will be reduced, traffic will be greatly increased. Mr Estill says that the trucks that will be running are not as heavy as the gravel trucks running on some roads. Does this make it any better? And how can he predict how many and what kinds of trucks will eventually be going up and down the road?

Mr Estill says that there will always be Nymbism. That may be true, but would you want to have an industrial area and all that comes with it by your front door? There might be some enthusiasm for this project by some of the councillors, but please do the right thing and make the right decision. Say NO to this project.

From:Township of Puslinch <services@puslinch.ca>Sent:Wednesday, January 25, 2023 8:00 PMTo:PlanningSubject:New Entry: Comments regarding proposed Estill Innovation Community

Name	
Marcus Mar	'es
Email	
Phone	<u> </u>
Address	
	d 4
Address 7000 Con R Puslinch, O	
7000 Con R	
7000 Con R Puslinch, O	
7000 Con R Puslinch, O N0B 2J0	N
7000 Con R Puslinch, O N0B 2J0 Comments I am shocke	Concerns regarding the proposed Estill Innovation Community d that the township is willing to consider an unsolicited attack on our
7000 Con R Puslinch, O N0B 2J0 Comments I am shocke community.	Concerns regarding the proposed Estill Innovation Community d that the township is willing to consider an unsolicited attack on our

and zoned that if the proposed Danby factory walks away at the last minute the developer and dear Councillor can bring in a myriad of bad actors. We don't need jobs. We need homes.

If the councilors are so in dire needs for a revenue base perhaps we can discuss that and our options instead of entertaining a high pressure tactic from an obviously bad player.

This is ridiculous and if Mr Estill calls this NIMBY-ISM maybe we should be insulting him, too.

I am not aware of an emergency need for funds, and especially not one that would warrant 140,000 L of water per day and an "Innovation Centre" for 600 employees... and I especially cannot see a reason we would need to excuse this bribery induced mockery of our town.

we have that accross the Hanlon in Guelph, but I guess the Guelph taxes are too high for this developer.

-Marcus

From: Michael Collins

Sent: Thursday, January 5, 2023 5:02 PM

To: Courtenay Hoytfox <choytfox@puslinch.ca> **Subject:** RE: New Entry - Email the Municipal Clerk

Hi Courtenay,

Thanks again for all of the follow-up and explanation.

As you may be able to tell from the phrasing, and types of questions I have asked, I am expecting the development to proceed given our provincial government current construction viewpoint, and the ability for this development to utilize the CIHA order. Given Mayor Seeley's and Councillor Goyda's comments in the Wellington Advertiser's article (https://www.wellingtonadvertiser.com/estill-hopes-to-open-100-million-innovation-community-in-puslinch/). They are also concerned about truck traffic on Sideroad 20. I understand a traffic study is to be done as part of this development in Q2 2023, but how is that going to be relevant and applicable once they close off access to the Hanlon from Concession Road 4 as part of the Highway 6 Bypass? If truck traffic is currently not allowed on Sideroad 20, can the quick approval of the development as part of CIHA bypass traffic recommendations indicated, or wanted by the Township, thus putting the onerous of road improvements back onto the Township (or the City of Guelph regarding Forestell Road)?

I politely request that you pass along my questions to the proponent and to council. I'll be attending the meeting in which I'm sure I'm ask some additional questions (if the time warrants it). I would like to know what Mr. Estill's definition of a lot of trucks, and heavy truck is, considering the volume and weight of trucks required to proceed with the construction of this development and operation of these new warehouses.

Estill said there wouldn't be a lot of trucks and certainly not heavy trucks. And the M' would be involved as the Hanlon is a provincial highway.

Michael



Michael Collins

Estimator - Civil Department

www.nacsworld.com

Office: Morriston

North America Construction (1993) Ltd. • NAC Constructors Ltd. • 21 Queen Street • Morriston • ON • • N0B 2C0



This e-mail message may contain privileged or confidential information. If you are not the intended recipient, you may not disclose, use, distribute, or copy this message or attachment in any way. If you receive this message in error, please delete the e-mail and any attachments permanently and also advise the sender of the error via e-mail. Thank you.

From: Courtenay Hoytfox < choytfox@puslinch.ca>

Sent: Thursday, January 5, 2023 4:30 PM

To: Michael Collins

Subject: RE: New Entry - Email the Municipal Clerk

[CAUTION]: This email originated outside of NAC. Use caution with links/attachments.

Hi Michael, thank you for the feedback.

At this time the Township is not conducting any formal review of the proponents documents or proposal. Staff are simply making the information available to the public in order to solicit feedback for Council's consideration. Council is committed to engaging with the community on development proposal such as this.

As you may be aware, the request is for Council to use the Province's Community Infrastructure and Housing Accelerator tool. If the tool is used, it can exempt a development from complying with certain policies such as the Provincial Policy Statement and the County Official Plan. Please be aware that Council has not made any decision related to this request. You may have already viewed the the Provinces' guide to a CIHA tool, but if not the link below has information about the process:

https://www.ontario.ca/page/community-infrastructure-and-housing-accelerator

The first step for the Township is to enter into a cost recovery agreement with the proponent. This would enable the Township to recover costs incurred relating to a public information meeting and facilitating an initial review. Normally, this would be covered by the planning application fee, however, no application is submitted through this process.

I can forward your questions along to the proponent and to Council. The questions would also form part of the public record. Please let me know if this is what you had in mind.

Thank you,

From: Michael Collins

Sent: Thursday, January 5, 2023 10:19 AM

To: Courtenay Hoytfox < choytfox@puslinch.ca >
Subject: RE: New Entry - Email the Municipal Clerk

Hi Courtenay,

After reviewing the documents, I currently have the following questions:

- 1. When reviewing the "Due Diligence Land Use Planning Review" document prepared by GHD, on page 16 of 38 of the PDF, Figure 3 indicates the on-site body of water has been deems a provincially significant wetland. Item 6.2 from the same document indicates that the official policy of Wellington County to <u>prohibit development in Provincially Significant Wetland areas</u>. When reviewing the unofficial site plans provided within the Geotechnical Assessment document, both plans show structures over this on-site wetland. Will the Township require the site plan to be modified to accommodate the protection of this wetland?
- 2. When referencing the Electrical and Gas Service Assessment document, it states design and construction of the gas main will need to be done on Forestell road where it meets Sideroad 20. Will any other additional work need to be done at Enbridge's yard on Forestell Road just east of Downey? Expansion of that yard was also completed Summer/Fall of 2022, was this in anticipation of this new service to go in for this new development?
- 3. I assume there is a need for this new development to have fiber internet service provided to the site. Would it be possible to provide infrastructure that could be tied into by Standard Broadband for Puslinch residents that are west of the Hanlon?
- 4. When reviewing the two preliminary site plans, both show driveway access off of Sideroad 20. How many trailer loads are expected to enter and leave the site on a daily basis once the buildings have been constructed? Is truck traffic permitted on any of the roads surrounding the site (i.e. Sideroad 20 or Forestell Road) once the site has been developed? The site plan shows tractor trailers lined up along the sides of the building, and I am concerned regarding the volume of truck traffic that will be increased to a residential area.
- 5. When reviewing the two preliminary site plans, one site plan has a hard finished surface area (asphalt or building footprint) of approximately 152,000 m2, while the other has approximately 160,000 m2 of a hard finished surface. Both site plans have approximately 65,000 m2 of building footprint in which a concrete foundation and concrete slab on grade will be required. Using a high level assumption of 300mm thickness of Granular B, 150mm thickness of Granular A under asphalt areas, and 300mm thick Granular A under 300mm thick Concrete slabs on grade would result in the following:
 - a. 19,500 m3 of concrete, or approximately 2,200 loads of concrete
 - b. 75,000 tonnes of Granular A (3,400 triaxle loads)
 - c. 60,000 tonnes of Granular B (2,600 triaxle loads)

Will truck traffic be permitted along Sideroad 20 or Forestell Road during the construction of this development, or will it be restricted to Concession Road 4? Will any restrictions be imposed during school bus hours to eliminate deliveries during school bus routing hours as two bus routes travel along Forestell Road, Side Road 20, and Concession Road 4?

Thanks,

Michael



Michael Collins

Estimator - Civil Department

www.nacsworld.com
Office: Morriston

North America Construction (1993) Ltd. • NAC Constructors Ltd. • 21 Queen Street • Morriston • ON • • N0B 2C0



This e-mail message may contain privileged or confidential information. If you are not the intended recipient, you may not disclose, use, distribute, or copy this message or attachment in any way. If you receive this message in error, please delete the e-mail and any attachments permanently and also advise the sender of the error via e-mail. Thank you.

From: Courtenay Hoytfox <choytfox@puslinch.ca>

Sent: Tuesday, January 3, 2023 2:31 PM

To: Michael Collins

Subject: RE: New Entry - Email the Municipal Clerk

[CAUTION]: This email originated outside of NAC. Use caution with links/attachments.

Hi Michael, for sure. I would consider these more conceptual plans as no formal application has been submitted at this time. You can absolutely submit written comments that will be included in the file and will form part of the public record. You can also attend the public meeting and ask questions directly of the proponent. You do no need to submit anything in advance of the public meeting in order to participate. More information will be available when the meeting date is scheduled.

Thank you,



Courtenay Hoytfox Municipal Clerk Township of Puslinch 7404 Wellington Rd. 34, Puslinch, ON NOB 2J0

P: 519-763-1226 ext. 227/Fax: 519-763-5846 <u>www.puslinch.ca</u>

From: Michael Collins

Sent: Tuesday, January 3, 2023 2:18 PM

To: Courtenay Hoytfox <<u>choytfox@puslinch.ca</u>> **Subject:** RE: New Entry - Email the Municipal Clerk

Hi Courtenay,

Thanks for taking the time to respond and for providing that link with all of the useful information. After reviewing the document, two possible site plans have been considered and can be seen on pages 42 and 43 of the Geotechnical Report (document #7). I anticipated as much from the line of work that I do and referencing these types of documents.

I've never submitted questions or attended a public meeting before, but do questions for this public meeting that is to be held in February need to be submitted prior to the meeting, or will there be a chance to vocally address any questions/concerns at the meeting?

Thanks,

Michael



Michael Collins

Estimator - Civil Department

www.nacsworld.com
Office: Morriston

North America Construction (1993) Ltd. • NAC Constructors Ltd. • 21 Queen Street • Morriston • ON • • N0B 2C0



This e-mail message may contain privileged or confidential information. If you are not the intended recipient, you may not disclose, use, distribute, or copy this message or attachment in any way. If you receive this message in error, please delete the e-mail and any attachments permanently and also advise the sender of the error via e-mail. Thank you.

From: Courtenay Hoytfox < choytfox@puslinch.ca>

Sent: Tuesday, January 3, 2023 1:24 PM

To: Michael Collins

Subject: RE: New Entry - Email the Municipal Clerk

[CAUTION]: This email originated outside of NAC. Use caution with links/attachments.

Hi Michael, thanks for the email. The link below has the documents that have been submitted to the Township. We do not have a formal site plan drawing at this stage.

https://puslinch.ca/ciha/

Please let me know if you have any other questions. Thank you,



Courtenay Hoytfox Municipal Clerk Township of Puslinch 7404 Wellington Rd. 34, Puslinch, ON NOB 2J0

P: 519-763-1226 ext. 227/Fax: 519-763-5846 www.puslinch.ca

From: Michael Collins < mcollins@nacsworld.com >

Sent: Tuesday, January 3, 2023 10:19 AM

To: Courtenay Hoytfox <<u>choytfox@puslinch.ca</u>> **Subject:** New Entry - Email the Municipal Clerk

Michael C	ollins
Your Ema	ail
Subject	
Subject New Prope	osed Dvelopment on Sideroad 20

Sent from Township of Puslinch

proposed development. If he has, is there any way this can be shared publicly, or at

least viewed at the Township office?

From: Township of Puslinch <services@puslinch.ca>

Sent: Thursday, January 12, 2023 8:04 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name PETER HOFSTRA **Email Phone** Address 6931 Forestell Rd RR6 Guelph, ON N1H 6J3 Comments/Concerns regarding the proposed Estill Innovation Community

We are deeply concerned about the potential Estill Innovation Community. The additional traffic, noise (both during construction and post) and potential reduction of property values are all deep concerns. Further, we do not think a section of land

should be developed, in this manner, without a plan for the future usage of all surrounding lands. We strongly urge the township to NOT permit this development. Thank you for engaging your community.

Peter.

Sent from Township of Puslinch

From: Peter Mitro

Sent: Wednesday, January 25, 2023 3:09 PM

To: James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; rhurst@puslinc.ca; Admin

Cc: Dan Neundorf; Donna Christie; Scott Gillingham **Subject:** Proposed Estill Manufacturing development.

Hello Mayor Seeley and Puslinch councillors:

We have lived on Forestell rd in Puslinch since August of 2000.

We enjoy our beautiful area, friendly and caring neighbours, quiet country roads, and the feeling of living "in the country", even though we are very close to Guelph.

We are vehemently opposed to the proposed Estill/Danby development on Sideroad 20 north, for numerous reasons...

ACESS:

Mr. Estill estimates that there will be approximately 600 people employed in this manufacturing plant... That means approximately 600 vehicles arriving and leaving daily, using Forestell Road, Concession 4 and Sideroad 20, as there are no transit links to this area. This, coupled with the lack of access to Highway 6, the Hanlon expressway, due to the new mid- block overpass being built, means that most vehicles arriving will be using these back roads, including full-size transport trucks, moving goods to and from the site.

Our quiet side roads in this area will be overrun with traffic. Further, these country roads are not designed to handle the amount of traffic this development will bring.

SERVICES:

There are currently very few services serving the proposed plot of land for development. I'm sure that a large, deep well will have to be dug to provide water for this manufacturing plant, and this will no doubt affect all of our local resident's wells. The current Danby plant on Whitelaw Road in Guelph Township has its own water tower, so I would imagine this new development will build one as well, once they establish their own well-water system. Our water supply will be in jeopardy.

LOSS OF VALUABLE FARMLAND:

The current construction of the new midblock interchange on Highway 6 north near Maltby rd is already being challenged by farmers in the area, who have launched legal action against the Government of Ontario for improper use, expropriation, and take-over of farmlands located on Concession 7 and County rd 34. The Estill sight is another example of perfect farmland being taken over for industrial development. Perhaps Mr Estill could look for suitable serviced industrial land in the Aberoyle industrial area, or in the City of Guelph, rather than developing valuable prime agricultural land situated in a quiet residential/agricultural area.

We will be attending any and all upcoming public information sessions to voice our unwavering opposition to this proposal.

Thank you

The Mitro's 6987 Forestell rd RR 6 Guelph

Sent from my iPhone

Sent from my iPhone

From: John Sepulis < jsepulis@puslinch.ca>
Sent: Sunday, January 15, 2023 2:39 PM

To: Glenn Schwendinger < gschwendinger@puslinch.ca>

Cc: Courtenay Hoytfox <choytfox@puslinch.ca> **Subject:** Fwd: Estill Industrial Development

Good afternoon Glenn,

Would you please add this correspondence to the file so that it can be part of the public record on this matter.

Thanks, John

John Sepulis Councillor Township of Puslinch

Begin forwarded message:

From: sandra pady

Date: January 15, 2023 at 2:27:27 PM EST
To: John Sepulis < jsepulis@puslinch.ca >
Subject: Fwd: Estill Industrial Development

Dear Councillor Sepulis:

This is a declaration of my strong opposition to the application that has been made by the so-called "Estill Innovation Community" to build an industrial complex on 60 acres of land, bordered by Puslinch Conc. 4, Sideroad 20 and Hwy 6 in Puslinch Township.

Puslinch Township, where I have lived for 34 years, is an agricultural/rural haven. Yes, we tolerate gravel pits and, yes, we confine the movement of the heavy trucks to county roads that have been constructed to handle such transportation machines. On the other hand, Concession 4 and Sideroad 20 exist for agricultural/residential use. We do not have heavy trucks of any kind rolling down these roads because the roads have not been engineered for those purposes and, as well, such traffic would be extremely dangerous for residents as they walk in their community. Other factors to consider are the negative impacts of industrial noise and lighting that would be generated.

As you are well aware, our neighbourhood abuts a large industrial park on the northern border of the Township. It was 25 years ago that the land for this industrial area was expropriated from Puslinch Township by the City of Guelph. There is still plenty of land in that industrial park for development. And that is where it belongs.

For many years, Puslinch Township has been besieiged by corpoate applications to develop our precious agriculatual/residential lands. Mr. Estill's application is just one more attempt to make us compromise our quality of life for his corporate gains. The granting of this application would open the door tounceasing calls for development in Puslinch.

There is plenty of land in the City of Guelph industrial areas for developments like this "innovation community". I urge you to reject this application.

Sincerely, Sandra Pady

--

Sandra Pady 6985 Concession 4 Puslinch ON N0B2J0

--

Sandra Pady 6985 Concession 4 Puslinch ON N0B2J0 From: Scott Gillingham

Sent: Monday, January 16, 2023 2:54 PM

To: Admin; James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst

Cc:

Subject: Estill Innovation Community proposal

Dear Puslinch Township, Mayor Seeley and councillors;

My wife and I moved to 6981 Forestell Road in 1988, two years after graduating from the Ontario Veterinary College. We have enjoyed close to 35 years of country living despite the endeavours of the Hanlon business Park to upset our daily life style. We succeeded in having the city of Guelph properly define their intent, a committee of concerned Puslinch tax payers instrumental in the new directions.

Now we have this proposal to contend with. I was led to believe that Puslinch would not accept manufacturing and warehousing as their purpose for tax revenue? Am I wrong? Puslinch has been known for lifestyle, exemplifying environmental and sustainability elements for balance and prosperity. I am not against growth, I endorse such but truly is this the direction our township wants to take? Country roads will be inundated with traffic, peaceful country walks and cycling will be hindered and at risk.

As a veterinarian consultant in poultry for close to 40 years I understand sustainability. Can this proposed 60 acre industrial development be defined as sustainable? There are wetlands at risk, traffic issues will grow in concerns, noise and light pollution to be redefined, water and sewage concerns for our community and surrounding areas...

The **infrastructure** is **not** there for the needed water, sewage, gas, etc for the development. East of the Hanlon has the infrastructure. Hanlon business park has the infrastructure.

Please, I urge you and the council to consider this proposal as a negative for our community. Growth for our township will be housing, green space, innovative agriculture and an environment for the future in health and prosperity. Please do not do this to us, it will affect all in the area and a blemish to our township. I will be at the meeting in February and I urge your office to inform us of the date and time to be present.

Thanking you in advance

Scott and Amy Gillingham 6981 Forestell road Guelph, Ontario From: Sharon Smith

Sent: Saturday, January 14, 2023 2:45 PM

To: James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin

Subject: Objection to Proposed Estill Innovation Community Development

Hello,

We are writing to strongly object to the proposed Estill Innovation Community development at 4631 Sideroad 20 N.

We have resided at 7011 Concession 4 (at the Southwest corner of Sideroad 20 and Concession 4) for over 40 years. Our property includes a house on 6 acres and a managed forest of 14 acres.

Our objections and comments are as follows:

1. The heavy volume of traffic that this development will cause on Conc. 4, Sideroad 20 and Forestell Rd. This will add employee and business vehicles including a substantial volume of cars, trucks etc.

Conc. 4 is one of the busier roads in the township, with traffic going to and from the landfill located a short distance away, drivers taking shortcuts etc. Visibility is poor due to the gently rolling hills on this stretch of road, making it extremely dangerous for people enjoying a walk, bicycling, or entering/exiting driveways, and increasing the chance of accidents.

- 2. The impact that the noise associated with construction and operation of the proposed project, as well as traffic in the future, will have on the wildlife inhabiting our managed forest (deer, foxes, owls, etc.)
- 3. All of the properties nearby draw their drinking and other household water from wells. We are concerned about water issues the effects of the wells that will have to be dug for the proposed facility on the surrounding water supply.
- 4. Light and traffic pollution.
- 5. The adverse effects on the value of nearby residential properties.
- 6. For over 40 years, we have enjoyed the quality of life in this peaceful residential area. The new development would negatively affect the quality of life for all nearby residents, despite the developer's pledge to create a community park in the development and his comments about there being no heavy trucks, which we doubt.

We are sure that there are more suitable properties nearby to accommodate industrial developments which would also be more accessible by nearby highways and not interfere with residential areas and roads.

For the reasons above, we request that the township decline this proposal.

Thank you for considering our concerns in this matter.

Jim and Sharon Smith

7011 Conc. 4, Puslinch

From: John Sepulis < jsepulis@puslinch.ca> Sent: Thursday, January 12, 2023 4:57 AM

To: Glenn Schwendinger < gschwendinger@puslinch.ca>

Cc: Courtenay Hoytfox <choytfox@puslinch.ca>

Subject: Fwd: Sideroad 20 North

Good morning Glenn, Please add this to the project file. Thanks, John

Sent from my iPhone

Begin forwarded message:

From: TODD COLLEY

Date: January 11, 2023 at 6:16:35 PM EST

To: James Seeley < <u>iseeley@puslinch.ca</u>>, Jessica Goyda < <u>igoyda@puslinch.ca</u>>, John Sepulis

<jsepulis@puslinch.ca>, Sara Bailey <sbailey@puslinch.ca>, Russel Hurst

<<u>rhurst@puslinch.ca</u>>

Cc: Mari-Lou Colley

Subject: Sideroad 20 North Reply-To: TODD COLLEY

Good afternoon.

As a resident of Sideroad 20 North for almost 30 years I watched with interest the presentation from Mr. Jim Estill for the development of 4631 Sideroad 20 North and council's initial responses.

Thank you for recognizing that Sideroad 20 North is a residential neighborhood and that the road itself is not designed for use by heavy vehicles. The road is used by almost all residents not only for access to their properties but also for recreational uses such as going for bike rides, walking, running and exercising their dogs. The road has also become a very popular location for other local cyclists because of the low traffic and rolling hills. There are also several school age children living on the road and as a result is a school bus route.

While the shoulder of the road is wide enough for one person to move over to allow personal vehicles and the occasional heavier farm vehicle or truck providing services to the residents, it is not wide enough for residents to safely walk the shoulder with multiple transport trucks passing in both directions. There are also a number of blind spots due to the hills. Personal passenger vehicles are narrow enough to safely slow down and move over enough to allow walkers and riders room while going up one of these hills but this would not be possible for a transport truck without crossing the centre line let alone trucks travelling in both directions.

I also don't believe the road was constructed with the regular use of heavier vehicles in mind leading to increased wear and tear and the resulting higher maintenance costs. The increased noise of additional heavy vehicles travelling the road day and night in this quiet community is also of real concern. Mr. Estill made a comment about gravel trucks currently running on our roads. I'm not sure what he was referring to. Is he thinking of Laird Rd?

The intersection at Sideroad 20 N and #34 would also be problematic for increased volume of larger vehicles. Turning onto #34 from Sideroad 20 N in either direction can already be difficult due to the number of vehicles travelling along #34. Vision is also impeded in either direction on #34 due to a small hill to the east and a larger but more distant hill to the west. Without the addition of a light or roundabout vehicles would have a hard time proceeding onto #34 without vehicles coming upon them quickly. There are also changes happening at Highway #6 and #34 that will add increased traffic entering onto #34 from a new access ramp/road halfway between #6 and Sideroad 20 N leaving even less time for larger trucks to either slow down and exit #34 from the east onto Sideroad 20 N or to enter onto #34 from Sideroad 20 N. Again, a traffic light, roundabout or turning lane would need to be added from the east and west on #34 to safely access Sideroad 20 N. It was suggested in Mr. Estill's presentation that direct access to Highway 6 from the land he is hoping to purchase may be an option but I have a hard time understanding how that would work for access to or departure from the property in all directions. Even if turning lanes were added to Highway #6 entering the property from the North and departing to the South it seems that all traffic coming from the South and Heading to the North would need to travel along Sideroad #20 N. It may be possible for traffic heading north to first go south on #6 to the future overpass and then circle around to the North but I'm still not sure how vehicles heading to the property from the South get access without using Sideroad 20 N. I think all the same concerns would apply for vehicles turning to head west from Sideroad 20 N onto the 4th Concession or Forestell Road. If any of this was even feasible, Sideroad #20 N would need to be widened, the hills would need to be reduced, proper drainage and sidewalks would need to be added and I'm sure a qualified engineer would come up with many more requirements.

When my family moved to Sideroad 20 N we realized that its position between Guelph and the 401 and its proximity to Highway 6 would eventually lead to growth in the neighborhood and that is what has happened. There are already many more homes on the road than when we moved here and we expect that to continue. What we didn't expect was that the current access to Highway 6 from the 4th concession would be shut down and our country road would become a service road for commercial businesses and their heavy vehicles. If by some stretch of the imagination it was decided that this was the future of Sideroad 20 N shouldn't the planning and improvements be done prior to allowing increased traffic and heavy trucks for the safety of all?

Mr. Estill seems to be in a bit of a hurry and was trying to use scare tactics that if council didn't approve his development he could lose the option for the property and would just have to take his business elsewhere. Your responses clearly showed that you were not falling prey to that tactic. I'm not a developer but it seems to me that unless the current property owner has another more suitable purchaser for the property they will continue to extend the timeline as many times as necessary for all parties to come to a mutually agreeable solution. Mr. Estill's timeline should not be driving such a major decision especially when he has already said that if he can't get approval he has other options.

Thank you for giving consideration to our concerns.

Regards,

Todd & Mari-Lou Colley 4522 Sideroad 20 North R.R. #6 Puslinch Ontario N1H 6J3

Proposed Estill Innovation Community @ 4631 Sideroad 20N

60 Acre Industrial Development with Manufacturing and Warehousing

IN YOUR NEIGHBOURHOOD

SAY NO!



600+ Employees – Traffic Issues | Property Values

Quality of Life: Noise, Pollution, Water Issues, Lights ...

Mr. Estill says: "but there will be some people who will object, there will always be Nimbyism but if you are going to grow, you are going to have to do this somewhere"

Mr. Estill says: "the trucks that will be running are not as heavy as the gravel trucks running on those roads" (Residents – do you see a lot of gravel trucks running on our roads?).

Why put this in an established RESIDENTIAL area? We say No!

Have your say (3 Ways):

- 1. Email: (Dan Neundorf 4632 Sideroad 20N) with:
- your <u>name and address</u> so that I can add your name to keep you informed
- with interest in a **Zoom Meeting** on January 25th at 7:00 pm for residents to discuss more?
- 2. Give your feedback on the Puslinch Township website: https://puslinch.ca/CIHA/
- 3. Please plan to attend the February Council Meeting to show support the more residents the better (Date TBD)

Want to contact individual councillors with your thoughts (Please do)?

- Mayor Seeley: jseeley@puslinch.ca
- Jessica Goyda: jgoyda@puslinch.ca
- John Sepulis: jsepulis@puslinch.ca
- Sara Bailey: sbailey@puslinch.ca
- Russell Hurst: rhurst@puslinch.ca
- Staff: admin@puslinch.ca

Let's stop this from happening!

From: Township of Puslinch <services@puslinch.ca>

Sent: Tuesday, February 07, 2023 7:58 AM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name

Andrew Dawe

Email

Address

4000 concession road 4 Puslinch, ON N0B 2J0

Comments/Concerns regarding the proposed Estill Innovation Community

This is a beautiful small community and this is not a spot to put industry please preserve the beautiful country and farmland

Sent from Township of Puslinch

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>
Sent: Thursday, February 02, 2023 10:51 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up Flag Status: Flagged

Name

Angie & Mike Mason

Email

Phone

Address

4662 Sideroad 20N Guelph, ON N1H 6J3

Comments/Concerns regarding the proposed Estill Innovation Community

We are Angie and Mike Mason, the owners and residents of 4662 Sideroad 20N in Puslinch, Ontario. We reside on a beautiful 1-acre residential/agricultural property located on the south side of Sideroad 20N in one of the most desirable neighbourhoods in southern Ontario. We also happen to be situated directly across the road from the proposed Estill development at 4631 Sideroad 20N. We strongly oppose the proposed development and zoning change to industrial.

When we first received the Township's "Notice of Intent for Community Feedback" (dated December 21, 2022) with references to the "Community Infrastructure and Housing Accelerator (CIHA)" and "More Homes for Everyone Act", we assumed that the proposed development would be adding additional housing to our neighbourhood. It was not until we began speaking with our neighbours that we realized the proposed development was going to be a 60-acre industrial complex with 600+ employees, significant truck traffic and 24-hour operations. It is hard to understand how this development fits into "More Homes for Everyone."

Zoning and Land Use

The local area along both sides of Sideroad 20N, along the south side of Forestell Road and along Concession 4 is all zoned agricultural and consists of farmed agricultural properties and rural residences. The proposed development property, located at 4631 Sideroad 20N, has also been agricultural and actively farmed with crops for decades. Several lot severances along Sideroad 20N, Forestell Road and Concession 4 were recently approved for residential development and various new single family dwellings have been recently constructed along these roads in close proximity to the proposed Estill development.

While we understand the need for additional housing and development of lands within the Township, we strongly believe that such development must conform to the Official Plans as detailed by Wellington County and established zoning areas, with appropriate buffers between industrial lands and sensitive residential properties.

The only nearby industrial/commercial development is located outside of the borders of Puslinch Township, within the City of Guelph on the north side of Forestell Road, as well as east of Hanlon Parkway. These nearby industrial/commercial properties are connected municipal water and wastewater servicing and roads were designed to be absent of direct access to the Forestell Road / Sideroad 20N neighbourhood. The development north of Forestell Road was also heavily scrutinized by this community and design plans were altered based on the recommendations of local residents along Forestell Road and Sideroad 20N.

Impacts to Groundwater Supply Wells

It is difficult to compare the proposed Estill development with other nearby industrial/commercial properties within the borders of the City of Guelph due to several issues, one of the most important being water and wastewater servicing. All local residents along Sideroad 20N, Concession 4 and Forestell Road are privately serviced by individual wells and septic systems. Existing nearby industrial/commercial developments within the City have negligible impacts to nearby private wells due to the absence of groundwater takings and discharge of effluent to the environment. The proposed Estill development plans to install supply well(s) to produce an estimated 140,000 L/day, requiring a Permit to Take Water from the Ministry of the Environment, Conservation and Parks (MECP). A comprehensive hydrogeological study, pumping test and monitoring program have not been completed determine potential impacts of the proposed taking on nearby private well users. Some residents in the area have already reported water supply shortages, which could be exacerbated by drawdown at the Estill development. We also note that the proposed 140,000 L/day was based on an 8-hour day, while the proposed development is being considered for 24-hour operations, meaning that significantly more water takings could occur than proposed.

Let's also consider where this water is going once it is taken. The proposed development would need a large scale subsurface sewage disposal system to deal with their 140,000 L (or more) per day of sewage effluent. An Environmental Compliance Approval and supporting studies would be required in order to

demonstrate that sewage from the development would not negatively impact nearby private well users or surface water features.

In addition, the Estill site is located within a Wellhead Protection Area (WHPA) D with a vulnerability score of 2. It is also important to consider the current Southwest Quadrant Water Supply Class Environmental Assessment as part of the City of Guelph Water Supply Master Plan, which includes a new test well installed on the north side of Forestell Road. The current study was initiated in 2021 and will take approximately 5 years. The WHPA from the new test production well along Forestell Road will likely place the Estill property within a WHPA-B with a vulnerability score of 6 to 8.

Noise and Light Pollution

We have significant concerns about the proposed Estill development negatively impacting the use and enjoyment of our property. We have already had problems with noise impacts from the Medline property located about 300 m east of our house, across the Hanlon. We experienced persistent noise and vibrations within our house, which we spent months trying to source, eventually to determine the noise was coming from Medline and their refrigeration trucks. It only took a single truck running a refrigeration unit to cause noise and vibrations within our home, which occurred intermittently at all hours of the day. We have issued complaints with the MECP in order to deal with these issues. The proposed Estill development will be directly across the street from us. If we are already having problems with noise from a building 300 m away, just think of how noisy it will be with one right in our front yard.

Light pollution is also a concern. Mike's parents (Christine & Gary Mason) live next door to us at 4668 Sideroad 20N (they also strongly oppose the Estill development) and have had issues with lights from warehouse buildings east of the Hanlon shining glare into the windows of their house as well as over their agricultural lands, potentially impacting their livestock (sheep and horses).

Property Values

It is likely that our property values have already started to fall as a result of this proposal itself. What if you found your dream property, and then discovered that a massive industrial facility was going to be built across the street? Most people would start to have second thoughts and see what else is on the market. This will directly impact property values. Is Estill going to compensate all of us for this financial loss? This development will have a negative impact on our potential resale value.

Traffic

From review of Estill's reply to the township's questions and the proposal that was presented at the council meeting on January 25, 2023, it seems clear that the volume of traffic will increase significantly. Estill estimated that there could potentially be over 40 heavy to light vehicles running along Concession 4 and Sideroad 20 N at all hours of the day. This would be exacerbated by potentially 600 employees coming into the area. The current infrastructure cannot accommodate this capacity. Even if the Estill development were to be able to maintain access to the Hanlon off of Concession 4

there would be a significant impact. Promises to control truck drivers commuting on Sideroad 20 N and Forestell through load restrictions, strict policies and procedures that carry little weight. Even now heavy trucks occasionally make their way down this route.

Property Enjoyment

We originally bought this property due to its proximity outside the city limits, its size, space and privacy. The proposed development will clearly have an impact on all of these factors. The noise, light pollution and increased traffic will greatly impact our enjoyment of our property.

Safety and Security

With 600+ employees and constant truck traffic, we can say goodbye to our safe little community where people run, bike and walk with their families and dogs along the small, quiet sideroads. With poor sightlines and no pedestrian sidewalks, the roads will become unsafe for pedestrian use with the extra traffic. School bus stops could become hazardous. Incidents of break-ins, theft and vandalism will increase. Littering (which is cleaned up annually by residents on a volunteer basis) will increase.

Closure

We have spent significant time reviewing and researching the development proposal to prepare this letter. Thank you for taking the time to review our comments and concerns.

We hope that the Township will support the residents and taxpayers of this community by rejecting this proposal and zoning change to industrial. We strongly encourage the Township to develop a Secondary Plan (or equivalent) prior to considering individual site plan approvals to promote mindful and sustainable development of these lands. We want the Township to do the right thing, which involves careful planning, impact studies and consultation with the community and First Nations groups prior to development approvals.

Sent from Township of Puslinch

Township of Puslinch <services@puslinch.ca> From: Sent:

Sunday, February 05, 2023 4:22 PM

Planning

To:

New Entry: Comments regarding proposed Estill Innovation Community **Subject:**

Name Carolyn Anthony **Email** Phone Address 6960 Concession 4 Puslinch, ON N0B 2J0 Comments/Concerns regarding the proposed Estill Innovation Community This development causes great concern. Myself and my family strongly disagree with the proposed development.

1

Many concerns from use of ground water and sustainability, noise and air pollution,

grea lands impacted, decrease of property value.

I am also gravely concerned over the increase of traffic that this type of rezoning will bring and the safety of my young family. Recreational use of the road for walking or bikeriding will be eliminated, the shoulder along many of the stretches are already minimal or non existing where wetlands come close to the road. Aside from what you can deem as lifestyle impacts, Our roads have gently rolling hills and with a young son that will be picked up and dropped off by school bus twice a day, the increase in volume of cars is alarming. From the information gathered 600 employees and 30 trucks a day translates to potential of 1260 additional cars and large trucks passing my home daily.

I am at a loss for what this development brings to my neighborhood and community, with no positive contributions and severely negatively affecting all those around It.

Sincerely

Carolyn Anthony & family

Sent from Township of Puslinch

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>

Sent: Thursday, February 02, 2023 7:31 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up Flag Status: Flagged

Name

Catherine Gardner

Email

Phone

Address

6899 Forestell Rd. Guelph, ON N1H6J3

Comments/Concerns regarding the proposed Estill Innovation Community

I do not support this project and had written an email directly to the mayor stating my reasons. I've pasted it below to ensure it's included.

Dear Mayor Seeley,

I am writing to express my complete opposition to the proposed industrial development of the land on Sideroad 20 in Puslinch.

I see no sense in the proposal in terms of road access and inserting an industrial complex in a residential neighbourhood and farming community. The placement of this development is counter to the make-up of the land and its residents. I also find that the response of nimbyism from Mr. Estill is misleading and beside the point. If it were the case where this was the last parcel of land on which to develop, the story may be different. However, knowing that there are more feasible lots already earmarked for

commercial/industrial use brings me to question to what degree other options are under review, both by council and the developers.

In consideration of the wishes of its residents, council should block this development on land that is not only important to its agriculture community, but represents a sensitive ecological buffer within the Grand River watershed.

Sent from $\underline{\text{Township of Puslinch}}$

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>
Sent: Thursday, February 02, 2023 7:35 PM
To: Planning
Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up
Flag Status: Flagged

Name Colin Gardner

Email

Phone

Address

6899 Forestell Rd. Guelph, ON N1H6J3

Comments/Concerns regarding the proposed Estill Innovation Community

I oppose this project, as it does not represent the wishes of the community and ignores more feasible parcels of land for development.

Sent from Township of Puslinch

February 2, 2023

Via: Email [Mayor Seeley (jseeley@puslinch.ca), Jessica Goyda (jgoyda@puslinch.ca), John Sepulis (jsepulis@puslinch.ca), Sara Bailey (sbailey@puslinch.ca), Russel Hurst (rhurst@puslinch.ca), staff (admin@puslinch.ca)]

Mayor Seeley, Councillors and Staff Township of Puslinch 7404 Wellington Road 34 Puslinch, Ontario N0B 2J0

Dear Mayor Seeley, Councillors and Staff:

Re: Proposed Estill Innovation Community 4631 Sideroad 20N, Puslinch, Ontario

We are Angie and Mike Mason, the owners and residents of 4662 Sideroad 20N in Puslinch, Ontario. We reside on a beautiful 1-acre residential/agricultural property located on the south side of Sideroad 20N in one of the most desirable neighbourhoods in southern Ontario. We also happen to be situated directly across the road from the proposed Estill development at 4631 Sideroad 20N. We strongly oppose the proposed development and zoning change to industrial.

When we first received the Township's "Notice of Intent for Community Feedback" (dated December 21, 2022) with references to the "Community Infrastructure and Housing Accelerator (CIHA)" and "More Homes for Everyone Act", we assumed that the proposed development would be adding additional housing to our neighbourhood. It was not until we began speaking with our neighbours that we realized the proposed development was going to be a 60-acre industrial complex with 600+ employees, significant truck traffic and 24-hour operations. It is hard to understand how this development fits into "More Homes for Everyone."

Zoning and Land Use

The local area along both sides of Sideroad 20N, along the south side of Forestell Road and along Concession 4 is all zoned agricultural and consists of farmed agricultural properties and rural residences. The proposed development property, located at 4631 Sideroad 20N, has also been agricultural and actively farmed with crops for decades. Several lot severances along Sideroad 20N, Forestell Road and Concession 4 were recently approved for residential development and various new single family dwellings have been recently constructed along these roads in close proximity to the proposed Estill development.

While we understand the need for additional housing and development of lands within the Township, we strongly believe that such development must conform to the Official Plans as detailed by Wellington County and established zoning areas, with appropriate buffers between industrial lands and sensitive residential properties.

The only nearby industrial/commercial development is located outside of the borders of Puslinch Township, within the City of Guelph on the north side of Forestell Road, as well as east of Hanlon Parkway. These nearby industrial/commercial properties are connected municipal water and wastewater servicing and roads were designed to be absent of direct access to the Forestell Road / Sideroad 20N neighbourhood. The development north of Forestell Road was also heavily scrutinized by this community and design plans were altered based on the recommendations of local residents along Forestell Road and Sideroad 20N.

Impacts to Groundwater Supply Wells

It is difficult to compare the proposed Estill development with other nearby industrial/commercial properties within the borders of the City of Guelph due to several issues, one of the most important being water and wastewater servicing. All local residents along Sideroad 20N, Concession 4 and Forestell Road are privately serviced by individual wells and septic systems. Existing nearby industrial/commercial developments within the City have negligible impacts to nearby private wells due to the absence of groundwater takings and discharge of effluent to the environment. The proposed Estill development plans to install supply well(s) to produce an estimated 140,000 L/day, requiring a Permit to Take Water from the Ministry of the Environment, Conservation and Parks (MECP). A comprehensive hydrogeological study, pumping test and monitoring program have not been completed determine potential impacts of the proposed taking on nearby private well users. Some residents in the area have already reported water supply shortages, which could be exacerbated by drawdown at the Estill development. We also note that the proposed 140,000 L/day was based on an 8-hour day, while the proposed development is being considered for 24-hour operations, meaning that significantly more water takings could occur than proposed.

Let's also consider where this water is going once it is taken. The proposed development would need a large scale subsurface sewage disposal system to deal with their 140,000 L (or more) per day of sewage effluent. An Environmental Compliance Approval and supporting studies would be required in order to demonstrate that sewage from the development would not negatively impact nearby private well users or surface water features.

In addition, the Estill site is located within a Wellhead Protection Area (WHPA) D with a vulnerability score of 2. It is also important to consider the current Southwest Quadrant Water Supply Class Environmental Assessment as part of the City of Guelph Water Supply Master Plan, which includes a new test well installed on the north side of Forestell Road. The current study was initiated in 2021 and will take approximately 5 years. The WHPA from the new test production well along Forestell Road will likely place the Estill property within a WHPA-B with a vulnerability score of 6 to 8.

Noise and Light Pollution

We have significant concerns about the proposed Estill development negatively impacting the use and enjoyment of our property. We have already had problems with noise impacts from the Medline property located about 300 m east of our house, across the Hanlon. We experienced persistent noise and vibrations within our house, which we spent months trying to source, eventually to determine the noise was coming from Medline and their refrigeration trucks. It only took a single truck running a refrigeration unit to cause noise and vibrations within our home, which occurred intermittently at all hours of the day. We have issued complaints with the MECP in order to deal with these issues. The proposed Estill development will be directly across the

street from us. If we are already having problems with noise from a building 300 m away, just think of how noisy it will be with one right in our front yard.

Light pollution is also a concern. Mike's parents (Christine & Gary Mason) live next door to us at 4668 Sideroad 20N (they also strongly oppose the Estill development) and have had issues with lights from warehouse buildings east of the Hanlon shining glare into the windows of their house as well as over their agricultural lands, potentially impacting their livestock (sheep and horses).

Property Values

It is likely that our property values have already started to fall as a result of this proposal itself. What if you found your dream property, and then discovered that a massive industrial facility was going to be built across the street? Most people would start to have second thoughts and see what else is on the market. This will directly impact property values. Is Estill going to compensate all of us for this financial loss? This development will have a negative impact on our potential resale value.

Traffic

From review of Estill's reply to the township's questions and the proposal that was presented at the council meeting on January 25, 2023, it seems clear that the volume of traffic will increase significantly. Estill estimated that there could potentially be over 40 heavy to light vehicles running along Concession 4 and Sideroad 20 N at all hours of the day. This would be exacerbated by potentially 600 employees coming into the area. The current infrastructure cannot accommodate this capacity. Even if the Estill development were to be able to maintain access to the Hanlon off of Concession 4 there would be a significant impact. Promises to control truck drivers commuting on Sideroad 20 N and Forestell through load restrictions, strict policies and procedures that carry little weight. Even now heavy trucks occasionally make their way down this route.

Property Enjoyment

We originally bought this property due to its proximity outside the city limits, its size, space and privacy. The proposed development will clearly have an impact on all of these factors. The noise, light pollution and increased traffic will greatly impact our enjoyment of our property.

Safety and Security

With 600+ employees and constant truck traffic, we can say goodbye to our safe little community where people run, bike and walk with their families and dogs along the small, quiet sideroads. With poor sightlines and no pedestrian sidewalks, the roads will become unsafe for pedestrian use with the extra traffic. School bus stops could become hazardous. Incidents of break-ins, theft and vandalism will increase. Littering (which is cleaned up annually by residents on a volunteer basis) will increase.

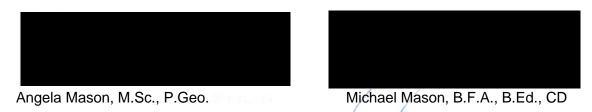
Closure

We have spent significant time reviewing and researching the development proposal to prepare this letter. Thank you for taking the time to review our comments and concerns.

We hope that the Township will support the residents and taxpayers of this community by rejecting this proposal and zoning change to industrial. We strongly encourage the Township to develop a Secondary Plan (or equivalent) prior to considering individual site plan approvals to promote mindful and sustainable development of these lands. We want the Township to do the right thing, which involves careful planning, impact studies and consultation with the community and First Nations groups prior to development approvals.

Yours truly,

The Owners of 4662 Sideroad 20N



cc: Dan Neundorf, Gary & Christine Mason, Jim & Donna Christie

230202_ltr_Puslinch_4631Sdrd20N Development.docx 02/02/2023 10:11 PM

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>

Sent: Friday, February 03, 2023 3:21 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name

Elaine Weber

Email

Phone

Address

4646 Sideroad 20 North Guelph, ON N1H 6J3

Comments/Concerns regarding the proposed Estill Innovation Community

Loss of this agricultural land will have a detrimental effect on our commercial poultry farm .One of the significant impacts of the loss of this land will be the necessity of transporting animal bi-product a greater distance, resulting in inefficiency and the creation of increased green house gas.

Concerns about the water quality and continued availability are also a concern for our poultry as well as for our household use.

The volume and type of traffic will not only create noise but result in unsafe driving conditions due to the rolling nature of Sideroad 20 and the many "hidden driveways"

The potential impact of property value devaluation is also a concern, as is how this type of development will affect the reasonable enjoyment of our property and affect our quality of life.

Sent from Township of Puslinch

Justine Brotherston

From:

Sent: Friday, February 03, 2023 2:24 PM

To: James Seeley; Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin

Subject: Proposed Estill Innovation Community @4631 Sideroad 20N

Follow Up Flag: Follow up Flag Status: Flagged

Proposed Estill Innovation Community @4631 Sideroad 20N

I am opposed to the proposed Estill Innovation Community Development at 4631 Sideroad 20 North, Puslinch for the following reasons:

- Sideroad 20 N and Concession 4 aren't suitable to accommodate the traffic generated by the proposed 600 employee facility and the associated truck traffic. Both of these roads are quiet residential roads, on which people walk with their families, cycle, walk their dogs etc. These roads are hilly with limited site lines, they run through environmentally sensitive wets lands and a variety of wildlife cross these roads daily including deer, coyotes and turtles. Both of these roads have changed little since the 1840s when Puslinch was settled. They are lined with old sugar maples, cherry trees, white cedar, spruce, pine etc. These are historically significant roads in Puslinch and are part of our communities heritage.
- Sideroad 20 and Concession 4 have half load restrictions in March and April. How does Mr. Estill propose to get truck traffic to this development during these months?
- This proposed development will increase traffic significantly on Concession 4 and Sideroad 20 and this will only get worse once Concession 4 is closed at the Hanlon Expressway as part of the highway 6 redevelopment.
- This proposed development will impact the residents in the area with light, noise and air pollution and the possible decline in property values.
- This is a residential area not an industrial area.
- Isn't there restrictions on development close to functioning livestock production areas? I believe there is a functioning farm boarding the west side of this proposed development.
- Who is responsible for paying for the infrastructure to service this proposed development ie water, sewers, gas, roads etc?
- The More Homes for Everyone Act, 2022 is misleading. This proposal has nothing to do with affordable housing.
- How does this proposal align with the proposed County of Wellington Official Plan Amendment (OPA) No.120? Shouldn't the (OPA) be approved first before even considering the proposed development at 4631 Sideroad 20 north?
- I makes no sense to pave over viable agricultural land. This land could be used to produce food for the marginalized members of our community.

Recommendations:

This development isn't congruent with the residential communities on Sideroad 20 and Concession 4. The developer should pursue other options, which might include purchasing land zoned for industrial purposes in the City of Guelph. This serviced development land is directly east of the proposed 4631 Sideroad 20 development, bordered by the Hanlon Expressway on the west, Maltby Road on the south and Gordon Street on the east. It will have the roads to support this proposed development and direct access to the 401 via the new interchange on the Hanlon Expressway , just south of Maltby Road.

Emil P

Gary & Christine Mason 4668 Side road 20N RR6, Guelph, Ont. N1H6J3

January 5, 2023

Courteny Hoytfox, Municipal Clerk Township Of Puslinch

Re: Proposed Estill Innovation Community ($60 \, \text{Acre Industrial Development}$) @ $4631 \, \text{Side road}$ 20N

We are the property owners of the twenty acre parcel of land on the corner of Puslinch side road 20N and Forestell Road. We have lived here for 26 years. Our property is zoned Agricultural and is actively farmed. Our comments and concerns regarding the above noted proposal are as follows;

- How will this affect the value of our property? Should we have a property
 assessment prior to this development, if it moves forward, and will we be
 compensated if the property value decreases?
- What impact will this development have on the water level and quality in our well?
 What measures will be taken if problems arise? The installation of storm and sanitary sewers, commercial septic and well systems will lower and possibly contaminate the water table.
- How will this affect our livestock? Light pollution, noise pollution, etc. Complaints regarding smells from our animals. Isn't there a restriction for commercial development within so many meters of a barn.
- Side road 20 hasn't been constructed for heavy traffic both volume and weight.
 When the MTO closes the access from Concession Road 4 to Hwy 6 where will the commercial traffic travel? MTO intends to start construction in 2023.
- · What will the buildings look like? Do they have any preliminary sketches?
- How does this development fit into the "More Homes for Everyone Act" maybe the property should be residential.

At this time we both appose this development. Since we wont be able to attend the meeting we are delegating our son Michael Mason as our representative.

Hopefully the above questions can be answered and will be addressed. Further comments and concerns will probably crop up as we receive more detailed information.

Thank you for giving us the opportunity to comment on this proposal.

Gary & Christine Mason Land owners

Courtenay Hoytfox

From: John Sepulis

Sent: Saturday, February 4, 2023 9:19 AM

To: Glenn Schwendinger
Cc: Courtenay Hoytfox

Subject: FW: Proposed Estill Innovation development

From: Greg Bowles

Sent: Friday, February 03, 2023 5:23 PM
To: John Sepulis < jsepulis@puslinch.ca>

Subject: Proposed Estill Innovation development

February 03 2023

Re: Estill innovation centre proposal sideroad 20 and concession 4.

I have lived at 6968 concession 4 since 1973.

I am writing to express my disapproval of a proposed development at the corner of SR20 and conc. 4.

There are properties such as those near aberfoyle and 401 that are currently zoned industrial.

I fail to see the need to rezone agricultural/residential land to accommodate this project when suitabley zoned land already exists in the township.

The traffic on concession 4 will grow enormously with 600 employees.

Please reconsider this application.

Sincerely

Greg Bowles 6968 Concession 4 Puslinch Ont. N0B2J0

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>
Sent: Friday, February 03, 2023 9:11 AM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up Flag Status: Flagged

Name

Gregory Crawley

Email

Phone

Address

6890 Concession 4 Puslinch, ON N0B2J0

Comments/Concerns regarding the proposed Estill Innovation Community

The designated industrial land in the area should be used. This proposed development would negatively impact the residential and farming community.

Sent from Township of Puslinch

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>

Sent: Thursday, February 02, 2023 8:11 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up Flag Status: Flagged

Name

Hillary Wilsom

Email

Phone

Address

4494 sideroad 20 north Puslinch , ON N1h6j3

Comments/Concerns regarding the proposed Estill Innovation Community Hello,

I wanted to voice my concerns regarding the proposed development of the Estill Innovative Community. During the initial proposal to council, Mr.Estill indicated that there was a potential for 600 employees at this location. I walk/run and bike with my two young children along sideroad 20 north a couple of time a week. When we do pass a vehicle, it's typically a neighbour, who will often stop to chat or wave on their way home or to work/ to run errands/ pick up kids from school. If this proposal was to more forward, the significant increase in traffic on this road would effectively stop our recreational use of the road as it would be far too dangerous for the children to go on the road. As mentioned, most people using the road, live on the road and are cognizant of neighbours walking dogs and children riding their bikes on the road. With

600 added vehicles driven by people just trying to get home, there is a lot more speeding and erratic driving which can be very dangerous.

I do not support this proposal and hope that Puslinch council will stand by their platform to protect our quiet and rural community where our children will grow up in a safe environment.

Thank you,

Hillary Wilson

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>

Sent: Thursday, February 02, 2023 6:58 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up Flag Status: Flagged

Name

Irene LaPointe

Email

Address

6925 Concession Rd 4 Puslinch, ON N0B2J0

Comments/Concerns regarding the proposed Estill Innovation Community

This proposed site will be a night mare regarding traffic from vehicles coming and going due to employees working at the site. Working trucks depending on the business. Noise pollution. This is a residential area and should be kept as such.

From: Township of Puslinch <services@puslinch.ca> Sent: Monday, February 06, 2023 4:54 AM To:

Planning

New Entry: Comments regarding proposed Estill Innovation Community **Subject:**

Name Jacqueline and Steven Flowers **Email** Phone **Address** 6517 Wellington Cty Rd 34 Puslinch, ON N3C2V4 Comments/Concerns regarding the proposed Estill Innovation Community Dear Council We are opposed to the current application for the Estill Innovation Community

I am opposed to the proposed Estill Innovation Community Development at 4631

Sideroad 20 North, Puslinch for the following reasons:

Sideroad 20 N and Concession 4 aren't suitable to accommodate the traffic generated by the proposed 600 employee facility and the associated truck traffic. Both of these roads are quiet residential roads, on which people walk with their families, cycle, walk their dogs etc. These roads are hilly with limited site lines, they run through environmentally sensitive wets lands and a variety of wildlife cross these roads daily including deer, coyotes and turtles. Both of these roads have changed little since the 1840s when Puslinch was settled. They are lined with old sugar maples, cherry trees, white cedar, spruce, pine etc. These are historically significant roads in Puslinch and are part of our communities heritage.

Sideroad 20 and Concession 4 have half load restrictions in March and April. How does Mr. Estill propose to get truck traffic to this development during these months?

This proposed development will increase traffic significantly on Concession 4 and Sideroad 20 and this will only get worse once Concession 4 is closed at the Hanlon Expressway as part of the highway 6 redevelopment.

This proposed development will impact the residents in the area with light, noise and air pollution and the possible decline in property values.

This is a residential area not an industrial area.

Isn't there restrictions on development close to functioning livestock production areas? I believe there is a functioning farm boarding the west side of this proposed development.

Who is responsible for paying for the infrastructure to service this proposed development ie water, sewers, gas, roads etc?

The More Homes for Everyone Act, 2022 is misleading. This proposal has nothing to do with affordable housing.

How does this proposal align with the proposed County of Wellington Official Plan Amendment (OPA) No.120? Shouldn't the (OPA) be approved first before even considering the proposed development at 4631 Sideroad 20 north?

I makes no sense to pave over viable agricultural land. This land could be used to produce food for the marginalized members of our community.

Recommendations:

This development isn't congruent with the residential communities on Sideroad 20 and Concession 4. The developer should pursue other options, which might include purchasing land zoned for industrial purposes in the City of Guelph. This serviced development land is directly east of the proposed 4631 Sideroad 20 development, bordered by the Hanlon Expressway on the west, Maltby Road on the south and Gordon Street on the east. It will have the roads to support this proposed development and direct access to the 401 via the new interchange on the Hanlon Expressway, just south of Maltby Road.

We urge you to carefully weigh the need for development against the need for our

rural community to stay rural and stop the encroachment of city development into Puslinch

Justine Brotherston

From: Township of Puslinch <services@puslinch.ca>

Sent: Thursday, February 02, 2023 7:24 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Follow Up Flag: Follow up Flag Status: Flagged

Name

Javier Vera

Email

Phone

Address

6964 Concession 4 Puslinch, ON N0B2J0

Comments/Concerns regarding the proposed Estill Innovation Community

As a local resident of Puslinch I completely dissagree with the proposed development of the Estill Innovation Community.

It will be a significant deterioration of our rural lifestyle and our environment. The pollution, noise, traffic, water waste and, species extermination are just a few of negative impacts of the proposed development.

There are already big parcels of land assigned for industrial development North of Forestell Rd along Hanlon Expressway, why not use the already assigned area for this development?

4584 Wellington Rd. 35 Puslinch, ON. NOB 2J0

February 6, 2023

The Township of Puslinch 7404 Wellington County Rd. 34 Puslinch, On NOB 2J0

RE: The Estill Innovation Community

Dear Council Members;

We have several concerns with regard to the above proposed development at 4631 Sideroad 20N and stand by our neighbours closer to the proposed development with greater concerns.

Our first concern is the effect on our water supply.

Over the past 40 years with each new home built we have observed changes in our water quality from excellent to a strong sulfur taste and smell.

This proposed development will require an immense amount of water.

The past three years Puslinch has suffered drought. The water table has been lowered from that alone.

Another concern is traffic. There are already times of the day when we can barely get out of our laneway onto Wellington Road 35 and at time take risks to do it.

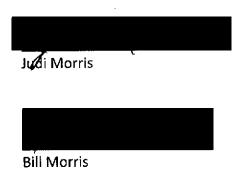
What is the proposed route of traffic for all of this for the trucks and people working at the Estill Innovation Community? What is the plan to manage this traffic for local residents.

I know full well the impact of the noise and light pollution for those living closer. Over the past 15 years there has been substantial noise pollution in the night coming from the industrial area to the point we cannot sleep with our windows open at times.

Driving south along Wellington Rd. 35, at Wellington Rd. 34 the light pollution from the existing industries is disturbing. For the people living closer it will be unbearable.

A portion of that land is a protected wetland governed by the GRCA. Residents that have portions of their land regulated by the GRCA are prevented from building or making changes to that area. How can it be that these rules can be ignored in this situation?

For the above reasons of our and those of our neighbours we oppose the above captioned development.



Courtenay Hoytfox

From: Glenn Schwendinger

Sent: Friday, February 3, 2023 1:16 PM

To: Courtenay Hoytfox

Subject: FW: February 8th Council Meeting - Estill Innovation Community Development

Attachments: Box Like Site Plans.pdf

From: Michael Collins

Sent: Friday, February 03, 2023 1:03 PM

To: James Seeley < <u>iseeley@puslinch.ca</u>>; Jessica Goyda < <u>igoyda@puslinch.ca</u>>; Russel Hurst < <u>rhurst@puslinch.ca</u>>; Sara

Bailey <<u>sbailey@puslinch.ca</u>>; John Sepulis <<u>jsepulis@puslinch.ca</u>>

Cc: Courtenay Hoytfox <<u>choytfox@puslinch.ca</u>>

Subject: February 8th Council Meeting - Estill Innovation Community Development

Dear Mayor and Councillors of Puslinch,

Thanks for taking the time to read my email. My wife and I will be flying out on a trip (first one in 4 years) on the morning of February 8th, so our kids, my wife and I won't be able to attend the council meeting on February 8th where you will be discussing the Estill Innovation Community Development.

I have the following additional comments/questions, point 2 being the most important one:

- 1. I humbly request that you do not go ahead with the CIHA as it will limit the amount of opportunities, and time for community input on a development like this requires, especially considering two sides of the property is bordered by residential properties. When the Hanlon Creek Business park was proposed, and developed, there were several community consultations which resulted in the large berm being constructed to block both light, and noise. The city also backed away from providing access to the Business Park from Forestell Road. These types of conversations need to occur if this development is to proceed. *This also can't be done in a singular information session.*
- 2. At the 42:50 mark of the council meeting recording from December 21st

 (https://www.youtube.com/watch?v=Hp_4Cbwkz-o), Mayor Seeley indicates that he would be heavily opposed to a truck terminal going in on the 6 acres of industrial land. I called up the truck terminal across from Danby (Transport N Service) this morning, and talked to Mike in their safety department. He indicated they have 86 trucks that do week long return runs, and a small percentage that do multiple trips. Call it approximately 200 truck trips, and 172 employee vehicle trips on a weekly basis for that truck terminal. Between Danby's 25 trucks per day, and UCFP's 17 trucks per day, that is 420 truck loads minimum per week, plus the upwards of 1200 daily employee trips. This warehouse complex, although producing products, it becomes essentially a truck terminal by means of the by-product of truck traffic it generates. This volume of truck traffic is also going to increase by the very nature that Danby is at least doubling their warehouse size.
- 3. When I look at the council meeting recording from December 21st, all of the councillors' concerns are traffic based. Does council feel that lights on a warehouse that are on all through the night, the noise of the facility (from both traffic and operation), and the extraction of water not a concern? I invite all of council to come to our property (6949 Forestell Road), stand on my porch, and imagine what the business park across the street would impact our property if the berm was not there. When outside, we hear trucks running at all times of the night, and the lights on the buildings are still above the berm. If the two wells required to meet the peak demand extract 144,000 litres per day, are any current wells in threat of being dried up? If one of our wells does dry up from these two wells being installed, who is liable to replace those wells?
- 4. At the 32:16 mark of the council meeting recording, Mr. Estill comments that he is going to build a nice building, with trails, and gardens for the community. The current buildings occupied by Danby, and Upper Canada Forest

Products are both boxes, as they need to be for a warehouse that stores products and to utilize a bridge or monorail crane within the facility. The two preliminary proposed site plans that were attached in the Geotechnical report show very box like building footprints, and so much hard surface footprint that no real room is left for trails or gardens. Just seems like fluff to try and appease any concerns instead of genuine design considerations.

- 5. At the 27:40 mark of the council meeting recording, Mr. Estill made a comment there was no other 60 acre available land in Puslinch or Guelph that could accommodate this facility. All of the reports done by GHD are dated June 2022, inferring that this piece of property on Sideroad 20 was looked at well in advance of that. The City of Guelph sold the last 107 acres of land in the Hanlon Creek Business Park between October and December 2022 (https://pub-guelph.escribemeetings.com/filestream.ashx?DocumentId=31302, and https://www.guelphtoday.com/local-news/city-to-sell-107-acres-in-hanlon-creek-business-park-5927802). All of the former Town of Puslinch lots are adjacent, and would solve all of the noise, light, water, and trucking issues that the Sideroad 20 property presents. The land is also serviceable by Guelph Transit to funnel the students the Agtech Innovation Centre would house. Why wasn't this piece of land consider, or was this a case of a CEO not wanting to pony up the necessary funds to develop a business in an area that would properly accommodate it?
- 6. This last one is petty, but does need to be asked. At the 27:50 mark of the December 21st council meeting, Mr. Estill states he has two other possible locations in different communities available to him. Is the first one in his backyard, and is the second one in his cottage's backyard since he is all against NIMBYism? I find it laughable, that a concession block that currently has a business park to the north of it, and a waste transfer station as part of its area be accused of NIMBYISM...

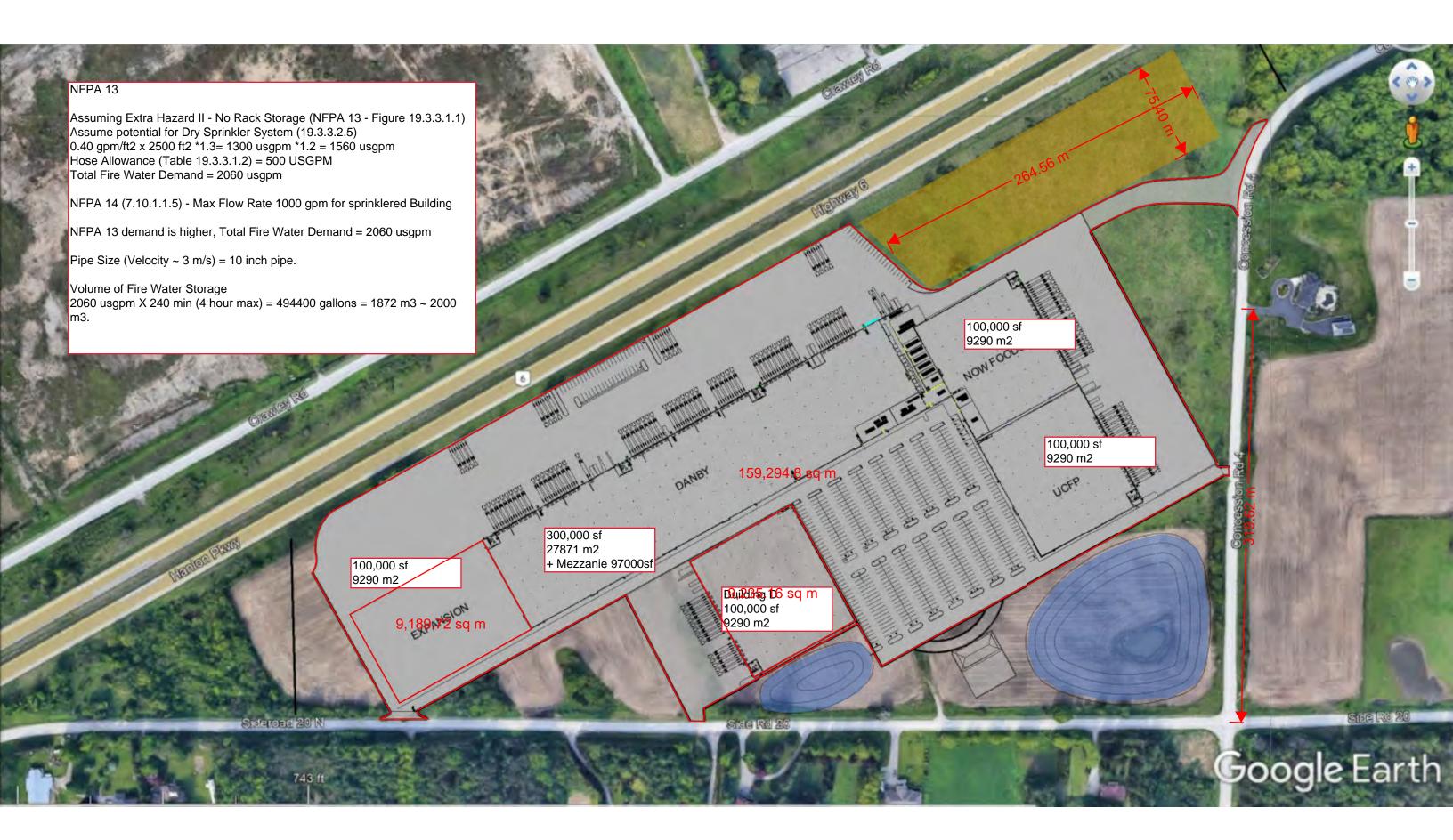
Lastly, if Mr. Estill had come to the town proposing affordable housing and a refugee centre for new or existing refugees he has brought over, he would have my unwavering support of that type of development. I would even volunteer my time and skillset to assist with that type of development. He has done a lot of good for the community and country, but this development is the exact opposite of all that he has done.

Regards,

Michael



This e-mail message may contain privileged or confidential information. If you are not the intended recipient, you may not disclose, use, distribute, or copy this message or attachment in any way. If you receive this message in error, please delete the e-mail and any attachments permanently and also advise the sender of the error via e-mail. Thank you.





Name Michael Dawe **Email** Phone **Address** 290 Terrace Wood Cres Kitchener, ON N2P 0A8 **Comments/Concerns regarding the proposed Estill Innovation Community** Stop this proposed project. Not appreciate for the area.

Township of Puslinch <services@puslinch.ca>

New Entry: Comments regarding proposed Estill Innovation Community

Tuesday, February 07, 2023 11:07 AM

Planning

From:

Sent:

Subject:

To:

From: Township of Puslinch <services@puslinch.ca>

Sent: Sunday, February 05, 2023 8:26 PM

To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name

Michelle Lacasse

Email

Address

6992 Wellington Road 34 Cambridge, ON N3C 2V4

Comments/Concerns regarding the proposed Estill Innovation Community

We live very close to the proposed development site. We moved from the city to Puslinch for the peace and tranquility that country life offers. In addition to taking away people's rural lives, there are many other concerns we have - The traffic, light pollution, noise and loss of agricultural land. There are many other areas outside of the township that are more suitable for this type of development. It's not the right fit for here, now or ever. Don't allow it to happen. It would be a devastating blow tho those living near it and for the whole township. Keep rural life rural.

Justine Brotherston

From:

Sent: Monday, February 06, 2023 7:02 PM

To: Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin

Cc:

Subject: FW: Estill Innovation Community

Dear Council Members,

We (my wife (copied) and I) shared the below email with Mayor Seeley recently and want to ensure you have seen our concerns.

Thank you for the opportunity to express our view and we trust all resident views will be taken in consideration.

Please feel free to contact us if you would like further information.

Peter Hofstra.

From:

Sent: January 12, 2023 8:22 PM

To: jseeley@puslinch.ca

Cc:

Subject: Estill Innovation Community

Happy New Year Mayor Seeley,

We want to express our deep concern regarding the potential development of the Estill Innovation Community. Our near term concerns relate to the disruption the increased traffic would cause, on roads that are not constructed to support significant traffic. The traffic that would be associated with the construction phase as well as future operations are deeply concerning. Further problematic issues relate to the noise that would accompany both the construction phase and future operations. As well, the impact on property values could be deeply negative. Why would a potential resident buy in the neighbourhood of an industrial centre? Finally, we do not believe it is suitable to develop a parcel of land, like that being considered, without a communicated plan for future usage of all surrounding lands. What is the future plan for all lands west of the Hanlon, east of Downy, south of Foretell and north of wellington road 34? Without an encompassing plan, it does not make sense to develop a small section of this area and have it significantly impact the broader region.

Thank you for considering our opinion.

Feel free to reach out for further discussion.

Peter and Janet Hofstra 6931 Forestell Rd Puslinch, ON. From:Township of Puslinch <services@puslinch.ca>Sent:Monday, February 06, 2023 6:56 PMTo:PlanningSubject:New Entry: Comments regarding proposed Estill Innovation Community

Name	
Renata Mares	
Email	
Phone	
1 110110	
Address 23 milson cre	S
Address 23 milson cre Guelph , ON N1c 1h1	S
Address 23 milson cre Guelph , ON	
Address 23 milson cre Guelph , ON N1c 1h1	oncerns regarding the proposed Estill Innovation Community

Courtenay Hoytfox

From: Planning

Sent: Thursday, February 2, 2023 10:17 AM

To: Courtenay Hoytfox

Subject: FW: New Entry: Comments regarding proposed Estill Innovation Community

From: Township of Puslinch < sent: Thursday, February 02, 2023 10:14 AM

To: Planning < planning@puslinch.ca >

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name			
Rob Schweitzer			
Email			
Eman			
Phone			
I HUHC			
Address			
) North		

Comments/Concerns regarding the proposed Estill Innovation Community

I am opposed to the proposed Estill Innovation development at 4631 Sideroad 20 North.

Although I currently rent, I have the right to continue to enjoy my home and my farm which will be directly impacted by this commercial development in a residential/rural zoned area.

The environmental damage to the farmland, wildlife and well water will be irreversible.

The direct ill effects on my rescued animals, most of who, in the past, have experienced neglect and abuse will be even more traumatizing with the noise, pollution, dust and heavy vehicle traffic.

Please enforce the zoning by-laws and ensure this development is placed in an existing commercially zoned area.

Sincerely, Rob Schweitzer 4599 Sideroad 20 North Puslinch, Ontario N0B 2J0

To:

Mayor Seeley

I am opposed to the proposed Estill Innovation development at 4631 Sideroad 20 North.

Although I currently rent, I have the right to continue to enjoy my home and my farm which will be directly impacted by this commercial development in a residential/rural zoned area.

The environmental damage to the farmland, wildlife and well water will be irreversible. Current developments have already impacted wildlife by driving them out of their habitat and have increased the coyote killing of my livestock.

The direct ill effects on my rescued animals, most of which, in the past, have experienced neglect and abuse will be even more traumatized with the noise, pollution, dust and heavy vehicle traffic creating dangerous road conditions.

The lighting alone from this large commercial building will leave me lit up day and night and will make it impossible to leave curtains and windows open.

Please enforce the zoning by-laws and ensure this development is placed in a more appropriate existing commercial zoned area.

Sincerely, Rob Schweitzer 4599 Sideroad 20 North Puslinch, Ontario N1H 6J3

Justine Brotherston

From: Robert Jarvis

Sent: Friday, February 03, 2023 12:41 PM

To: James Seeley

Cc: Jessica Goyda; John Sepulis; Sara Bailey; Russel Hurst; Admin **Subject:** Proposed Estill Innovation Community @4631 Sideroad 20N

Follow Up Flag: Follow up Flag Status: Flagged

Proposed Estill Innovation Community @4631 Sideroad 20N

I am opposed to the proposed Estill Innovation Community Development at 4631 Sideroad 20 North, Puslinch for the following reasons:

- Sideroad 20 N and Concession 4 aren't suitable to accommodate the traffic generated by the proposed 600 employee facility and the associated truck traffic. Both of these roads are quiet residential roads, on which people walk with their families, cycle, walk their dogs etc. These roads are hilly with limited site lines, they run through environmentally sensitive wets lands and a variety of wildlife cross these roads daily including deer, coyotes and turtles. Both of these roads have changed little since the 1840s when Puslinch was settled. They are lined with old sugar maples, cherry trees, white cedar, spruce, pine etc. These are historically significant roads in Puslinch and are part of our communities heritage.
- Sideroad 20 and Concession 4 have half load restrictions in March and April. How does Mr. Estill propose to get truck traffic to this development during these months?
- This proposed development will increase traffic significantly on Concession 4 and Sideroad 20 and this will only get worse once Concession 4 is closed at the Hanlon Expressway as part of the highway 6 redevelopment.
- This proposed development will impact the residents in the area with light, noise and air pollution and the possible decline in property values.
- This is a residential area not an industrial area.
- Isn't there restrictions on development close to functioning livestock production areas? I believe there is a functioning farm boarding the west side of this proposed development.
- Who is responsible for paying for the infrastructure to service this proposed development ie water, sewers, gas, roads etc?
- The More Homes for Everyone Act, 2022 is misleading. This proposal has nothing to do with affordable housing.
- How does this proposal align with the proposed County of Wellington Official Plan Amendment (OPA) No.120? Shouldn't the (OPA) be approved first before even considering the proposed development at 4631 Sideroad 20 north?
- I makes no sense to pave over viable agricultural land. This land could be used to produce food for the marginalized members of our community.

Recommendations:

This development isn't congruent with the residential communities on Sideroad 20 and Concession 4. The developer should pursue other options, which might include purchasing land zoned for industrial purposes in the City of Guelph. This serviced development land is directly east of the proposed 4631 Sideroad 20 development, bordered by the Hanlon Expressway on the west, Maltby Road on the south and Gordon Street on the east. It will have the roads to support this proposed development and direct access to the 401 via the new interchange on the Hanlon Expressway , just south of Maltby Road.

Regards

Robert Jarvis 4556 Sideroad 20 Guelph, Ont. N1H 6J2

Courtenay Hoytfox

From:

John Sepulis

Sent:	Tuesday, February 7, 2023 8:09 AM				
To:	Glenn Schwendinger				
Cc:	Courtenay Hoytfox				
Subject:	FW: New Entry - Email Councillor John Sepulis - Estill Development				
To: John Sep	Foering Bay, February 06, 2023 9:02 PM Bulis < isepulis@puslinch.ca > W Entry - Email Councillor John Sepulis				
	Your Name				
	Russ Toering				
	Your Email				
	Your Address 6996 Concession 4 Puslinch, ON N0B 2J0				
	Subject Estill Development				
	Your Message				

Mr. Sepulis,

Jennifer and I live at 6996 Concession 4. We have been here 20+years. We are very much opposed to this new proposed development.

We love the quiet of this neighborhood, and we are looking forward to Concession 4 being closed at the Hanlon. I hate to think of the traffic, the noise, and the light pollution of a parking lot full of lights and cars and trucks. I suspect that the night view of the stars would be completely ruined. We spend a lot of time outdoors at night.

We are also concerned about the effect this development would have our our water supply. Our well is sufficient for our needs, but we certainly couldn't live with less supply, or risk to the cleanliness of the water.

Another negative aspect is the traffic, and the impact it would have on the safety of the community. This development would push significant levels of traffic onto our road, and this would reduce the safety of us, and our children.

Developments like this belong in areas that are already designated as industrial land, and the township being pushed into quickly making a decision to approve rezoning is not wise, and it certainly is not necessary.

Mr. Estill can build his development in an appropriate area where the infrastructure to support the development already exists, and where there would be no impact to a residential and agricultural neighbourhood.

Please do the right thing for the residents of the area.

Russ and Jennifer Toering 6996 Concession Rd 4 Puslinch, ON N0B2J0

Justine Brotherston

From: Russ Toering

Sent: Monday, February 06, 2023 8:48 PM

To: Admin

Subject: Estill development

To Puslinch Council,

Jennifer and I live at 6996 Concession 4. We have been here 20+years. We are very much opposed to this new proposed development.

We love the quiet of this neighborhood, and we are looking forward to Concession 4 being closed at the Hanlon. I hate to think of the traffic, the noise, and the light pollution of a parking lot full of lights and cars and trucks. I suspect that the night view of the stars would be completely ruined. We spend a lot of time outdoors at night.

We are also concerned about the effect this development would have our our water supply. Our well is sufficient for our needs, but we certainly couldn't live with less supply, or risk to the cleanliness of the water. Another negative aspect is the traffic, and the impact it would have on the safety of the community. This development would push significant levels of traffic onto our road, and this would reduce the safety of us, and our children.

Developments like this belong in areas that are already designated as industrial land, and the township being pushed into quickly making a decision to approve rezoning is not wise, and it certainly is not necessary.

Mr. Estill can build his development in an appropriate area where the infrastructure to support the development already exists, and where there would be no impact to a residential and agricultural neighbourhood.

Please do the right thing for the residents of the area.

Russ and Jennifer Toering 6996 Concession Rd 4 Puslinch, ON N0B2J0

__

Russ Toering

THE DONKEY SANCTUARY OF CANADA 6981 CONCESSION 4, PUSLINCH, ON NOB 2J0

February 3, 2023

TO: Puslinch Township Mayor James Seeley and Councillors Russel Hirst, Jessica Goyda, John Sepulis, and Sara Bailey

On behalf of The Donkey Sanctuary of Canada (DSC) I am writing to declare our opposition to the application for the rezoning of the 60 acre property on the north-east corner of Concession 4 and Sideroad 20 which has been submitted to Puslinch Township Council on behalf of the Estill Innovation Community Development.

The DSC, which has been carrying out its significant work for 31 years in Puslinch, is an animal rescue/welfare charity. The Sanctuary's 200 acre property is a working farm and center for animal welfare education. In addition the DSC serves as a model to the community for respectful land use which places an emphasis on the interdependent reality of the human /natural environments.

The DSC has made a long-term commitment to Puslinch Township, to its rural environment and to the evident importance which has always been placed on the land. Visitors to the Sanctuary remark time and again on the peacefulness and supportiveness of our rural atmosphere. The Estill Development, with its 600 employees going back and forth, as well as innumerable trucking trips 24 hours a day would overwhelm the environment due to dramatically increased noise levels, light pollution, road use, and excessive consumption of groundwater.

We believe strongly that Puslinch Township should maintain as its purpose the responsibility to steward positively the land and to resist further urban and industrial pressures. There are many other fully serviced sites available in the city of Guelph where the Estill Development could locate. We urge Council to refuse this rezoning application.

Respectfully submitted,

Sandra Pady, Founder and Chair of the Board of Directors

From: Township of Puslinch <services@puslinch.ca>
Sent: Monday, February 06, 2023 6:48 PM
To: Planning

Subject: New Entry: Comments regarding proposed Estill Innovation Community

Name	
Scott Ro	binson
Email	
Phone	
Address	
Address 4526 Sic Guelph, N1H6J3	eroad 20
4526 Sic Guelph,	eroad 20
4526 Sic Guelph, N1H6J3	eroad 20

Forrestell, Sideroad 20 and Concession 4 exploding with 600 employees descending on the area, and transport trucks having to trudge along those rural roads and lastly, the precedent that the use of a CIHA will set whereby any chunk of Class 2 farmland in Puslinch can be papered over and developed, taking precious and disappearing farmland out of production.

Courtenay Hoytfox

From: John Sepulis

Sent: Sunday, February 5, 2023 10:43 AM

To: Glenn Schwendinger
Cc: Courtenay Hoytfox

Subject: FW: Opposition to Proposed Estill Innovation Community

From: Tim Forestell

Sent: Saturday, February 04, 2023 2:46 PM

To: James Seeley <jseeley@puslinch.ca>; Jessica Goyda <jgoyda@puslinch.ca>; Russel Hurst <rhurst@puslinch.ca>; Sara

Bailey <sbailey@puslinch.ca>; John Sepulis <jsepulis@puslinch.ca>; Admin <admin@puslinch.ca>

Subject: Opposition to Proposed Estill Innovation Community

Hello Mayor Seeley and Puslinch Council members,

My husband, daughter and I live at 6953 Forestell Rd in Puslinch.

It has been brought to my attention that the council is considering an industrial development on side rd 20 which has been proposed by Jim Estill. I am writing to you today to express my concerns with this development and make it clear that my household is very opposed.

My concerns include but are not limited to, increased traffic, environmental concerns, well water depletion, noise and light pollution.

Jim Estill is dismissing the concern of traffic based on his relationships with the province and the potential of having access from the Hanlon expressway into the development. As long as there is access from the development onto side rd 20, there will be a significant increase in traffic on the residential township roads, as employees utilizing the facilities will take the quickest route into Guelph, (Side rd 20, Forestell rd, Concession 4 etc). Local residents actively walk on these roads each day. I am afraid if this development is approved it will no longer be safe for my 5 week old daughter and I to take walks along the road.

This matter is extremely important to me, so I will be taking a vacation day from work on Wednesday Feb 8th to ensure that I am in attendance at the council meeting to show my opposition, alongside my fellow neighbours. I hope that you as council members representing the residents of Puslinch Township, unanimously vote against this project.

Thanks,

Tim, Jordan, Lucy

6953 Forestell rd, Puslinch

Courtenay Hoytfox

From: Admin

Sent: Friday, February 3, 2023 11:52 AM

To: Courtenay Hoytfox

Subject: FW: Estell Industrial Development Proposal

From: Tom Forestell

Sent: Friday, February 03, 2023 10:33 AM

To: James Seeley <jseeley@puslinch.ca>; Jessica Goyda <jgoyda@puslinch.ca>; John Sepulis <jsepulis@puslinch.ca>;

Sara Bailey <<u>sbailey@puslinch.ca</u>>; Russel Hurst <<u>rhurst@puslinch.ca</u>>

Cc: Admin <admin@puslinch.ca>

Subject: Estell Industrial Development Proposal

Dear Mayor Seeley and Members of Puslinch Township Council

My name is Tom Forestell and my wife and I live on Forestell Road between County Rd 35 and Sideroad 20. I am a lifelong resident of Puslinch Township. Some of my children and grandchildren also live on Forestell Rd.

I am opposed to the Estell Industrial Development Proposal for a myriad of reasons, including but not limited to, damage to the environment, noise and light pollution, well water concerns and traffic. I would like the focus of this email to be on two of these: concern for the environment and traffic. By focusing on these two does not negate the fact that I hold any of the other concerns that I have to be less important.

Environment:

I am strongly opposed to rezoning any agricultural land for industrial or commercial use. Once this land is gone it is gone forever. Everyone is aware of climate change and we all have a responsibility to mitigate this change. The current provincial government has taken a stance to pave over farm land for highways and to allow construction on the green belt. I believe that Puslinch Township is better than this. I believe that industrial development should be in industrial areas and not agricultural/rural residential areas. If this were to be approved what would stop anyone from applying and receiving rezoning approval for industrial land anywhere in the township? I am heartened by the fact that most, if not all of you, campaigned on maintaining the rural nature of our township. I trust that you will live up to that campaign commitment

Traffic:

There is a large rural residential presence in the area of the Estell proposal that does not align with industrial development. Despite Mr. Estell's assertion that MTO would leave open access to the Hanlon Expressway South to Conc. 4, this is not a given. Even if this access to the Hanlon Expressway does occur people will always take the shortest route to their destination. At this point the fastest and only routes to Guelph or Cambridge are along Forestell Rd, Conc. 4 and Sideroad 20. These are narrow, hilly country roads with many homes along them. They all join up with either of the busy County Roads 35 or 34.

From my experience on Forestell Rd, I have had to wait up to 3 minutes to cross County Rd 35 during the busy times and I am the only vehicle at the stop sign. The math is simple of how this will be compounded with the amount of traffic that is predicted.

Danby has a store front as well as their factory in their current location. Please keep in mind the excess traffic that this will create in addition to their employees. On their sale days it is difficult to get a spot in their current parking lot.

I walk daily on Forestell Road and I see many other seniors do the same on Conc. 4 and Sideroad 20. I am concerned about the safety on these roads for walkers and children catching the school bus.

Living on Forestell Rd we know first hand the effect of being close to industrial land. Despite any accommodations the City of Guelph made to the Puslinch residents with the construction of a berm along Forestell Rd we are still tormented by the constant hum of transport trucks. The light pollution coming from these businesses from across the road shines right into our windows.

In conclusion, my hope is to age in my Puslinch home and not be trapped in it. I would also like to feel that the rural nature enjoyed by my ancestors in this township will continue to be there for my children and grandchildren.

I know that you will take my concerns seriously and I thank you for that.

Tom and Barb Forestell 6951 Forestell Rd, Guelph ON N1H 6J3



REPORT ADM-2023-006

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Municipal Clerk

PRESENTED BY: Courtenay Hoytfox, Municipal Clerk

MEETING DATE: February 8, 2023

SUBJECT: Badger Daylighting Zoning Amendment Application Status Update

File: D14/ONT

RECOMMENDATION

That Report ADM-2023-006 entitled Badger Daylighting Zoning By-law Amendment Application Status Update be received; and

That Council direct staff to forward the report and schedules to the property owner and agent for a response and that the response be included in the Planning recommendation report to be considered by Council at a March 2023 Council meeting; and

That Council direct staff to forward this report and schedules to the local Ministry of the Environment Conservation and Parks office for comment.

<u>Purpose</u>

The purpose of this report is to provide Council with an update on the Badger Daylighting Zoning Amendment Application and to provide information relating to questions and comments that were heard at the statutory public meeting for the Zoning By-law Amendment application.

Background

As Council is aware, the Badger Daylighting Zoning Amendment Application was deemed complete and a public information meeting was scheduled for November 30, 2022. At the public meeting, Council heard a presentation from the property owner's agent and heard representations from members of the public.

A number of questions and concerns were expressed by the public at the public meeting. Following the public meeting on November 30, 2022, staff retained a firm to analyze the

applicant's submission materials as it relates to the comments heard at the public meeting. This peer review is attached to this report as Schedule "A". Staff further requested that County Planning staff prepare a summary memo outlining the outstanding questions/concerns as well. This is attached as Schedule "B". This work was undertaken in response to the public's feedback at the public meeting and in response to written comments received by the public. At this time, there are a number of concerns that have not been adequately addressed by the proponent. In order for Council to be in a position to make an informed decision regarding the zoning amendment application, it is essential that the proponent provide adequate responses and information to address the outstanding questions and concerns from both the public and Township consultants.

The Township has also been made aware of a number of activities on the property that are not included in the proponent's application for a zoning amendment. There is an outside commercial storage use near the front of the property that appears to be unrelated to the Hydrovac operations. There are a number of hydrovac trucks attending the property that are not identified as Badger Daylighting trucks. The Township has not issued any site alteration permits for the property, however, the Township has become aware of activities where a permit(s) may be required.

Staff have requested that the property owner/agent respond to the identified outstanding items by February 17, 2023 in order for a planning recommendation report to be considered by Council at a March 2023 meeting date. Staff further recommend that this report and schedules be forwarded to the property owner and agent for response in addition to the MECP for comments.

Financial Implications

None

Applicable Legislation and Requirements

Planning Act, R.S.O 1990

Engagement Opportunities

None

Attachments

Schedule "A" XCG Environmental Engineers and Scientists Consulting Limited Peer Review

application D14 BAD		
Respectfully submitted,	Reviewed by:	
Courtenay Hoytfox,	Glenn Schwendinger,	
Municipal Clerk	CAO	

Schedule "B" County of Wellington Information Memo - Summary of Issues regarding



XCG CONSULTING LIMITED T 519 741 5774 F 519 741 5627 | kitchener@xcg.com 820 Trillium Drive, Kitchener, Ontario, Canada N2R 1K4

February 6, 2023

XCG File No. 5-4740-03-01

Sent via Email: gschwendinger@puslinch.com

Mr. Glenn Schwendinger Chief Administrative Officer Township of Puslinch 7404 Wellington Road 34 Puslinch, Ontario N0B 2J0

Re: Updated Peer Review of Environmental Documents Submitted in Support of Zoning By-Law Amendment Application for Northern Portion of a Property Located at 6678 Wellington Rd. 34, Township of Puslinch, Ontario

Dear Mr. Schwendinger:

1. Introduction, Purpose, and Use

XCG Consulting Limited (XCG) was retained by the Corporation of the Township of Puslinch (the Township), to conduct a review of the environmental reports and other documents provided to the Township by, or on behalf of 2374868 Ontario Inc., operating as Conestoga Badger Inc. (Badger), in support of the Zoning By-law Amendment Application (the Application) for the northern portion of a property located at 6678 Wellington Rd. 34, Township of Puslinch, Ontario (subject property or site). The subject property, as defined above, is a part of a larger property owned by Badger.

The site location is shown on XCG's Figure 1. For reference purposes, the subject site layout is shown on a figure titled "Site Layout" that was included in a letter titled "Response to July 19, 2022, Township of Puslinch Comments – Zoning By-Law Amendment, 2374868 Ontario Inc. - 6678 Wellington Rd. 34," dated August 29, 2022, prepared by GHD Limited (GHD Figure 1). It is noted that the subject site boundaries shown on GHD Figure 1 are not the same as those shown on other figures included in the documents prepared by GHD Limited (GHD) listed below.

Based on the information provided by the Township, XCG understands that this review has been requested by the Township as part of the Application review process undertaken by the Township prior to making a decision with regards to the Application.

As instructed by the Township, the purpose of the review completed by XCG was to address the questions and provide opinions regarding the issues detailed in the Township's email correspondence dated December 12, 2022, including:

- Have the on-site activities conducted by Badger resulted in impacts to soil, surface water, and/or groundwater on the subject property?
- Are the environmental monitoring activities completed on the subject property to date, and those proposed to be completed in the future, appropriate and/or sufficient for the type of the operations completed by Badger on the subject property?
- Significant Discrepancies Between the information and Data in Reviewed Documents and the Information Provided by GHD During the November 30, 2022, Public Information Meeting; and



 Provide guidance/suggestions on how to address the significant issues identified during this review.

The key documents provided by the Township that were reviewed by XCG included the following:

- 1. "Preconsultation 6678 Wellington Road 34, Township of Puslinch," memorandum, dated December 16, 2020, prepared by Wellington Source Water Protection, Risk Management Office (Preconsultation Memorandum).
- 2. "Hydrogeologic Impact Assessment for 2374868 Ontario Inc. (in Support of an ECA), 6678 Wellington Road 34, Cambridge, Ontario," dated December 17, 2020, prepared by GHD (HIA Report).
- 3. "Design and Operations Report, Waste Processing Facility, 6678 Wellington Road 34, Township of Puslinch, Ontario, 2374868 Ontario Inc.," dated February 2, 2021, prepared by GHD (D&O Report).
- 4. "Hydro-Vac Truck Disposal Area: 6678 County Road 34, Puslinch Township," dated October 26, 2021, prepared by Harden Environmental Services Ltd. (Harden Review).
- 5. "Hydro Vac Truck Operation, 6678 County Road 34, Puslinch Township (Site)," dated November 24, 2021, prepared by GHD (First Response to Harden Review).
- 6. "Drinking Water Threat Disclosure Report, 6678 Wellington Road 34, Township of Puslinch, Ontario," dated December 17, 2021, prepared by GHD (Drinking Water Report).
- 7. "Stormwater Management Plan, Rev. 1, 2374868 Ontario Inc., 6678 Wellington Road 4, Township of Puslinch, Ontario, Badger Conestoga Inc.," dated August 25, 2022, prepared by GHD (Revised SWM Plan).
- 8. "Compliance Assessment Report, Aggregate Resources Act," dated September 2, 2022, prepared by Capital Paving Inc. (CPI Report).
- 9. "2374868 Ontario Inc., Application for Zoning By-law Amendment Application, Response to Harden Environmental Services Ltd Groundwater Comments," dated September 7, 2022, prepared by GHD (Second Response to Harden Review).
- 10. "2374868 Ontario Inc., Application for Zoning by-law Amendment application, Response to GM BluePlan Engineering Stormwater Comments," dated September 7, 2022, prepared by GHD Limited (Response to GM BluePlan Stormwater Comments).
- 11. Video recording of the November 30, 2022, Public Information Meeting (https://www.youtube.com/watch?v=qeWJKFOjmKQ).

The scope of this letter is limited to the matters expressly covered. This letter is prepared for the sole benefit of the Corporation of the Township of Puslinch and may not be relied upon by any other person or entity without the written authorization of XCG Consulting Limited. Any use or reuse of this document by parties other than those listed above is at the sole risk of those parties.



2. XCG's Review Comments/Responses to Township's Questions

2.1 Have the on-site activities conducted by Badger resulted in impacts to soil, surface water, and/or groundwater on the subject property?

According to GHD, an environmental consulting firm retained by Badger, the operations conducted by Badger on the subject property since approximately 2013, have not resulted in impacts to surface water, groundwater, and/or soil on the subject property or its vicinity. GHD based this conclusion on the fact that "... years of extensive surface water, soil and groundwater testing ... demonstrate that all fill received and used for rehabilitation at the Site meets Table 1 (Background) Standards, all surface water meets Drinking Water Standards, and all groundwater meets Table 2 (Potable) Standards."

XCG disagrees with GHD's conclusion. Based on review of the reports prepared by GHD, it is XCG's opinion that the information and data provided in these reports indicates that operations conducted by Badger have resulted in environmental impacts to the subject property. Furthermore, it is XCG's opinion that the information and data provided in the reports prepared by GHD does not support GHD's conclusion that "... years of extensive surface water, soil and groundwater testing ... demonstrate that all fill received and used for rehabilitation at the Site meets Table 1 (Background) Standards, all surface water meets Drinking Water Standards, and all groundwater meets Table 2 (Potable) Standards."

The sections below provide the rationale for XCG's opinion.

Soil Quality

The standard method for determining if on-site operations have resulted in impacts to the on-site soil quality is to compare the current soil quality data to the historical, baseline data. Without the baseline data to compare to, it is not possible if the on-site operations degraded the on-site soil quality. There is no evidence that the on-site/in-situ soil has been sampled, (only imported fill have been sampled), as such, there is no information or data regarding the on-site/in-situ soil quality.

Reportedly, fill brought to the site is not sampled prior to being dumped on-site. Fill brought to the site is only sampled after it is processed (mixed, drained, dried, and stockpiled), which reportedly takes up to a week. Based on the reviewed reports, it appears that only one sample was collected from every 100-cubic metre stockpile of the processed/dried fill. No stockpile sampling methodology was provided by GHD, as such, it is not known if the collected samples were representative of a worst case fill quality, or even representative of the overall stockpile quality.

The stockpiled fill was reportedly sampled monthly from January 2017 to July 2020, and once a week from July 2020 to the end of November 2020. Not all fill stockpiles were sampled for by the same parameters. It is noted that according to the D&O Report, sampling of the imported stockpiled soil has been completed since 2014; however, no soil quality data prior to January 2017 was available for review.

Analytical results for samples collected from the stockpiled processed fill after April 2020, indicate that occasionally, some of the tested parameters, including sodium adsorption ratio (SAR); metals, including barium, chromium, chromium VI, cobalt, lead, vanadium; polycyclic aromatic hydrocarbons (PAHs) including anthracene, benzo(a)anthracene, benzo(a)pyrene,



benzo(b)fluoranthene, benzo(k)fluoranthene, fluoranthene, indino(1,2,3-cd)pyrene, phenanthrene, pyrene; petroleum hydrocarbons (PHC) including fractions F2, F3, F4, and F4G, and toluene were detected at concentrations above the Table 1 (Background) generic soil condition standards (SCS) published by the Ministry of the Environment (MOE, or the Ministry)¹ in the document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act," dated April 15, 2011 (MOE SCS).

Samples collected between January 2017 and April 2020, were not sampled for SAR, PAHs, and PHCs. As noted above, samples collected after April 2020, occasionally were reported to have concentrations of these parameters above the Table 1 SCS.

Surface Water Quality

The standard method for determining if on-site operations have resulted in impacts to the surface water quality is to compare the results of the background samples to the results for samples collected from the site and/or downstream from the site. Typically, for the purpose of establishing background conditions, the surface water samples are collected from location(s) upstream of the site and/or upstream of areas affected by the on-site operations. If the concentrations of analyzed parameters in the samples collected from the site and/or downstream of the site are higher than the concentrations for the same parameters in the background samples, than there is a potential the on-site operations have impacted the surface water quality. It is normal for the concentrations of tested parameters to vary from sampling event to sampling; however, consistently higher concentrations in samples collected from the site and/or downstream from the site versus the concentrations in the background samples likely indicate site-related impacts to the surface water quality.

There is no evidence in the reports prepared by GHD, that any background surface water quality samples have been or are being collected at the site. Therefore, there is no data available to determine if the operations conducted by Badger are impacting the on-site surface water quality.

According to the information in the Revised SWM Plan, the on-site surface water quality is reportedly monitored by collecting samples from the on-site stormwater management (SWM) pond. Reportedly, the SWM pond has been constructed as a "wet pond", meaning the pond was excavated below the water table, and never goes dry. The pond does not have an outlet and is not lined. As such, surface water discharging from the site mixes with the in-situ groundwater present in the pond, before infiltrating into the ground. According to the SWM Plan, up to 150 tons per day or 135,000 litres per day of water is generated/ discharged on-site as part of the Badger's operations. Reportedly, majority of this water drains overland to a swale that discharges to the SWM pond. The rest of the water infiltrates into the ground surface, and some evaporates.

It is noted that the Revised SWM Plan, and other documents prepared by GHD, state "...150 tons per day or 35,000 litres per day". This is not correct, and it is assumed that it is a typographic error, since 150 tons is equivalent to 135,000 litres, not 35,000 litres. According to the Revised SWM Plan, the quality of the surface water generated on the subject site is

¹ Previously also known as the MOE, Ministry of the Environment and Energy (MOEE), and the Ministry of Environment and Climate Change (MOECC). Currently known as the Ministry of the Environment, Conservation and Parks (MECP).



monitored by sampling water in the on-site SWM pond. Reportedly, water in the pond was sampled weekly since 2014. However, there is no data in the reviewed reports prepared by GHD for samples collected from the SWM pond prior to January 2017. Based on the data in the Revised SWM Plan, from January 2017 to October 2020, the SWM pond was sampled once a month, and from October 2020 to end of November 2020, the SWM pond sample on a weekly basis.

Reviewed reports indicate that samples collected from the SWM pond up to April 2020, were analyzed for metals only. Samples collected from May 2020 to the end of November 2020 were analyzed for metals, volatile organic compounds (VOCs), semi-volitive organic compounds (SVOCs), PHCs, polychlorinated biphenyls (PCBs), and PAHs. A few samples were also analyzed for biochemical oxygen demand (BOD), total suspended solids (TSS), and total phosphorous.

Given that the background surface water quality was never investigated and is currently unknown, GHD has concluded that since the concentrations of analyzed parameters in the samples collected from the SWM pond meet that provincial water quality objectives (PWQOs) and/or the generic Table 2 (potable groundwater) SCS, the water discharged on site by Badger does not impact the on-site surface water quality.

XCG does not agree with GHD's conclusion because the SWM pond samples are not representative of the quality of surface water generated from Badger's operations. This is because the surface water generated on-site mixes with/is diluted by the groundwater present within the SWM pond before it is sampled.

The liquid soil brought to the site for processing/dewatering originates at various sites. No samples of the soil are collected at the source sites. Fill brought to the site is only sampled after it is processed [i.e., mixed with (diluted) with other fill brought to the subject site, and dewatered]. Therefore, it is not known if the parameters the SWM pond samples are analyzed for, represent all contaminants of concern (COCs) associated with the source sites. In addition, as stated above, one sample has been collected from the SWM pond on a monthly and weekly basis, even though, up to 150 tons or 135,000 litres per day of water is discharged by Badger to the site surface as part of their on-site operations. It is noted that no sediment samples have been collected from the SWM pond or the drainage swale.

Furthermore, the fact that the SWM pond samples meet the PWQOs, and/or the Table 2 SCS is no indication of the potential impacts to the surface water quality on the subject property. The PWQOs, Table 2 SCS, and other regulatory criteria or standards, were not developed to be used as "pollute-up-to" levels. Based on GHD's reasoning, it would be allowed to discharge contaminants to the environment, as long as the measured concentrations of these contaminants, for example in surface water, were below a specific criteria (i.e., dilution is not a solution to pollution).

In addition, the regulatory standards and criteria are frequently updated to reflect the new/updated toxicity data and the advances in analytical methods, which allow for detection of contaminants at lower and lower limits. Furthermore, there are new/emerging contaminants that currently do not have regulatory standards in Ontario. For example, Per-and Polyfluoroalkyl Substances (PFAS) are a group of manufactured chemicals that have been used for decades to make coatings and products that resist heat, oil, stains, grease, and water. PFAS are called forever chemicals as they break down very slowly in the environment and



accumulate in the soil, sediments, and water. Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) are the most well-known PFAS. Ontario does not have standards for PFAS in soil, surface water, groundwater, or sediment. However, in 2017, Ontario developed interim advice for PFAS, recommending that drinking water used for human consumption not exceed 70 ng/L for 11 different PFAS.

PFAS have been used in a variety of products, including, amongst others, the insulation of electrical wires. As such, since most of the soil/fill brought to the site by Badger reportedly is generated from daylighting of buried utilities and services, it is possible that the soil and water discharged on the subject site as part of Badger's operations contains PFAS.

Groundwater Quality

The standard method for determining if on-site operations have resulted in impacts to the groundwater quality is to compare the results of the background samples to the results for groundwater samples collected from monitoring wells installed down-gradient from the site/on-site operations and screened in the same water bearing zones. It is normal for the groundwater concentrations of tested parameters to vary from sampling event to sampling; however, consistently higher concentrations in samples collected from the down-gradient wells versus the concentrations in samples collected from the background well(s) likely indicate site-related impacts to the groundwater quality.

In order to determine if the on-site operations conducted by Badger resulted in impacts to the groundwater under the subject property and in its vicinity, GHD compared groundwater samples collected from two sets of wells to the Ontario Drinking Water Quality Standards (ODWQS) and the Table 2 SCS. The two sets of wells include, two potable water supply wells, designated as "Applicant's Well" or EXI and "Agricultural Zoned Well" or A, and three shallow overburden water table monitoring wells MW1-20, MW2-20, and MW3-20.

According to the HIA Report, the water supply well EXI obtains water from a deep overburden (gravel) water bearing zone at a depth of 33.8 metres below ground surface (bgs). The other water supply well, well A, reportedly obtains water from the bedrock aquifer from a depth of 24.1 metres to a depth greater than 29.6 metres bgs. The water supply well EXI is located offsite, adjacent to the west subject property boundary, while the water supply well A is located approximately 45 metres to the south of the southwest corner of the subject property. The monitoring wells MW1-20, MW2-20, and MW3-20 were installed in November 2020, to depths between 12.2 metres bgs and 14.3 metres bgs. The monitoring wells MW1-20, MW2-20, and MW3-20 are located in the southwest corner of the subject site, adjacent (offsite) to the southeast corner of the subject site, and in the northeast corner of the subject site, respectively. The locations of the above noted wells are shown on GHD Figure 1.

The HIA Report states that based on the groundwater contours shown on Figure 3.11 in the HIA Report, the groundwater flow generally follows the topography toward south-southwest. The HIA Report also states that based on the groundwater flow shown on Figure 3.11, the water supply wells EXI and A and the monitoring well MW1-20 and MW2-20 are located down-gradient from the on-site operations, while the monitoring well MW3-20 is located upgradient from the on-site operations.

Based on XCG's review of the information presented on Figure 3.11, the water supply well EXI and the monitoring wells MW1-20, and MW2-20 should be considered to be located crossgradient (not down-gradient) from the on-site fill processing areas. The water supply well A



could be considered to be located down-gradient from the fill stockpile area and cross-gradient from the fill processing area. The monitoring well MW3-20 appears to be located up-gradient from the on-site operations and can be considered as a background well for the shallow overburden water table groundwater quality. Since the water supply wells are used (pumping) daily to supply water for the on-site and off-site operations, the high hydraulic conductivity of the on-site soils and the ongoing discharge of up to 150 tons or 135,000 litres of water to the site surface/SWM pond on a daily basis, the groundwater flow regime depicted on Figure 3.11 may not be representative of the prevalent groundwater flow regime.

GHD has concluded that since that concentrations of analyzed parameters in the samples collected from the water supply wells EXI and A and the monitoring wells MW1-20, MW2-20, and MW3-20 meet the ODWQS and Table 2 SCS, the on-site operations conducted by Badger have not resulted in impact the on-site groundwater quality.

XCG does not agree with GHD's conclusion. As discussed above, the regulatory criteria or standards, were not developed to be used as "pollute-up-to" levels. As mentioned above, the standard method for determining if on-site operations have resulted in impacts to the groundwater quality, is to compare the results for samples collected from the background well(s), to the results for groundwater samples collected from monitoring wells installed downgradient from the site/on-site operations. Furthermore, as discussed above, the regulatory standards and criteria are frequently updated to reflect the new/updated toxicity data and the advances in analytical methods, which allow for detection of contaminants at lower and lower limits. Furthermore, there are new/emerging contaminants that currently do not have regulatory standards in Ontario (e.g., PFAS).

For the purpose of this review, XCG compared the groundwater results for samples collected on November 24/25, 2020, and on December 4, 2020, from the background monitoring well MW3-20 to the results for samples collected from monitoring wells MW1-20 and MW2-20. It is noted, that as discussed above, it is XCG's opinion that the monitoring wells MW1-20 and MW2-20 should be considered to be located cross-gradient (not down-gradient) from the onsite fill processing area. Based on this comparison, it is evident that some metal and inorganic parameters were detected and higher concentrations, in some cases significantly higher (i.e., at least one order of magnitude), in samples collected from wells MW1-20 and MW2-20 than in samples collected from well MW3-20.

The following Tables 1 and 2 summarize the concentrations of total and dissolved metals/inorganics for samples collected from the monitoring wells MW-1, MW-2, and MW-3.

Table 1 Comparison of total concentrations for samples collected on November 24/25, 2020 and December 4, 2020

Parameter (Total Concentrations)	MW3-20 November 24, 2020	MW1-20 November 25, 2020	MW2-20 November 24, 2020
Chloride	4800	8170	8110
Aluminum	210	352	6.6
Boron	12	24	70
Copper	0.96	1.39	18
Iron	224	417	<10
Manganese	90.6	114	357
Nickel	1.62	1.46	9.19
Potassium	1910	4100	63700



Parameter (Total Concentrations)	MW3-20 November 24, 2020	MW1-20 November 25, 2020	MW2-20 November 24, 2020
Sodium	6780	8500	6780
Zinc	<3.0	6.5	25.3

Parameter	December 4, 2020	December 4, 2020	December 44, 2020
Chloride	3.98	11.7	5.4
Aluminum	61	366	9.6
Boron	11	29	43
Copper	1.42	1.43	10.8
Iron	68	439	<10
Manganese	50.9	135	143
Nickel	1.09	8.97	4.93
Potassium	1350	5560	32200
Sodium	4390	9850	5050
Zinc	<3.0	10.2	18.9

Notes: All concentrations are in μ g/L.

Green font indicates concentration lower or equal to the background concentration.

Red font indicates concentration higher than background concentration.

Table 2 Comparison of dissolved concentrations for samples collected on November 24/25, 2020, and December 4, 2020

Parameter (Dissolved Concentrations)	MW3-20 November 24, 2020	MW1-20 November 25, 2020	MW2-20 November 24, 2020
Arsenic	0.31	0.41	<1.0
Cobalt	0.57	0.39	1.6
Copper	3.02	0.66	17.1
Nickel	1.35	0.88	9.5
Sodium	6870	8450	7340
Thallium	< 0.01	< 0.01	0.11
Zinc	1.7	1.3	26

Parameter	December 4, 2020	December 4, 2020	December 4, 2020
Arsenic	0.22	0.36	0.46
Cobalt	0.41	0.43	0.64
Copper	0.53	0.70	10.8
Nickel	0.95	1.13	4.94
Sodium	3680	9100	4800
Thallium	< 0.01	0.015	0.066
Zinc	<1.0	4.3	18.7

Notes: All concentrations are in μ g/L.

Green font indicates concentration lower or equal to the background concentration.

Red font indicates concentration higher than background concentration.

The listed concentrations are from Table 4.1 in the HIA Report.



2.2 Adequacy of the Past, the Current and the Proposed Environmental Monitoring

2.2.1 Past/Current Environmental Monitoring

The environmental monitoring activities implemented by Badger on the subject site from January 2017 to end of November 2020, are summarized and discussed in Section 2.1, above.

In summary, it is XCG's opinion that the environmental monitoring activities undertaken by Badger on the subject site are not adequate to detect and/or monitor the potential and actual impacts to the soil, surface water, and groundwater on the subject property.

2.2.2 Proposed Environmental Monitoring

According to the information provided in the D&O Report, in the future (it is assumed after Badger receives all the required regulatory permits and licenses), stockpiles of imported, (dried) soil, will be sampled at a frequency as provided in Ontario Regulation (O. Reg.) 153/04 Schedule E, Table 2 Minimum Stockpile Sampling Frequency. This implies that, based on the anticipated stockpile volume being approximately 100 cubic metres, a minimum three samples will be collected from each stockpile in accordance with the sampling protocols described in O. Reg. 153/04. The stockpile soil samples will reportedly be analyzed for SAR, electrical conductivity (EC), O. Reg. 153/04 metals, VOCs, PHCs (F1 through F4), and unspecified "any other contaminant of potential concern (COPC)".

There is no indication that quality of in-situ soil in the areas affected by Badger's on-site operations will be monitored to determine if the imported liquid soil resulted in impacts to the on-site soils.

Based on the information in the Drinking Water Report, the groundwater quality monitoring program will include quarterly sampling of the monitoring wells MW1-20, MW2-20, and MW3-20, and once per year sampling of the two water supply wells EXI and A. Groundwater quality will be monitored for SVOCs, PAHs, VOCs, TPH, and metals.

According to the Drinking Water Report, the above groundwater monitoring program will start after Badger obtains the final environmental compliance approval (ECA) for the on-site operations. This implies that currently the on-site groundwater quality is not monitored.

The surface water quality monitoring program will include collection of one sample from the SWM pond at a minimum on a monthly basis. The parameters for which the SWM pond samples will be analyzed, was not indicated; however, based on the MOE's comments, it appears that the SWM pond samples will be analyzed for the same parameters as groundwater (i.e., for for SVOCs, PAHs, VOCs, TPH, and metals).

Reportedly, after two years of monitoring, a monitoring report will be prepared by a Qualified Professional which will provide a review of the data, the soil stockpiling data, an assessment of the potential for environmental impact and an opinion on whether continued monitoring is necessary. As noted above, soil and surface water sampling is currently ongoing, and the groundwater monitoring program will start upon issuance of final ECA.

It is XCG's opinion that the proposed environmental monitoring, if implemented, will not be adequate to detect and/or monitor the potential and actual impacts to the soil, surface water, and groundwater on the subject property. This is because the proposed monitoring is almost



the same to the monitoring activities completed on the subject up to end of November 2020. Below are the key points to support XCG's opinion:

- There is no plan to sample liquid soil brought to the site before it is discharged onto the site surface;
- Each load of imported soil will be sampled, only after it is processed (mixed with other soil) and dried on-site, and consolidated in 100-cubic metre stockpiles, which can be days to over a week after a soil load has been delivered to the site;
- There is no plan to sample surface water draining from the imported soil before it discharges to the site and/or mixes with the groundwater in the SWM pond;
- There is no plan to add additional monitoring wells down-gradient from on-site soil processing and stockpiling area and/or around the SWM pond;
- The proposed frequency of sampling/monitoring activities during the first two years following obtaining the required regulatory approvals is similar to that completed in the past; and
- After the first two years, the currently proposed monitoring program will be reviewed to determine if any monitoring is required at all.

2.3 Significant Discrepancies Between the information and Data in Reviewed Documents and the Information Provided by GHD During the November 30, 2022, Public Information Meeting

During the November 30, 2022, Public Information Meeting (Meeting), GHD has made several statements related to the sampling of the liquid soil brought to the site, including:

Every load of soil delivered to the site by Badger is sampled.

XCG Comment

According to the D&O Report, only the dried soil, stockpiled in 100-cubic metre piles, are sampled. Reportedly, one sample is collected from each 100-cubic metre soil stockpile. There is no information in the D&O Report, or other reports listed in Section 1, on the capacity/size of the vacuum trucks used by Badger. However, a typical/common capacity of hydrovac trucks is between 3 and 5 cubic metres for standard capacity trucks, and between 6 and 12 cubic metres for large and extra-large capacity trucks. Since according to the D&O Report, only up to 40 percent of each load is soil/solids, each 100 cubic metre stockpile of dried soil can include between 83 loads (based on a 3-cubic metre capacity truck) and 21 loads (based on a 12-cubic metre capacity truck). Furthermore, according to the D&O Report, the soil processing area has capacity of 2,500 cubic metres, which theoretically means that up to 2,083 loads (based on a 3-cubic metre capacity truck) and 521 loads (based on a 12-cubic metre capacity truck) could be processed on-site at any time, before the dried soil is placed in the 100 cubic metre stockpiles and a single sample collected for chemical analyses.

Every load of soil that comes onto the site is tested in accordance with all current practices, procedures and analytical methods.



XCG Comment

As discussed in Section 2.2 above, "currently" only one soil sample is collected from each 100 cubic metre stockpile. O. Reg. 153/04, Schedule E, Table 2 Minimum Stockpile Sampling Frequency specifies that for stockpiles less than 130 cubic metres, a minimum three soil samples must be collected in accordance with the sampling protocols described in O. Reg. 153/04. It is currently proposed, that in the future the on-site stockpiles will be sampled in accordance with O. Reg. 153/04.

Soil brought to the subject site is tested daily.

XCG Comment

As discussed in Section 2.1 above, the stockpiled soil was reportedly sampled monthly from January 2017 to July 2020, and once a week from July 2020 to the end of November 2020.

Furthermore, according to the CPI Report, during 2021 and 2022, no soil was used for pit rehabilitation. There is no information in the reviewed reports regarding the final use of the soil brought to the site by Badger during 2021 and 2022.

All soil brought to the site is sampled for all parameters.

XCG Comment

As discussed in Section 2.1 above, soil samples collected between January 2017 and April 2020 were not sampled for SAR, PAHs, and PHCs. It also noted in Section 2.1., soil samples collected after April 2020 occasionally were reported to have concentrations of SAR, PAHs, and PHCs above the Table 1 SCS. Given that the most source sites for soil brought to the site are located adjacent to roads, sidewalks, and other areas used/associated vehicular traffic and/or using salt for de-icing/winter maintenance purposes, all soil delivered to the site should be sampled SAR (and EC), PAHs, and PHCs.

Badger obtains most of the water for its operations from the on-site well. The daily volume of water pumped from the on-site well is below the threshold that would trigger permit requirement. If extra water is needed, Badger uses municipal, potable water.

XCG Comment

Based on the current regulations, up to 50,000 litres of groundwater can be taken daily without a need for obtaining a Ministry Permit to Take Water (PTTW). As mentioned above, up to 150 tons or 135,000 (not 35,000, as stated by GHD) litres per day of water is discharged by Badger to the site surface as part of their on-site operations. If less than 50,000 litres of water is obtained from the on-site well, then up to 85,000 litres per day of water may come from the municipal potable water supplies. If less than 50,000 litres of water comes from the on-site well, then contrary to the information provided during the meeting, it appears that most of the water used by Badger is obtained from the municipal supplies.

Furthermore, the municipal potable water is treated. The water treatment, amongst other steps, includes chlorination. When treated (chlorinated) water mixes with the naturally occurring organics in the subsurface (soil, groundwater), chlorine in the treated water reacts with these naturally-occurring organics resulting in the creation of trihalomethanes (THMs), for example, chloroform, bromoform. THMs are environmental pollutants, and many are considered carcinogenic.



3. SUGGESTED NEXT STEPS

As part of this project, the Township has requested that XCG provides guidance/suggestions on how the Township could address the significant issues identified by XCG during this review.

The most significant issues identified by XCG during this review include:

- 1. The potential for the liquid soil brought to the site by Badger to result in impacts to the onsite soil, surface water and groundwater quality.
- 2. The deficiencies in the past, current, and the proposed monitoring programs associated with the on-site operations conducted by Badger.

The following steps/actions could be taken in order to minimize the potential for on-site impacts from the liquid soil brought to the site:

- Every load of liquid soil brought to the site is sampled (soil and water) and the results reviewed to determine compliance prior to processing/dewatering and stockpiling of the soil on site.
- Constructing water-tight area(s)/cell(s) on-site for the liquid soil brought to the site. Once the liquid soil is placed in the cell, it can be sampled, and once it is determined that the soil and the water meet the Table 1 SCS or other applicable regulatory requirement, the soil can be process/dewatered on-site prior to use as backfill on the adjacent pit. Soil and or water not meeting the applicable quality criteria should be removed from the site for off-site processing or disposal at a Ministry-licensed facility.
- Liquid soil brought to the site could be processed/solidified using suitable amendments in the designated water-tight area(s)/cell(s). Once the soil is dry enough to be stockpiled, the stockpiled soil can be relocated and sampled in accordance with the applicable regulatory requirements.
- To minimize the potential for impacting the on-site groundwater with THM's, Badger should obtain PTTW and only use water from the on-site well for hydrovaccing operations.

In order to monitor the soil, surface water, and groundwater quality for potential or actual impacts related to Badger's on-site operations, XCG recommends the following amendments to the current/proposed monitoring program:

- On an annual basis collect in-situ soil samples from the area(s) of the site affected by soil processing and stockpiling activities to determine if the on-site operations resulted in impacts to the on-site soil. Impacted soil should be removed from the site for off-site processing or disposal;
- Require every load of liquid soil brought to the site to be sampled (soil and water) prior to the liquid soil being discharged to the ground surface for processing;
- Water draining from the soil brought to the site should be sampled before it discharges to the on-site SWM pond;
- Install additional monitoring wells along the south and west (down-gradient) subject property boundaries, including two monitoring wells between the existing wells MW1-20



and MW2-20, and one well between MW1-20 and the water supply well EXI, and three monitoring wells around the SWM pond;

- During the first year surface and groundwater samples should be tested on a monthly basis. Depending on the analytical results, the sampling frequency could be reduced, for example to once every two months or quarterly. The frequency and the scope of the ongoing monitoring program should be reviewed on an annual basis; and
- During the first year of monitoring, in addition to the currently proposed list of analytical parameters, the surface water and groundwater should also be sampled for PFAS.

4. LIMITATIONS

The scope of this letter is limited to the matters expressly covered. This letter is prepared for the sole benefit of the Corporation of the Township of Puslinch and may not be relied upon by any other person or entity without the written authorization of XCG Consulting Limited. Any use or reuse of this document by parties other than those listed above is at the sole risk of those parties.

The opinions provided herein were based on the information and data generated by others, as summarized in the reviewed reports. Conditions between and beyond these locations may become apparent during future investigations or on-site work, which were not detected or anticipated at the time of the reviewed reports were completed. The reviewed information and data were assumed to be accurate, unless otherwise stated, and was not independently verified by XCG. As such, XCG cannot be held responsible for environmental conditions at the subject site that were not apparent from the reviewed information and data or due to errors and/or omissions in the information and data reviewed.

5. CLOSURE

We trust this information is sufficient for your use at this time. If you require additional information, please do not hesitate to contact the undersigned.

Yours very truly,

XCG CONSULTING LIMITED

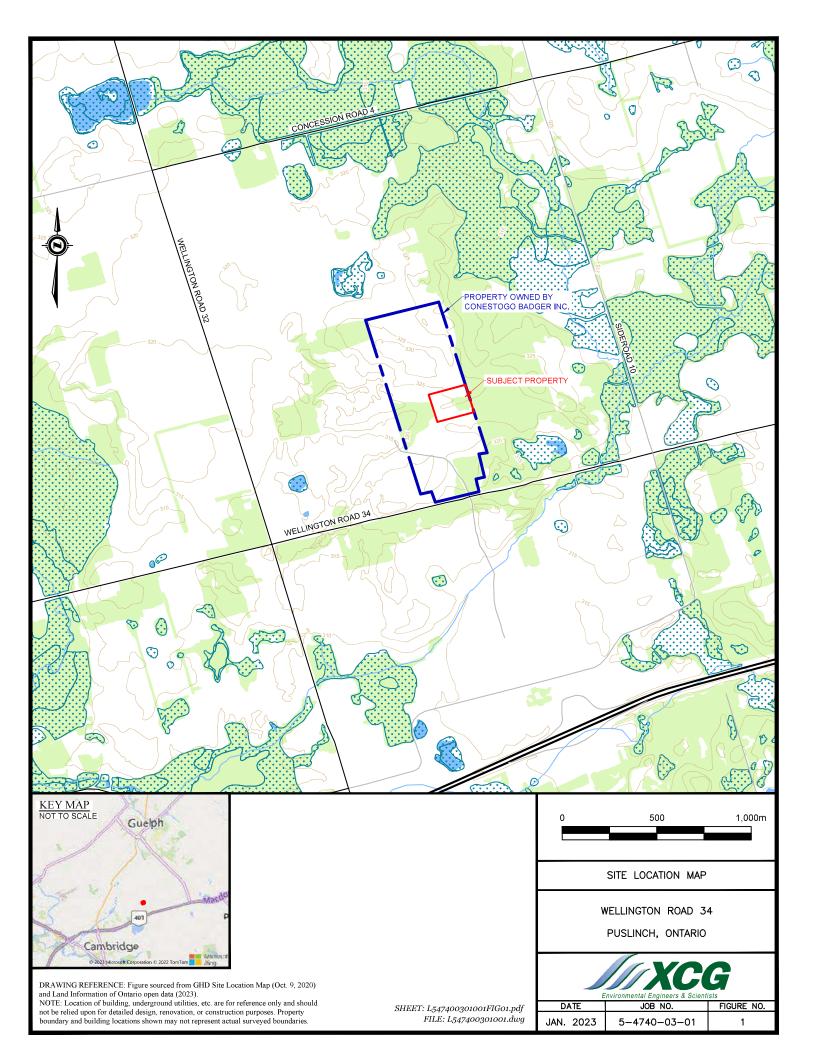
Thomas Kolodziej, B.A.Sc., P.Eng., QP_{ESA} Senior Project Manager

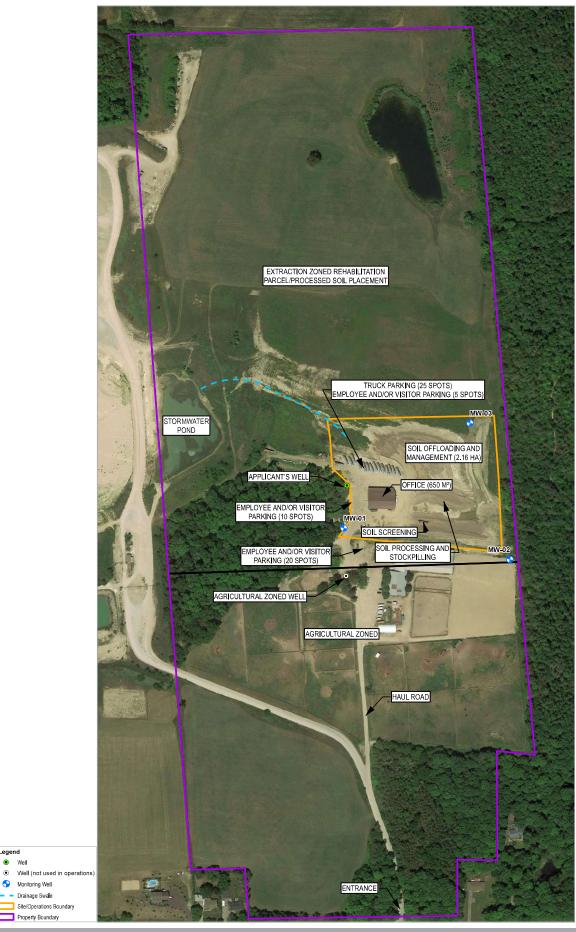
3 8

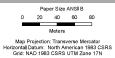
Attachments: Figures



FIGURES









2374868 ONTARIO INC. 6678 WELLINGTON RD 34 TOWNSHIP OF PUSLINCH, ON

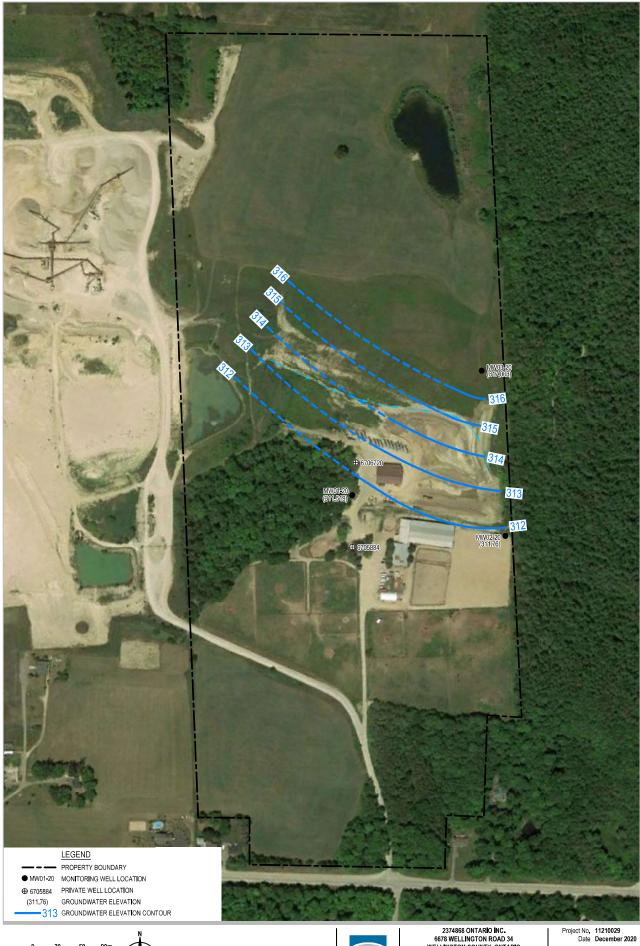
Project No. 11210029

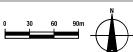
Revision No.
Date Aug 26, 2022

Legend Well

Monitoring Well

 Drainage Swale Site/Operations Boundary Property Boundary







2374868 ONTAR**IO INC.** 6678 WELLINGTON ROAD 34 WELLINGTON COUNTY, ONTAR**I**O



PLANNING REPORT for the TOWNSHIP OF PUSLINCH

Prepared by the County of Wellington Planning and Development Department

DATE: February 8th, 2023

TO: Glenn Schwendinger, CAO

Township of Puslinch

FROM: Zach Prince, Senior Planner

County of Wellington

SUBJECT: INFORMATION MEMO – Summary of Issues

Zoning By-law Amendment Application D14/BAD

Part of Lot 8, Concession 3 6678 Wellington Road 34

SUMMARY

This information memo is to provide staff with a summary of the key issues that remain regarding a proposed Zoning By-law amendment application at 6678 Wellington Road 34. This report is in addition to the public meeting report provided to council on November 30th, 2022.

It is recommended that this Information Memo regarding the proposed Zoning By-law Amendment D14/BAD be considered by Township staff and Township Council.

SUMMARY OF ISSUES

This file has been through a detailed review by planning staff and the Township's various consultants. A public meeting was also held on November 30th, 2022. Included below is a summary of key items that will need to be addressed and considered.

Outstanding Comments from Consultants and the Public

- Groundwater contamination and appropriate soils for the proposed use.
 - The Township's hydrogeologist has raised concerns about the suitability of the soils and the appropriateness of the proposed use in this location. Resident's have expressed concerns regarding the potential impacts to existing wells in the area.
 - The applicant has indicated that an engineered clay lining would be constructed for storing and handling of soils and water run off as well as on going monitoring.
 - These concerns have not been fully addressed and staff will continue to work with the applicant and consultants to determine if there is an acceptable solution.
- Size of use and meeting 'small scale' industrial requirements
 - Concerns were raised regarding the existing truck traffic to and from the site. Additionally, concerns were raised regarding the ability of the use to meet the County Official Plan's requirements for small scale industrial uses in the Secondary Agricultural Area.
 - Discussion with the applicant is on going regarding the number of trucks and employees that are currently on site. A future zoning by-law amendment would limit the number of trucks, area and building area that the use could operate in.

Existing Aggregate License & Local Permits

The property is a licensed as an aggregate pit - Wellington Pit #5 operated by Capital Paving Inc. (License number 20085). The applicant has indicated that the section of the pit that is subject of this application is in the rehabilitation phase of the pit's lifecycle; however, it is noted that Capital Paving has not provided comments on the proposed application.

The Township has received responses from Capital Paving regarding fill importation for the purposes of rehabilitation and received their completed Compliance Assessment Reports (CARs). Based on the submitted CARs no fill importation for pit rehabilitation was completed in 2021 or 2022.

Further, The Township does not have building permit information for the office building; however, the applicant has indicated the size is approximately 650m². Based on aerial photos it appears that a dwelling and other structure may have been removed since the initial aggregate pit site plan in 2003. The existing office building does not appear on the existing aggregate pit site plan.

Zoning By-law Amendment Applicability on Licensed Pits

Due to the existing aggregate license on the property the application is subject to the Aggregate Resources Act. The Act restricts the types of by-laws that municipalities can pass related to the existing operations. Further, the uses on a site plan approved by the Ministry supersede municipal by-laws and Official Plans. Staff's opinion is that the Vacuum Truck business and the storing and handling of liquid soil uses are not present on the approved site plan and are therefore not permitted under the ARA or in the Township or County Official Plans.

In addition, staff's opinion is that a zoning by-law amendment cannot be passed by a Municipality on an active pit license and would have no force or effect, therefore the pit license must be removed from the property in advance. A legal opinion to the contrary has not been provided.

On-Site And Excess Soil Management (O.Reg 406/19) – Permissions for Liquid Soil

The Province proposed changes to the handling of excess soils in 2022 and the proposed changes are now in effect as of January 1st, 2023. Included in some of the recent changes were updates to the *Rules for Soil Management and Excess Soil Quality Standards (December 23, 2022)*. The "Rules of Soil Management" (Soil Rules) are intended to be read together with the regulation (406/19). Included in these recent changes are the handling of liquid soils and their use on aggregate sites.

Planning staff have requested the applicant provide an update based on the changes that are now in force and effect, which would include confirmation if liquid soil is permitted to be utilized for rehabilitation of a pit.

Additional Items for consideration

The applicants will also need environmental compliance approvals (ECA) from the Ministry of Environment, Conservation and Parks (MOECP) and that an ECA will be required for: (i) air and noise and also (ii) industrial sewage works for the use itself. It is further understood that the applicant has withdrawn its ECA applications from the MOECP so that the local approval process can be undertaken first.

NEXT STEPS

Township staff have requested that the applicant submit additional information, including in response to the comments received at the public meeting. Upon review of the additional information, planning staff will prepare a recommendation report for council's consideration regarding the proposed use.

Respectfully submitted,

County of Wellington Planning and Development Department

Zagh Prince MCIP RPP, Senior Planner



REPORT ADM-2023-007

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Municipal Clerk

PRESENTED BY: Courtenay Hoytfox, Municipal Clerk

MEETING DATE: February 8, 2023

SUBJECT: Fox Run Phase 2 Condominium Plan Revision

File: D07/FOX

RECOMMENDATION

That Report ADM-2023-007 entitled Fox Run Phase 2 Condominium Plan Revision be received; and

That Council direct staff to proceed with the peer review of the requested revision to consolidate lots 9 and 10 as outlined in this report; and

That Council direct staff to report back on the outcome of the peer review and provide Council with a recommendation regarding the requested revision and any required amendments to the Condominium Agreement.

Purpose

The purpose of this report is to provide Council with the information relating to the request to consolidate lots 9 and 10 in the Fox Run Phase 2 Condominium.

Background

A request has been received to consolidate lots 9 and 10 in the Fox Run Phase 2 Condominium. The Township has been advised by County Planning staff that this process is not required to follow a typical planning process and is completed through the Land Registry Office. As such there is no formal consultation requirements.

Township staff have reviewed the request and the existing condominium agreement in order to determine recommended next steps. Below is a list of items staff have flagged for further review:

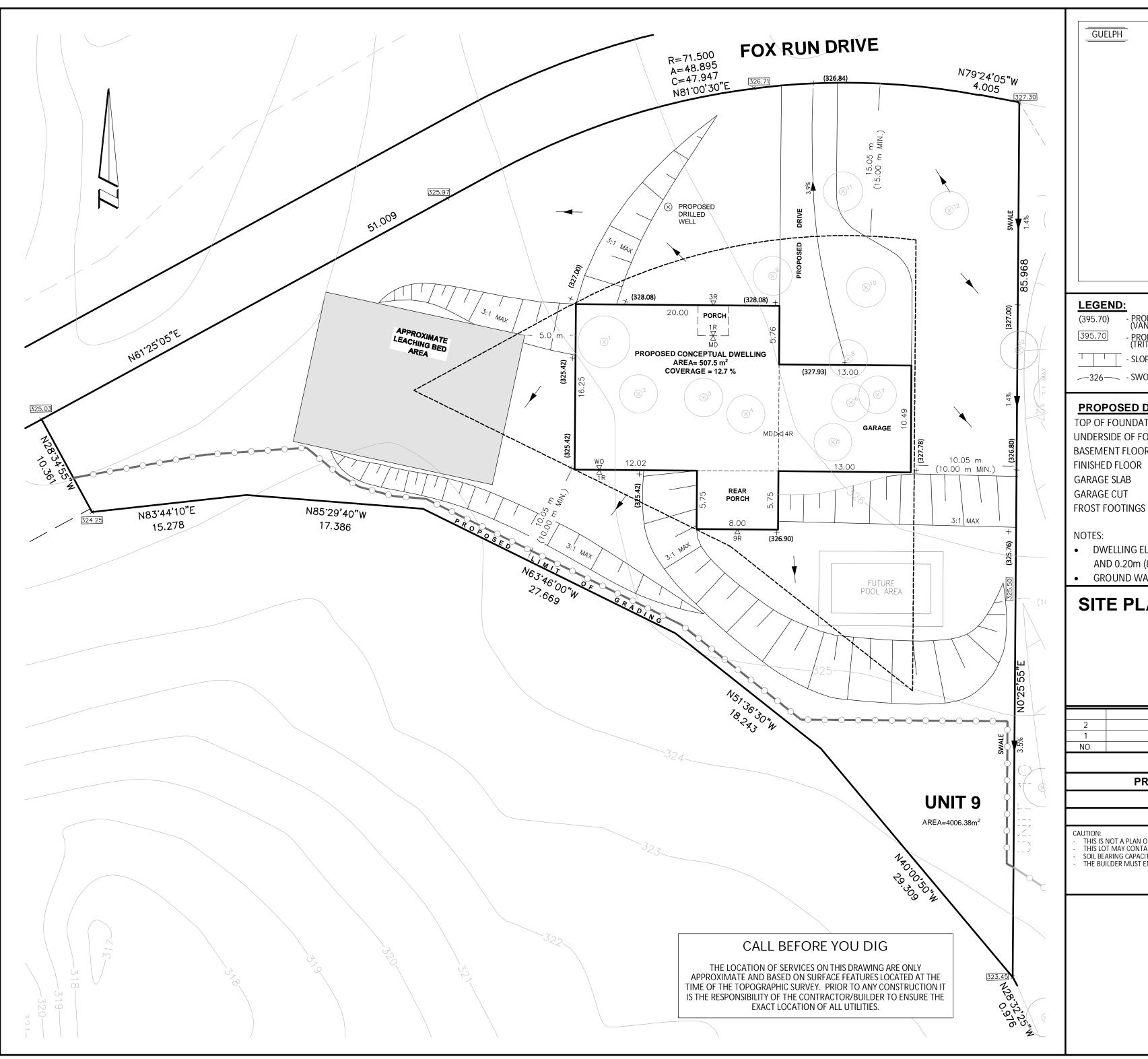
- The amending agreement should include the final plan approved by the Land Registry Office; the existing agreement does not specifically set out the individual lots (only the overall description of the lands as described in Schedule "A" to the agreement), and Schedule "B" describes the draft condominium plan (not the final plan approved by the Land Registry Office), and does not show the actual draft condo plan referenced in Schedule "B"; and
- The current Letter of Credit was reduced in 2019 to \$100,642.75; the Township engineer should be requested to comment on whether this amount is sufficient to incorporate the proposed amendments to the plan; and
- The amending agreement should have an additional preamble speaking to the proposed combined lot as well as a paragraph in the agreement that is more descriptive; and
- Schedule "H" to the agreement lists approved engineering drawings and specifications; therefore this schedule would need to be amended; and
- The agreement includes a paragraph that states, in part that "the Owner agrees to pay to the Township all reasonable costs incurred by the Township in connection with the development of this Condominium Development which, without limiting the generality of the foregoing, shall Include all expenses of the Township heretofore and hereinafter incurred for legal, engineering, surveying, planning and inspection services, extra Council meetings, if any, and employees' extra time, if any." An additional paragraph should be considered that specifically mentions third party cost recovery for the Township's review and includes any future inspections of the lot in the amending agreement; and
- The overall drainage and stormwater run-off will need to approved to ensure that the flow of the new grading plan on the combined lots (9&10) matches what was previously approved; and
- Updated tree preservation plans per lot may be required depending on the final proposed location of the structures and the servicing requirements (sewage system); and
- The current agreement requires the owner's consulting engineer, among other things, to provide the Township with a certificate for each unit for which a building permit application is submitted certifying that the proposed construction is in conformity with the Grading Control Plan. This would most likely support the requirement for a new Grading Control Plan; and
- Township consultants should be circulated on the proposed revisions, including the Township solicitor, Engineers, Ecologist, and Hydrogeologist. Township staff should also be circulated.

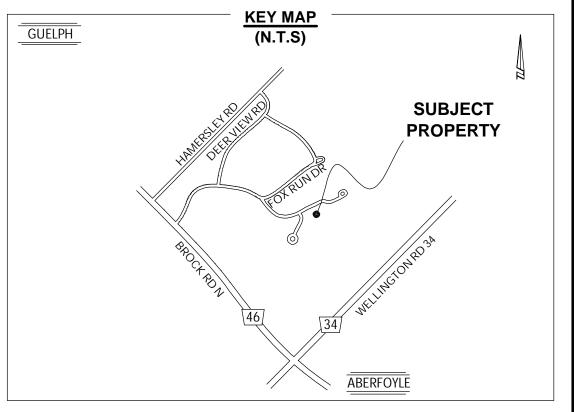
Financial Implications

Courtenay Hoytfox,	Glenn Schwendinger	
Respectfully submitted,	Reviewed by:	
Schedule "C" Existing Condominium Agreement		
Schedule "B" Lot 10 Survey Sketch		
Schedule "A" Lot 9 Survey Sketch		
<u>Attachments</u>		
None		
Engagement Opportunities		
None		
Applicable Legislation and Requirements		
As detailed throughout the report		

CAO

Municipal Clerk





LEGEND:

395.70

- SLOPE

___326____ - SWOOP TOOL CONTOURS

- - DIRECTION OF FLOW ---- - ZONING ENVELOPE - PROPOSED LIMIT OF GRADING TREE WITH MTPZ (AS PER ABOUD AND ASSOCIATES INC.)

PROPOSED DWELLING:

TOP OF FOUNDATION = (328.37)UNDERSIDE OF FOOTING = (325.27) **BASEMENT FLOOR** = (325.57)= (328.83)FINISHED FLOOR = (328.03)

GARAGE SLAB GARAGE CUT

ZONING: (ER2-6) **ESTATE RESIDENTIAL 2**

FRONT YARD - 15 m MIN. SIDE YARD - 10 m MIN. REAR YARD - 10 m MIN. COVERAGE - 30% MAX.

NOTES:

- DWELLING ELEVATIONS BASED ON A 2.90m (9'-6") FOUNDATION WALL HEIGHT AND 0.20m (8") THICK FOOTINGS.
- GROUND WATER ELEVATION = 324.20

= (0.34)

= (324.20 MIN.)

SITE PLAN FOR:

PROPOSED RESIDENCE

UNIT 9 WELLINGTON VACANT LAND CONDOMINIUM No. 246 TOWNSHIP OF PUSLINCH COUNTY OF WELLINGTON

2	LIMIT OF GRADING	WV	MARCH 09, 2020
1	LIMIT OF GRADING / TREES	WV	MARCH 02, 2020
NO.	REVISION	BY	DATE

DRAWING REVISION SCHEDULE

PREPARED FOR: TIMBERWORX CUSTOM HOMES

PROJECT No. 21059-12

DRAWING SCALE 1:250

- THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES.

 THIS LOT MAY CONTAIN STRUCTURAL OR NON-STRUCTURAL FILL PLACED DURING SUBDIVISION GRADING OPERATIONS.

 SOIL BEARING CAPACITY SHOULD BE VERIFIED AT THE TIME OF CONSTRUCTION.
- THE BUILDER MUST ENSURE A MINIMUM OF 1.22m OF EARTH COVER OVER THE FOOTINGS FOR FROST PROTECTION.



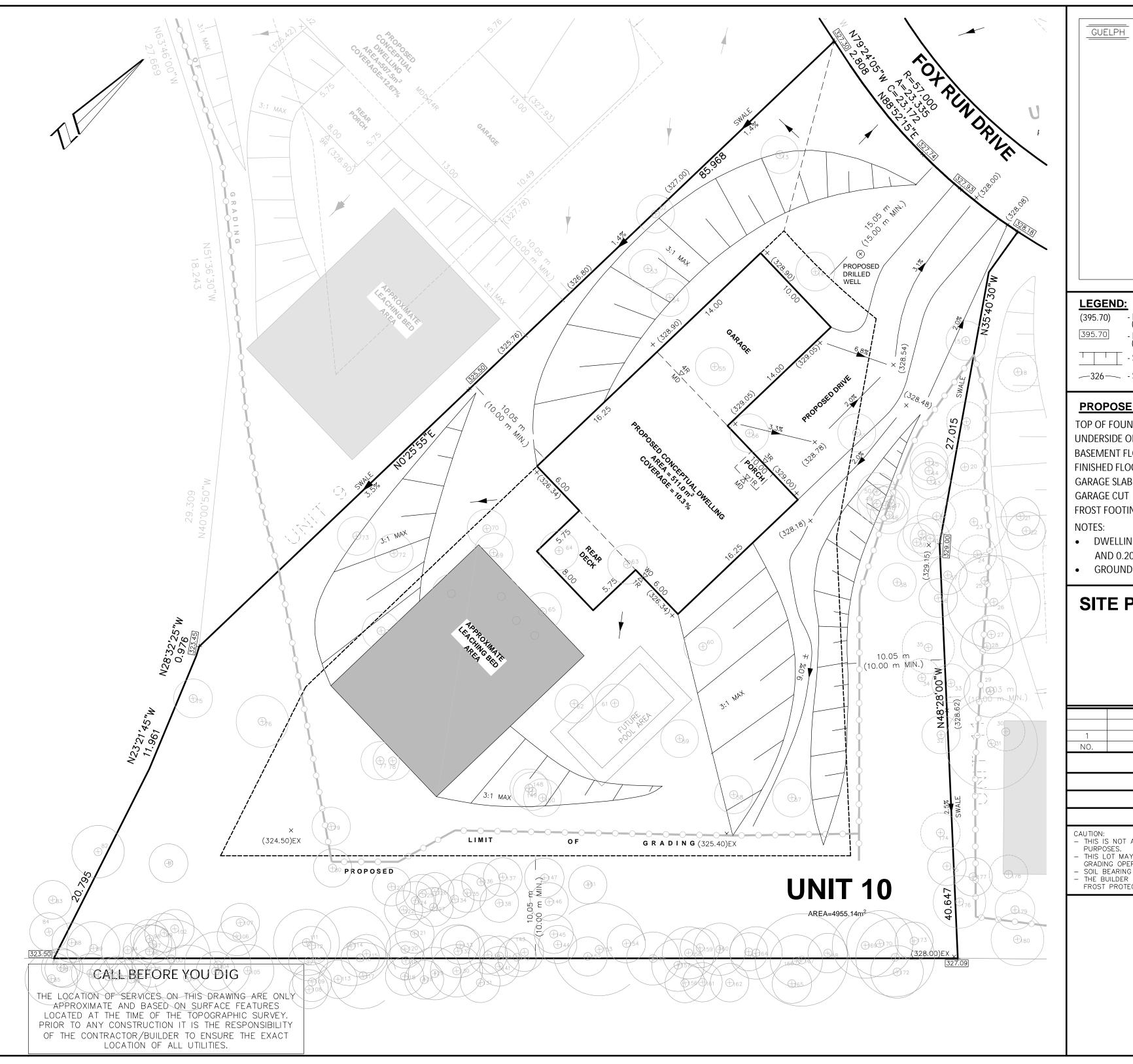


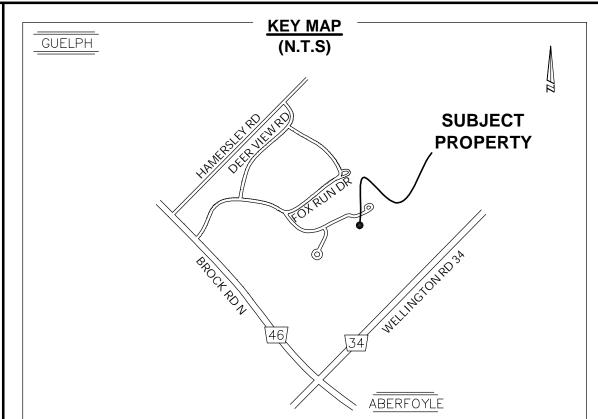
Orangeville Ph: 519-940-4110 Kitchener/Waterloo Ph: 519-742-8371 Guelph Ph: 519-821-2763 info@vanharten.com www.vanharten.com

CHECKED BY: JMD PROJECT No. 21059-12

Mar 9, 2020-3:18:05 PM

G:\000BASEPLANS\WVLCP 246 - Fox Run 2\ACAD\UNIT 9.dwg





LEGEND:

PROPOSED ELEVATION (VAN HARTEN)

 - DIRECTION OF FLOW PROPOSED ELEVATION (TRITON) ---- - ZONING ENVELOPE

- PROPOSED LIMIT OF GRADING - SLOPE

- TREE WITH MTPZ (AS PER ABOUD AND ASSOCIATES INC.) ─326─ - SWOOP TOOL CONTOURS

ZONING: (ER2-6)

SIDE YARD

REAR YARD

ESTATE RESIDENTIAL 2

FRONT YARD - 15 m MIN

COVERAGE - 30% MAX.

- 10 m MIN.

- 10 m MIN.

PROPOSED DWELLING:

TOP OF FOUNDATION = (329.29)UNDERSIDE OF FOOTING = (326.19) BASEMENT FLOOR = (326.49)

FINISHED FLOOR = (329.75)**GARAGE SLAB** = (329.05)

= (0.24)FROST FOOTINGS = (325.15)MIN.

- DWELLING ELEVATIONS BASED ON A 2.90m (9'-6") FOUNDATION WALL HEIGHT AND 0.20m (8") THICK FOOTINGS.
- GROUND WATER ELEVATION = 324.50

SITE PLAN FOR:

PROPOSED RESIDENCE

UNIT 10 WELLINGTON VACANT LAND CONDOMINIUM No. 246 TOWNSHIP OF PUSLINCH COUNTY OF WELLINGTON

1	LIMIT OF GRADING / TREES	WV	MARCH 02, 2020
Ο.	REVISION	BY	DATE

DRAWING REVISION SCHEDULE

PREPARED FOR: TIMBERWORX CUSTOM HOMES

PROJECT No. 21059-12

DRAWING SCALE 1:250

- THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE
- THIS LOT MAY CONTAIN STRUCTURAL OR NON-STRUCTURAL FILL PLACED DURING SUBDIVISION
- GRADING OPERATIONS.

 SOIL BEARING CAPACITY SHOULD BE VERIFIED AT THE TIME OF CONSTRUCTION.

 THE BUILDER MUST ENSURE A MINIMUM OF 1.22m OF EARTH COVER OVER THE FOOTINGS FOR FROST PROTECTION.



Orangeville Ph: 5A19-940-4110 Guelph Kitchener Ph: 519-742-8371 Ph: 519-821-2763

www.vanharten.com info@vanharten.com DRAWN BY: KC CHECKED BY: JMD PROJECT No. 21059-12

Mar 2, 2020-3:54:51 PM G:\000BASEPLANS\WVLCP 246 - Fox Run 2\ACAD\UNIT 10.dwg LRO#61 Notice

Receipted as WC517404 on 2017 09 20

The applicant(s) hereby applies to the Land Registrar.

yyyy mm dd

Page 1 of 30

at 14:01

Properties

PIN

71197 - 0411 LT

Description

PT LOT 19, CONCESSION 8 TWP OF PUSLINCH PTS 1, 2 & 3, 61R20083; S/T EASEMENT OVER PT 3, 61R20083 IN FAVOUR OF ONTARIO HYDRO AS IN ROS617297; S/T EASEMENT OVER PT 3, 61R20083 IN FAVOUR OF BELL CANADA AS IN ROS639490; SUBJECT TO AN EASEMENT IN GROSS OVER PT LOT 19, CON 8 DES AS PTS 2 & 3, 61R20083 AS IN WC330699; SUBJECT TO AN EASEMENT IN GROSS OVER PARTS 1, 2, 3, 61R-20083 AS IN WC494598; SUBJECT TO AN EASEMENT AS IN WC494612; SUBJECT TO AN EASEMENT IN GROSS OVER PARTS

1, 2, 3, 61R-20083 AS IN WC495121; TOWNSHIP OF PUSLINCH

Address

PUSLINCH

Consideration

Consideration

\$ 0.00

Applicant(s)

The notice is based on or affects a valid and existing estate, right, interest or equity in land

Name

SLOOT CONSTRUCTION LTD.

Address for Service

661 Watson Road South Puslinch, ON N0B 2J0

I, John Sloot, President, have the authority to bind the corporation.

This document is not authorized under Power of Attorney by this party,

Party To(s)

Capacity

Share

Name

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

Address for Service

R.R. #3, 7404 Wellington Road 34

Guelph, Ontario N1H 6H9

This document is being authorized by a municipal corporation Dennis Lever, Mayor and I Karen Landry, Clerk of The Corporation of the Township of Puslinch

This document is not authorized under Power of Attorney by this party.

Statements

This notice is pursuant to Section 71 of the Land Titles Act.

This notice is for an indeterminate period

Schedule: See Schedules

Signed By

Elizabeth Siobhan Marshall

10 Northumberland St.

N0B 1E0

acting for Applicant(s) Signed

2017 09 20

Tel

519-632-1327

Fax

519-632-1328

I have the authority to sign and register the document on behalf of the Applicant(s).

Submitted By

ROBSON CARPENTER LLP

10 Northumberland St.

2017 09 20

Ayr N0B 1E0

Tel

519-632-1327

Fax

519-632-1328

LRO # 61 Notice

Receipted as WC517404 on 2017 09 20

yyyy mm dd

at 14:01 Page 2 of 30

The applicant(s) hereby applies to the Land Registrar.

Fees/Taxes/Payment

Statutory Registration Fee

\$63.35

Total Paid

\$63.35

File Number

Applicant Client File Number ?

16020

Party To Client File Number :

133266-RTH

VACANT LAND CONDOMINIUM AGREEMENT

between

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

and

SLOOT CONSTRUCTION LTD.

INDEX OF KEY CLAUSES

	INDEX OF RET CLAUSES	Page
	ORDER OF PROCEDURE	
1. 2.	APPROVAL OF PLAN FOR REGISTRATION	
3.	REGISTRATION OF PLAN	
4.	REGISTRATION OF PEAN REGISTRATION OF AGREEMENT	
5.	ATTACHED SCHEDULES	
5. 6.	IMPLEMENTATION OF THE CONDITIONS OF DRAFT PLAN APPROVAL	2
7.	TOWNSHIP'S EXPENSES	
8.	THE OWNER'S CONSULTING ENGINEER	
9.	THE OWNER'S SURVEYOR	
10.	THE TOWNSHIP'S CONSULTING ENGINEER	
11.	WORKS TO BE CONSTRUCTED	
12.	NOTIFICATION OF COMMENCEMENT	
13.	VOIDING AGREEMENT	3
14.	OWNER'S EXPENSE	,3
15.	SECURITIES	3
16.	CONSTRUCTION AND PROGRESS OF SERVICES	4
17.	CONTRACTOR	
18.	CERTIFICATION OF SERVICES BY OWNER	
19.	SUPPLY OF SERVICES	
20.	OWNER'S LIABILITIES.	
21.	REPAIRS	
22.	DUST CONTROL	
23.	DRAINAGE	
24.	LAND FOR MUNICIPAL PURPOSES	
25.	CONSTRUCTION REFUSE	
26.	REQUIREMENTS FOR BUILDING PERMITS	
27,	MODEL HOMESREQUIREMENTS FOR OCCUPANCY	
28, 29.	EASEMENTS	
30.	SPECIAL PROVISIONS.	
31.	REGISTRATION AND RELEASE	
32.	NOTICES	
33.	ASSIGNMENT	
34.	SEVERANCE OF ULTRA VIRES TERMS	
35.	COUNTERPARTS	
	SCHEDULES	
Α	DESCRIPTION OF LANDS BEING SUBDIVIDED	
В	PLAN OF VACANT LAND CONDOMINIUM	
С	LIST OF SERVICES TO BE CONSTRUCTED AND UTILITIES TO BE PROCOMMON ELEMENTS	OVIDED ON THE
D	ESTIMATED COSTS	
E	LANDS AND EASEMENTS TO BE CONVEYED	
F	MONIES PAYABLE TO THE TOWNSHIP	
G	MONIES PAYABLE BY THE TOWNSHIP TO OWNER	
	LICT OF ADDROVED ENCANEEDING DRAWINGS AND SPECIFICATIONS	

CONDITIONS OF DRAFT PLAN APPROVAL

TOWNSHIP OF PUSLINCH

VACANT LAND CONDOMINIUM AGREEMENT

THIS AGREEMENT made in quadruplicate, the <u>20</u> day of <u>2016</u>, 2016

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

hereinafter called the "Township" of the FIRST PART

- and -

SLOOT CONSTRUCTION LTD.

a corporation formed under the laws of the Province of Ontario, hereinafter called the "Owner" of the SECOND PART

WHEREAS the Owner warrants that it is the Owner of the lands and premises described in Schedule "A" which is annexed to this Agreement (hereinafter referred to as the Condominium Development);

NOW THEREFORE THIS INDENTURE WITNESSETH that in consideration of other good and valuable consideration and the sum of TWO DOLLAR (2.00) now paid by each of the other Parties hereto to each of the other Parties hereto (the receipt whereof is hereby acknowledged) the Parties hereto hereby covenant, promise and agree with the other as follows:

1. ORDER OF PROCEDURE

Before the Township advises the County of Wellington that its conditions have been met, the Owner shall:

- (a) Pay in full all outstanding taxes including drainage, local improvement and special rates and charges.
- (b) Convey all easements required by the Township, as outlined in Schedule "E", free of charge, free and clear of all encumbrances except for registered mortgages, provided the mortgagee(s) of each such mortgage has provided such mortgagee's consent in form acceptable to the Township's lawyer, leaving the date of each easement and the Condominium Plan number and the description blank and authorizing the Township Solicitor to insert such date and Condominium Plan number when the plan is registered.
- (c) Provide an Engineer's Report satisfactory to the Township stating the means whereby stormwater from the Condominium Development will be carried to sufficient outlet. Where stormwater must be conducted through, or deposited upon, private lands before it reaches a sufficient outlet, the Owner shall obtain and convey to the Township the necessary easements and agreements, as set out in 1 (b).
- (d) Complete all final plans and specifications required by the Township for services to be constructed in accordance with this Agreement.
- (e) Deposit with the Township evidence that it has entered into an Agreement or Agreements, which are satisfactory to the Township, with Hydro One, telecommunication provider and any other suppliers of utilities which the Township deems necessary to properly develop the Condominium Development.
- (f) Deliver to the Township of Puslinch, the sum of \$17,343.75 (Dollars) in lieu of parkland, at the signing of this Agreement.
- (g) Name the internal streets to the satisfaction of the Township and County of Wellington.

Prior to starting construction of services, the Owner shall:

- (h) Notify the Township's Consulting Engineer at least 30 days before the commencement of construction and provide the Township's Consulting Engineer with all information and material required by the Township's Consulting Engineer.
- (i) Obtain all consents required by law.
- (j) Have all plans required for such servicing approved by the Township.
- (k) SatIsfy all other requirements of this Agreement that are a prerequisite to starting the construction of services.

2. APPROVAL OF PLAN FOR REGISTRATION

Upon the execution of this Agreement and the completion of all items under Clause 1, foregoing, the Township will advise the County of Wellington that the Owner has agreed to satisfy all the Township's conditions for the development of the Condominium Development with a brief but complete statement indicating how each of the conditions has been satisfied and will request that the County of Wellington approve of the proposed Plan of Vacant Land Condominium (the "Plan") for registration.

3. REGISTRATION OF PLAN

When the Plan has been approved and signed by the County of Wellington the Plan will be delivered by or on behalf of the County of Wellington to the Land Titles Office for registration, at the expense of the Owner. The Owner's surveyor shall provide to the County of Wellington a copy of the deposited Reference Plan submitted to the Land Registry /Titles Office for Wellington (No. 61) for "First Registration Under the Land Titles Act, R.S.O. 1990, chapter L.5". Also, the Owner's surveyor shall submit to the County of Wellington a written undertaking to provide to the County of Wellington a mylar copy and two white prints of the final plan of Condominium Development as registered in the Land Titles Office for Wellington (No. 61) within 21 days of the plan's having been registered.

4. REGISTRATION OF AGREEMENT

Upon the execution of this Agreement, it shall be registered on title by the Township's Solicitor at the expense of the Owner, A copy of the registered Agreement shall be filed with the County of Wellington.

5. ATTACHED SCHEDULES

The following Schedules are attached to and form part of this Agreement:

(a)	Schedule "A"	Description of the lands being developed.
(b)	Schedule "B"	A copy of the Plan proposed for registration.
(c)	Schedule "C"	A list of the services to be constructed and a list of the utilities to be provided, on the common elements
(d)	Schedule "D"	The estimated costs of the services to be constructed in accordance with Schedule "C".
(e)	Schedule "E"	The lands and easements to be conveyed by the Owner free of charge to the Township
(f)	Schedule "F"	A list of monies payable by the Owner to the Township.
(g)	Schedule "G"	A list of monies payable by the Township to the Owner.
(h)	Schedule "H"	A list of Approved Engineering Drawings and Specifications.
(i)	Schedule "I"	Conditions of Draft Plan Approval

6. IMPLEMENTATION OF THE CONDITIONS OF DRAFT PLAN APPROVAL

The Owner agrees to abide by and to implement the Conditions of Draft Plan Approval, including any amendments, as attached in Schedule "I" to this Agreement,

7. TOWNSHIP'S EXPENSES

The Owner agrees to pay to the Township all reasonable costs incurred by the Township in connection with the development of this Condominium Development which, without limiting the generality of the foregoing, shall include all expenses of the Township heretofore and hereinafter incurred for legal, engineering, surveying, planning and inspection services, extra Council meetings, if any, and employees' extra time, if any, and shall pay such costs from time to time forthwith upon demand, and, if such costs are not paid forthwith same shall bear interest from the date which is 10 days following the date of demand to the date of payment at two (2) percentage points in excess of prime rate of interest charged by the Canadian Imperial Bank of Commerce during such period.

8. THE OWNER'S CONSULTING ENGINEER

The Owner shall engage a Consulting Engineer registered with the Association of Professional Engineers of Ontario to:

- (a) Prepare designs
- (b) Prepare and furnish all required drawlngs and specifications
- (c) Obtain all necessary approvals in conjunction with the Township

- (d) Provide general administration and field layout and supervision of construction, including a letter certifying the proper installation of all services.
- (e) Provide final "as constructed" drawings
- (f) Provide coordination and scheduling to comply with the tlming provisions of this Agreement and the requirements of the Townshlp for all the works specified in this Agreement.
- (g) Furnish the Township with a certificate with respect to each unit within the Condominium Development for which a building permit application is made certifying that the proposed construction is In conformity with the Grading Control Plan.

9. THE OWNER'S SURVEYOR

The Owner shall engage an Ontario Land Surveyor to:

- (a) Provide the Upper Grand District School Board with a digital file of the Plan of Condominium Development in either ARC/INFO export or DXF format containing the following Information: at least 4 known UTM ground control points, parcel fabric, and street network.
- (b) Provide to the County of Wellington a digital file of this final Plan to be registered in a computerized format which is an AutoCad ".dwg" file format, and which includes a PCP (plot) file.

In addition to the provisions of Clause (b) of this Clause, the Owner shall, forthwith upon demand, provide the Township with such number as the Township deems necessary of the designs, drawings and records prepared and maintained pursuant to Clauses 8 (a) to (f).

10. THE TOWNSHIP'S CONSULTING ENGINEER

The Township shall engage a Consulting Engineer registered with the Association of Professional Engineers of Ontario to assist the Township in the review of any work required under this Agreement.

11. WORKS TO BE CONSTRUCTED

The Owner shall construct the services set forth in this Agreement at his expense and under the supervision of the Owner's Consulting Engineers in accordance with the terms of this Agreement and shall ensure that the utilities mentioned in Clause 1 of this Agreement are installed in accordance with the Agreement entered into with such utilities.

If, at any time, and from time to time during the development of the Condominium Development the Township's Consulting Engineer is of the opinion that additional services or utilities are necessary to provide adequately any of the services or utilities required pursuant to this Agreement, the Owner shall construct such additional services or utilities at his expense upon receiving written notice from the Township, providing it is reasonable and practical so to do having regard to the location of the

12. NOTIFICATION OF COMMENCEMENT

The Owner shall not commence construction of any of the services or utilitles until it has provided 30 days prior written notice to the Township's Consulting Engineer of its intention to commence such construction. If such construction is commenced prior to registration of the Plan, it is understood and agreed that by permitting the Owner to commence such construction, the Township shall not be deemed to have walved any rights which, by law, it has to control development prior to the registration of the Plan nor shall it be estopped from refusing to consent to the registration of the Plan or be liable for any loss or damage which the Owner may incur in the event that it is unable to register the Plan for any reason.

It is the intent of this Agreement that the services and utilities be constructed expeditiously and continuously and that with the exception of the final surfacing of roadways, all construction be completed within two (2) years from the date of registration of the Plan unless extended by the Township. If, for any reason, there is a cessation or interruption of construction, the Owner shall provide 30 days prior written notification to the Township's Consulting Engineer before the construction is resumed.

13. VOIDING AGREEMENT

If the Plan is not registered within three months after the date of its approval by the County of Wellington, or within such additional time as the Owner and Township shall agree upon in writing, the Township may at its option declare this Agreement, or any part thereof, to be null and void and so notify the County of Wellington.

14. OWNER'S EXPENSE

Every provision of this Agreement by which the Owner is obligated in any way shall be deemed to include the words "at the expense of the Owner" unless specifically stated otherwise.

15. SECURITIES

The Owner shall, upon signing this Agreement, lodge with the Township an Unconditional Irrevocable Letter of Credit or other form of security acceptable to the Township for the amount of

the Engineering Fees set out in Schedule "D" which shall serve as security for the Township expenses as set out in Clause 7.

Not less than 30 days prior to commencement of construction, the Developer shall increase the value of the Letter of Credit or accepted security to 100% of the cost of the works and services set out in Schedule "D" as tendered or as estimated, whichever is greater, serving as security for the Township's expenses as set out in Clause 7, and guaranteeing that the works and services to be provided in accordance with this Agreement will be installed and completed in accordance with the provisions of Schedule "C" and "H" and maintained within the time limits specified herein, and that all defects in the construction of such works and services or other matters provided for herein that become apparent within two (2) years from the completion thereof shall be promptly and properly repaired and replaced, and further guaranteeing that all matters provided for under this Agreement shall be promptly and fully complied with.

As work is completed for any sections of the work, the security held by the Township may be reduced to an amount equal to 125% of the cost of the work remaining to be completed as estimated by the Owner's consulting engineer and approved by the Township's Consulting Engineer.

The Township shall provide the Owner with the certificate contemplated by section 56(8) (b) of Ore. 48/01 to the Condominium Act upon the delivery to the Township of:

- a certificate of opinion from a professional engineer confirming the cost of completing and installing:
 - the facilities and services that the declaration and description show are included in the common elements, and,
 - (ii) the buildings and structures that the declaration and description show are included in the common elements;
- (b) security acceptable to the Township, acting reasonably in the amount set out in the said engineer's certificate of opinion if any of the matters set out in subparagraph (a) above are not completed at the time the Owner proceeds to register the Plan provided the said amount is acceptable to the Township's Engineer; and,
- an undertaking to amend the description of the condominium as contemplated by section 158(3)(b) of the Condominium Act.

The amount of the security posted is subject to the approval of the Township engineer.

16. CONSTRUCTION AND PROGRESS OF SERVICES

The Owner shall construct all services and utilities set forth in Schedule "C" and Schedule "H" and if it fails to do so or having commenced to do so fails or neglects to proceed with reasonable speed, the Township may, upon giving seven (7) days notice to the Owner of its intention to do so, enter upon the Condominium Development and proceed to construct or complete the construction of such services or utilities at the Owner's expense and pay such expense by deducting it from the security lodged by the Owner and any balance unpaid shall be a first lien upon the lands described in Schedule "A" hereto and shall be paid by the Owner forthwith upon demand.

17. CONTRACTOR

The services to be constructed under this Agreement shall be constructed by the Owner or by a Contractor or by Contractors employed by the Owner and approved in writing by the Township, but such approval shall not unreasonably be withheld.

18. CERTIFICATION OF SERVICES BY OWNER

The Township will not be accepting any services, however prior to building permits being issued for the development and when all services have been completed, the Owner's Consulting Engineer shall deliver to the Township, Chief Building Official (CBO) and the Township Engineer a letter certifying that all services, the installation of which are a standard/usual Township prerequisite to the issuance of a building permit, have been constructed, tested and commissioned for their intended uses in accordance with the approved plans, and shall Include all testing reports for the completed services including roads, stormwater management facilities, and fire reservoirs.

The Township reserves the right to inspect such services as it deems necessary to ensure compliance with the approved plans.

19. SUPPLY OF SERVICES

None of the services described in this agreement will become municipal services.

Notwithstanding Township's requirements concerning the approval and construction of such services, the Owner, and its successors namely the condominium corporation to be established and the owners of Units within the condominium Plan are solely responsible for the repair, maintenance and replacement of each service to be constructed pursuant to this agreement. Following the registration of the condominium plan contemplated by this Agreement (and the installation of the services called for herein to the satisfaction of the Township Engineer including the wells and private

sewage treatment systems following installation as called for in this Agreement) all obligations for the inspection, testing, repair, maintenance and replacement of such services is the responsibility of the said condominium corporation created on account of such registration and not the responsibility of the Owner.

20. OWNER'S LIABILITIES

The Owner covenants to indemnify and save harmless the Township against all legal liability for losses, damages, claims, actions, demands, sults and costs arising directly or indirectly from anything done or omitted to be done by the Owner, or any servant, Contractor, or agent of the Owner, in connection with the Condominium Development.

24 DEDAIDS

The Owner shall be liable for any damages caused to any existing Township or County of Wellington roads and services during construction on the Condominium Development.

22. DUST CONTROL

The Owner agrees to use such reasonable method to prevent any dust problem to traffic or home occupants as the Township shall deem necessary and for this purpose the Township's Consulting Engineer shall notify the Owner in writing from time to time of the requirements of the Township.

23. DRAINAGE

The Owner agrees it will submit to the Township a Grading Control Plan approved by the Township's Consulting Engineer establishing the proposed grading of the Condominium Development to provide for the proper drainage thereof and the draining of all adjacent lands which drain through the Condominium Development. The said Grading Control Plan is to be prepared in accordance with the recommended standards of the Canada Mortgage and Housing Corporation and the Township's standards.

- (a) The said Grading Control Plan shall include the following information:
 - (I) Spot levels or contours indicating the original elevation of the lands within and immediately surrounding the development;
 - (ii) A calculated spot elevation figure at approximately the proposed unit corners and house location and such additional elevations as are necessary to show the general intent of final grading;
 - (lii) Benchmark related to geodetic datum.
- (b) Before commencing any grading or construction on the site and prior to final approval of the Plan, the Owner shall prepare a detailed report, drawings and site plans to the satisfaction of the Grand River Conservation Authority and the Township of Puslinch. This report shall address the following:
 - (i) The location of all buildings to be erected and structures on the Condominium Development and all final grades and vegetation.
 - (ii) The means whereby storm drainage will be accommodated, and the means whereby erosion and siltation will be contained and minimized, both during and after the construction period.
 - (iii) The methods used to control runoff and infiltration shall be provided as outlined in the Final Stormwater Management Plan for Fox Run Estates Development Phase 2 as prepared by Triton Engineering Services Limited dated April 2013, or as amended with the approval of the Grand River Conservation Authority.
 - (iv) The Environmental Implementation Report (EIR) shall be to the satisfaction and approval of the Grand River Conservation Authority in consultation with the Township of Puslinch. This report is to detail the mitigation of impacts and enhancement proposed for the Natural features on the site; to include an overall Plantings Plan; and to provide a "Condominium Development Home Owner's Guide" regarding wetland, shoreline and natural area protection information.
 - (v) A detailed erosion and sedimentation control plan in accordance with the Grand River Conservation Authority's Guidelines for Sediment and Erosion Control for construction sites, indicating the means whereby erosion will be minimized and maintained on-site throughout all phases of grading and construction; including a monitoring and maintenance plan and provision for timely revegetation of the Condominium Development.
 - (vi) That the Owner obtain final approvals from the Grand River Conservation Authority for works regulated under Ontario Regulation 150/06.
- (c) The Owner shall provide a vegetation plan which meets the requirements of the Grand River Conservation Authority and undertake the construction in a manner which preserves the mature trees, natural features, ecological linkages and buffers to the satisfaction of the Grand

River Conservation Authority. The existing buffer areas shall be enhanced with native species per the approved Environmental Implementation Report (EIR).

- (d) The Owner will apply the provision of Condition 23 (b) above to the construction of roads and services.
- (e) The Owner will carry out or cause to be carried out the works shown on the drawings described in 23 (b) above.
- (f) The grading of the units and common elements in the Condominium Development shall be carried out in accordance with such Grading Control Plan to the satisfaction of the Township's Consulting Engineer and said plan shall be binding upon the Owner and upon any subsequent owner of any unit within the Plan.
- (g) The Owner will maintain the silt control measures requested by the Grand River Conservation Authority until the Grand River Conservation Authority is satisfied they are no longer required.
- (h) The Owner agrees to include provisions in the Condominium's declaration to the satisfaction of the Township that no person will after the approved unit or common element grading without the written consent of the Township and will, at all reasonable times, permit the Owner or the Township to enter on such lands for the purpose of checking its grades, levels and elevations, and where necessary, altering such grades, levels and elevations.

24. LAND FOR MUNICIPAL PURPOSES

The Owner agrees to convey to the Township and the County of Wellington free of charge the lands set forth in Schedule "E" for public purposes and to pay to the Township the amount in Schedule "F" for cash in lieu of parkland.

25. CONSTRUCTION REFUSE

The Owner agrees to regularly dispose of all construction refuse and debris from the road right-of-way or public areas, whether it be from site servicing or house building or any other source related to the development of the site, in an orderly and sanitary fashion. If the Owner fails to remove and dispose of construction refuse and debris to the satisfaction of the Township's Consulting Engineer, the Township may give written notice to the Owner. If the Owner fails to dispose of the refuse and debris within 48 hours after having received a written request from the Township so to do, the Township may, without further notice, undertake such removal and disposition and the cost thereof shall be paid by the Owner forthwith upon demand which costs shall include all expenses incurred by the Township in carrying out such removal and disposition.

26. REQUIREMENTS FOR BUILDING PERMITS

The approval of the Plan by the Township or the acceptance by the Township of any services constructed pursuant to this Agreement shall not obligate the Township to issue building permits for the construction of dwelling units within the Condominium Development and no building permits shall be issued unless and until:

- (a) All Parties have executed this Agreement and there has been compliance with all of the provisions of this Agreement to the date of such application;
- (b) Without limiting the generality of the foregoing, the engineering drawings and Grading Control Plan shall have been completed and constructed, and shall have received the approval of the Township and all other approving authorities;
- (c) The application for building permit complies with this Agreement and all applicable laws and includes a plot plan describing the lands upon which such dwelling unit shall be constructed and the adjacent lands which will be used in conjunction therewith (herein referred to as the "Unit");
- (d) The application for building permit is accompanied by a \$2,000.00 grading fee in accordance with the User Fees and Charges By-law, which shall be applied to the administration, review and inspection of lot grading. A registered Professional Engineer or Ontario Land Surveyor is required to provide certification that all lot grading has been completed in accordance with the approved unit grading plan.6
- (e) All underground services serving the unit have been constructed and tested, including the water reservoirs approved by the Township Fire Department;
- (f) All roads serving the units have been constructed to the top of Granular "B" grade;
- (g) The Township has approved the tile field site for the unit and the Owner has provided the Township with proof satisfactory to the Township that it will construct and provide telephone, hydroelectric and such other utilities as the Township deems necessary to develop the Condominium Development and will provide such utilities for the dwelling units for which application has been made for building permits and that all fees and other charges payable for such purposes have been paid or that security for payment satisfactory to the supplier of such utility has been given;

- (h) The plot plan accompanying the application for the building permit complies with the Grading Control Plan included with the approved drawings listed in Schedule "H" hereto, and contains a certificate or letter and stating that the Owner has reviewed the house plan and that it conforms to all restrictive covenants and that the Owner's Consulting Engineer has reviewed the plot plan and determined that it conforms with the Grading Control Plan. The Owner's Engineer shall apply a stamp and signature on the drawing certifying that it conforms with the general grading plan or provide a letter stating that it does. The plot plan is to be accompanied with a tile bed design prepared by a qualified engineer;
- (i) The septic system designer shall be a qualified engineering consultant, who specializes in the design and installation of Level IV treatment systems, and shall prepare and submit the necessary detailed site plan with each application for the Certificate of Approval of a Level IV treatment system and the same Consultant shall be responsible for and coordinate with the plot plan design all of the following:
 - Preparation of the detailed individual site plan, in accordance with the approved Grading Control Plan, illustrating all proposed buildings and structures and their elevations, the driveway and activity areas the location of the septic tank, pump tank or siphon (if required), the detailed design of the leaching bed area (and where a full or partially raised leaching bed if proposed, a detailed cross-section), all existing and proposed grades, including retaining walls and terraces, natural features and vegetation (existing and to be removed), the method of disposing of stormwater (drainage swales, directions and grades), all eroslon control and sedimentation features, and any other features necessary to ensure adequacy of the septic system and drainage for each unit.
 - (ii) Ensure that the septic systems and leaching beds are located greater than 15 metres from the wetland edge.
 - (iii) Ensure that the application conforms to the applicable provisions of the Township of Puslinch Zoning By-law.
 - (iv) Inspection of one or more test pits and preparation of a grain-size analysis report and water table evaluation report. Where imported fill material is required, the septic system design engineer shall provide a detailed grain-size analysis report on the proposed fill and shall obtain the approval of the applicable authority prior to placement on-site. For raised beds, supervision of the laying out, excavation and scarification of the leaching bed bottom and placement of fill to ensure compliance with design and grading criteria.
 - (v) Prior to authorizing the construction of the leaching bed, the septic system designer will obtain confirmation that the house has been constructed in the location and the grades indicated on the approved site plan.
 - (vi) Provision of a Certificate of Compliance for each sewage system within the Condominium Development stipulating that all grades and sewage system details have been constructed according to the approved design.
- (j) The Owner shall grade the Condominium Development in accordance with the detailed site plan as approved. Prior to the approval authority issuing a Use Permit, confirmation is required from the Owner's Engineer that final grading for the leaching bed areas, and sodding requirements have been completed to his/her satisfaction;
- (k) Eavestrough, foundation drains and surface/storm water drainage must not be directed to the sewage disposal system, nor unto or into the ground surface in the vicinity of the tile bed area in order to limit the impact of storm water on the operation of the leaching beds;
- (i) The Owner shall not permit the installation of any underground lawn irrigation systems within the primary leaching bed area, or an area which detrimentally affects the operation and effectiveness of the leaching bed. The Owner agrees to insert a provision in the Condominium declaration to this effect.
- (m) The Owner agrees to insert a provision in any Agreement of Purchase and Sale to which the Owner is a party and in the Condominium declaration to the satisfaction of the Township, to advise the purchaser/occupant that no structures, including accessory buildings and swimming pools, foundations for antennae and dishes, and no landscaping involving decks, berms, foundations, paving stones or trees shall be located within the sewage disposal envelope, the primary leaching bed area, or in an area which detrimentally affects the operation and effectiveness of the leaching bed;
- (n) The Owner shall provide to the unit purchaser and include as a Schedule to the Condominium declaration, a copy of a "Condominium Home Owner's Guide" to the satisfaction of the Township which provides the maintenance and obligations related to the private Individual Level IV treatment services and water supply systems;
- (o) The Owner agrees to insert a provision in any Agreement of Purchase and Sale to which the Owner is a party and in the Condominium declaration to the satisfaction of the Township to:

- (i) advise purchasers/occupants that Units shall be serviced by private Level IV sewage disposal systems at the expense of the Unit owner and the Unit owner shall be responsible for the operation and maintenance of the private Level IV sewage disposal system in accordance with the requirements of the Ontario Building Code;
- (ii) state that the Units are serviced by a private individual water wells, and that it is the responsibility of the Unit owner to operate and maintain the private wells in accordance with MOE regulations.
- (iii) The Owner agrees to insert a separate schedule in any Agreement of Purchase and Sale to which the Owner is a party to notify purchasers of approval authority requirements, the wording of which shall be reviewed by and be acceptable to the Township.
- (p) The construction of dwelling units for which building permits have been issued is being carried out in a manner satisfactory to the Chlef Building Official. The building permit applicant agrees to regularly dispose of all construction refuse and debris on the unit, from any source, in an orderly and sanitary fashion. If the applicant falls to remove the debris to the satisfaction of the Building inspector, the Township may give written notice to the applicant. If after 48 hours, the Building inspector is still not satisfied, the Township may without further notice, undertake such removal and disposition and the cost thereof shall be paid by the applicant forthwith upon demand.
- (q) The Building Permit Applicant further agrees that the construction of the building will not proceed past the basement stage until the builder has delivered to the Chief Building Official confirmation from a registered Professional Engineer or Ontario Land Surveyor, that:
 - (i) The basement elevation complies with the levels shown on the approved Plot Plan.
 - (ii) The location of the foundation complies with all zoning by-laws.

27. MODEL HOMES

Notwithstanding clause 6, building permits for model homes may be issued subject to:

- 1. A maximum of two (2) model home permits may be issued prior to the registration of the Plan.
- The Fire Department must be satisfied that adequate access and water supply is available to meet the fire fighting needs.
- 3. The Owner/builder must agree to maintain the access during construction of model homes.
- 4. The Owner/builder must acknowledge in writing that model home(s) will not be sold or occupied until all other requirements of the vacant land of condominium agreement have been complied with for the issuance of building permits.
- (a) The Owner/builder must contact the Hydro Electric Authority directly and make the necessary arrangements if a hydro service is required during construction.
 - (b) The Owner/developer must acknowledge in writing, that they understand the permanent underground hydro service will not be available until the electrical distribution system for the Plan has been fully installed, inspected and energized.
- 6. (a) Development Charges normally payable at the issuance of a building permit must be paid prior to the issuance of the building permit for a model home.
 - (b) The Owner further covenants that if it or any person claiming title through it or under its authority applies for and obtains such permits his/her will at all times maintain the private roads in reasonable and adequate fashion until such time as they are completed and will provide that all manholes, catchbasins and any other protrusion constructed on or in the roadway are kept at such a level in relation to the surface of the road so that, in the opinion of the Township Fire Chief no harm will come to emergency vehicles or other equipment that may be used on the roadway by the Township.
- 7. The Owner agrees that all applications for building permits shall be accompanied by all the plot plans and documents as stipulated within clause 26.

28. REQUIREMENTS FOR OCCUPANCY

No dwelling unit or any part thereof erected on any of the Condominium Development shall be occupied until water and hydro electric power have been connected to the dwelling and energized, the sewage disposal system has had final approval, and the services referred to in Schedule "C" have been installed.

29. EASEMENTS

The Owner agrees to grant free of charge the easements to the Township and County of Wellington set forth in Schedule "E" and such other easements or reserves as may be required for the purpose of carrying out the terms of this Agreement.

30. SPECIAL PROVISIONS

The Owner agrees:

- (a) To deliver a copy of the building restrictions (if any) to be imposed on the Condominium Development and a copy of the conditions contained in Clauses 23 (h), and 26, to every person purchasing a unit in the Condominium Development from the owner and inform every such person of the terms of this Agreement.
- (b) To attach the covenants and restrictions as set out in this Agreement to the Purchase and Sale Agreements entered into by the Owner.
- (c) To purchase and install all street name and traffic control signs for this development to the satisfaction of the Township.
- (d) To stockpile the topsoil on-site from all areas to be excavated and graded. The topsoil from the stripped areas shall be used to topsoil all areas to be seeded and shall not be removed from the Condominium Development until such time as all seeding has been completed. Should there be an excess of material on completion of the reinstatement, then the topsoil may be removed after giving the Township fifteen (15) days' written notice of such proposed removal.
- (e) That the units will be made suitable for private individual Level IV sewage disposal systems to the standards of the Township.
- (f) To take measures to protect that land which is not being developed immediately to control erosion. Disturbed areas not being developed immediately are to be reseeded or provided with other means of erosion protection.
- (g) That prior to final approval of the Plan, the Owner shall provide the Township with a hydrogeologist's report which ascertains the availability of an adequate supply of potable water to service the development. This report should also discuss the construction and installation of the private individual wells within the development.
- (h) To register the Plan as one (1) Condominium Plan, to the satisfaction of the Township and the County of Wellington, and the partles agree that when the Vacant Land Condominium Corporation is established, upon such registration, the said Condominium Corporation shall execute and deliver to the Township an agreement assumling all ongoing obligations of this Agreement that apply once all of the works and services called for herein are completed and the Owner's obligations on account thereof have been fulfilled;
- (i) To provide the Township and the County of Wellington with an opportunity to review and approve the proposed Condominium declaration and any arrangements for shared use of facilities and any related agreements and easements in respect of this Condominium Development prior to final approval and registration of the Plan. A copy of this Agreement as registered is to be filed with the County of Wellington.
- (j) To develop the common elements component of the Plan in accordance with the Ontario Building Code and all approved plans, including but not limited to site plan, servicing plan, grading and drainage plan, building elevations and building drawings approved by the Township and the Environmental Implementation report for the Condominium Development, prior to the final approval of the Plan
- (k) To undertake the installation, completion, operation, and maintenance of all storm sewers and stormwater management quality control systems in accordance with the approved plans, and in accordance with a maintenance schedule recommended by the system designer.
- (I) To satisfy the requirements of the Puslinch Fire Department including the provision of water reservoirs for fire protection.
- (m) That prior to obtaining a building permit with respect to each unit, the Owner shall construct a private well on each unit in accordance with Provincial Regulations.
- (n) That the Owner shall establish a well installation and maintenance program to the satisfaction of the Township of Puslinch and that such a program (including the unit owner's maintenance obligations related to the individual privately owned wells) shall be included within the declaration of the Plan and within all Purchase and Sale Agreements entered into by the Owner.
- (o) To insert a clause in each Purchase and Sale Agreement entered into by the Owner advising that the owner is responsible for the installation, completion, operation and maintenance of the individual privately-owned Level IV sewage disposal facilities, including any necessary Provincial approvals, and requiring that copies of all Provincial approvals be forwarded to the Township of Puslinch and the County of Wellington.
- (p) To provide to each unit purchaser and include as a schedule to the Condominium declaration a "Condominium Home Owner's Guide", to the satisfaction of the GRCA, regarding wetland, shoreline and natural area protection information.

- (q) The Owner agrees to insert a provision in any Agreement of Purchase and Sale to which the Owner is a party and in the Condominium declaration to the satisfaction of the Township, advising the owner of each Unit of the inspection and maintenance requirements of the individual privately-owned Level IV sewage disposal systems.
- (r) To obtain Certificates of Approval for a Permit to Take Water if necessary from the Ministry of the Environment and to copy the appropriate certificates and permits to the County of Wellington and the Township of Puslinch.
- (s) To reach an agreement with the Wellington Catholic District School Board regarding the supply and erection of a sign on the Condominium Development, at the Owner's expense, advertising potential Wellington Catholic District School Board supporters of the location of the schools serving the area and the current practice of bussing students outside the immediate area should schools in the area be at capacity.
- (t) To advise all prospective purchasers from the Owner with respect to each unit, through their Purchase and Sale Agreements and in the declaration to the satisfaction of the Township that school buses operated by or for the Wellington Catholic District School Board will not travel on privately owned or maintained right-of-ways, and that if students are eligible to be bused, they may be picked up along existing or future public roadways.
- (u) To implement wetland buffer improvements and revegetation as recommended in the Environmental Implementation Report as approved by the Township and Grand River Conservation Authority.
- (v) To comply with Canada Post's multi-unit policy which requires that the Owner provide a centralized mail facility at the Owner's/Condominium Corporation expense. The location of all centralized mail receiving facilities shall be determined in co-operation with Canada Post and the location of the centralized mail facilities indicated on appropriate maps, information boards and plans. This provision does not obligate the Owner to make any payments to Canada Post that are not strictly required for the actual provision of the centralized mail facility referred to earlier in this subparagraph;
- (w) To advise all prospective purchasers from the Owner with respect to each unit, through their Purchase and Sale Agreements and in the declaration to the satisfaction of the Township, that mail delivery will be in the form of designated Centralized Mail Box and shall also inform all such purchasers, prior to closing of any home sale, the exact location of such facilities within the community.
- (x) To advise all purchasers of Units from the Owner, through their Purchase and Sale Agreements of the development charges related to this plan of Condominium Development.
- (y) To provide adequate snow removal is to be provided to allow children to walk safely to a designated bus pick up point.
- (z) To provide a Tree Saving Plan for individual units to the satisfaction of the Township and Grand River Conservation Authority,

31. REGISTRATION AND RELEASE

The Owner hereby agrees that this Agreement and the Schedules hereto or any part or parts thereof, shall be registered upon the title of the land within the Plan of Condominium. When all the necessary provisions of this Agreement have been complied with by the Owner and upon request by the Owner, the Township will provide a letter that this agreement has been complied with to date.

32. NOTICES

Any notice required or permitted to be given hereunder shall be in writing and may be served either personally or by mailing such notice by registered mail, postage prepaid as follows:

The Corporation of the Township of Puslinch Ms. Karen Landry, Clerk RR 3, 7404 Wellington Road 34 Guelph, ON N1H 6H9

Sloot Construction Ltd. 599 Arkell Road Guelph, ON N0B 1C0

And if mailed by prepaid registered post shall be deemed to have been received by the party to whom it was mailed on the 2nd day following the day upon which it was received at one of Canada Post Corporation's offices.

33. ASSIGNMENT

The Owner shall not assign this agreement without the consent of the Township.

Furthermore, it is understood and agreed that all the provisions of this Agreement shall be binding upon all successive owners and assignees of the Condominium Development, including the Condominium Corporation to be created upon the registration of the Plan..

34. SEVERANCE OF ULTRA VIRES TERMS

If any term of this Agreement shall be found to be Ultra Vires of the Township, or otherwise unlawful, such term shall conclusively be deemed severable and the remainder of this Agreement mutatis mutandis shall be and remain in full force and effect.

This Agreement is binding upon and shall enure to the benefit of the Owner and the Township, their respective heirs, executors, administrators, successors and assigns.

The Owner shall not call into question directly or indirectly in any proceedings whatsoever in law or in equity or before any administrative tribunal the right of the Township to enter into this Agreement and to enforce each and every term of this Agreement and this Agreement may be pleaded as an estoppel against the Owner in any such proceedings. Notwithstanding the foregoing, if at any time during the currency of this Agreement, it is found by any Court of competent jurisdiction, any administrative tribunal or Ministry of Government that this Agreement or any part thereof is void insofar as the Township is empowered to enter into this Agreement, then no obligation, liability or duty of any nature or kind whatsoever, whether in law or in equity, shall be imposed upon the Township to carry out any part of this Agreement found to be void.

35. COUNTERPARTS

This Agreement may be executed in counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

IN WITNESS WHEREOF, the Owner has executed this Agreement, attested by the hands of its respective officer(s) duly authorized in that behalf and the Corporation of the Township of Puslinch has hereunto affixed its Corporate Seal as attested by the signatures of its Mayor and Clerk.

SLOOT CONSTRUCTION LTD.

Name:

Capacity:

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

Per:

Per:

Per:

AUTHORIZATION BY-LAW No. 4516

PASSED BY TOWNSHIP OF PUSLINCH COUNCIL
ON THE 20 DAY OF July 20 16

SCHEDULE "A"

DESCRIPTION OF LANDS BEING SUBDIVIDED

PT 19, CONCESSION 8 TWP OF PUSLINCH PTS 1, 2 & 3, 61R20083; S/T EASEMENT OVER PT 3, 61R20083 IN FAVOUR OF ONTARIO HYDRO AS IN ROS617297; S/T EASEMENT OVER PT 3, 61R20083 IN FAVOUR OF BELL CANADA AS IN ROS639490 SUBJECT TO AN EASEMENT IN GROSS OVER PT LOT 19, CON 8 DES AS PTS 2 & 3, 61R20083 AS IN WC330699 TOWNSHIP OF PUSLINCH.

SCHEDULE "B"

DRAFT PLAN OF VACANT LAND CONDOMINIUM

The Draft Plan of Vacant Land Condominium prepared by Astrid J. Clos Planning Consultants (Project No. 0816), lastly revised on May 12, 2010. County File 23CD-09003.

SCHEDULE "C"

LIST OF SERVICES TO BE CONSTRUCTED AND UTILITIES

TO BE PROVIDED ON THE COMMON ELEMENTS

SERVICES

(a) Roadways

To design standards as required by the Township's Consulting Engineer but in general to meet the minimum following standards:

Surface Width

- 6.0 m of Hot Mix Asphalt

Shoulders

- N/A

Surface Type

== 40 mm of HL-3 Asphalt and 50 mm of HL-4 complete with

concrete curb and gutter as per OPSD 600.060

Granular Base

- 350 mm of Granular "B"

- 150 mm of Granular "A" - Increased Granular "B" depth where indicated by soils

conditions

Minimum Grade

- 0.5%

Maximum Grade

Crown

2% minlmum on Granular "A"3% on Subgrade

Boulevards

- Graded, topsoiled and seeded from edge of curb to property line

Drainage

- Storm sewers and stormwater quality control management

features

Minimum Road Culvert - 400 mm dia.

Maximum Slopes

- 3:1

(b) **Electrical Services**

Electrical service to be buried along the roadway, easements, or common elements with buried secondary services to each unit, to meet the design requirements of Hydro One Inc.

Telephone Services
Telephone service is to be provided to each unit to meet the design requirements of the Telecommunications System provider.

(d) Unit Grading and Drainage

To be completed in accordance with the Grading Control Plan prepared by the Owner's Engineer and approved by the Township of Puslinch and the Grand River Conservation Authority.

To show tentative house locations and elevations for each unit. To show tile field locations and well sites, complete with any special features necessary to ensure adequacy of the septic system for each unit.

Water Supply (e)

To design standards as required by Ontario Regulation 903, the MOE and Township, including reservoirs for fire protection in accordance with the requirements of the Township of Puslinch Fire Department.

(f) Storm Sewers and Stormwater Management

To design the storm sewers system based on a 5 year City of Guelph IDF rainfall curve.

To design the storm water management facilities in accordance with the final Stormwater Management and Site Servicing Report for Fox Run Estates Development Phase 2 as prepared by Triton Engineering Services Limited dated April 2013.

Wetland Buffer Improvements and Revegetation
In conformance with recommendations included in the Environmental Implementation Report as approved by the Township and the Grand River Conservation Authority.

SCHEDULE "D"

ESTIMATED COSTS

The following is the estimated cost of services to be constructed in the Fox Run Estates Development Phase 2 in accordance with Schedule "C".

SUMMARY OF COST ESTIMATES

ITEM	COST
Roads and Drainage	\$938,451.50
Miscellaneous (incl. streetlighting)	\$101,000.00
Subtotal "A"	\$1,039,451.50
Engineering & Inspection	\$95,000.00
Contingency Allowance	\$100,000.00
Subtotal "B"	\$1,234,451.50
HST (13% of "B")	\$160,478.70
TOTAL ESTIMATED COST	\$1,394,930,20

SCHEDULE "E"

LANDS AND EASEMENTS TO BE CONVEYED

Township of Puslinch

- 1. Part 4 of Registered Reference Plan 61R-11619 to be deeded to the Township.
- 2. Parts 5, 6, 17, 21 and 22 of Registered Reference Plan 61R-20900 to conveyed to the Township for easement purposes.

SCHEDULE "F"

MONIES PAYABLE TO THE TOWNSHIP

- As per Clause 7, the Owner agrees to pay to the Township the cost of the Township's expenses in connection with this Condominium Development.
- 2. Applicable development charges pursuant to the Development Charges Act accessed on account of the building to be constructed form the amount per unit in effect at the time of application for each building permit. The Township shall also collect the applicable education development charge. These development charges shall be payable at the time of application for a building permit for each unit.
- Any other monies which might become due to the Township in accordance with the attached Agreement.
- 4. \$17,343.75 shall be paid to the Township of Puslinch in lieu of the parkland. This amount shall be payable at the time of the signing of this Agreement.

SCHEDULE "G" MONIES PAYABLE BY THE TOWNSHIP TO THE OWNER

NIL

SCHEDULE "H"

LIST OF APPROVED ENGINEERING DRAWINGS AND SPECIFICATIONS

Drawing No.	Drawing No. Revision No.		Description
01	4	April 2013	General Arrangement Plan
02	4	April 2013	General Grading Plan
03	4	April 2013	General Grading Plan
04	4	April 2013	General Grading Plan
05	4	April 2013	Existing Stormwater Management Facility Outlet Reconstruction
06	3	April 2013	Stormwater Management Notes & Details
07	3	April 2013	Road A Plan and Profile Sta. 0+000 to 0+360
80	3	April 2013	Road A Plan and Profile Sta. 0+360 to 0+675
09	3	April 2013	Road B Plan and Profile Sta. 0+000 to 1+180
10	3	April 2013	Road B Storm Outlet Plan and Profile Sta. 2+000 to 2+120
11	3	April 2013	Sediment and Erosion Control Plan
12	3	April 2013	Post-Development Catchment Plan
13	3	April 2013	Sections and Details
14	1 1	April 2013	Utility Plan

SPECIFICATIONS (Contract Documents)

Not Applicable

SCHEDULE "I"

CONDITIONS OF DRAFT PLAN APPROVAL

FOR VACANT LAND CONDOMINIUM 23 CD - 09003

THE CORPORATION OF THE COUNTY OF WELLINGTON

With respect to an application (File No. 23CD-09003) by Sloot Construction Ltd. (Fox Run Phase 2), pursuant to the provisions of Section 51 of the Planning Act, R.S.O. 1990, as amended, and pursuant to the Condominium Act, 1998, for approval of a plan of vacant land of condominium to be registered as one condominium corporation, being located on Part of Lot 19, Concession 8, Township of Puslinch, County of Wellington, Draft Approval is granted, subject to the following conditions of approval:

CONDITIONS OF APPROVAL FOR DRAFT PLAN OF VACANT LAND CONDOMINIUM 23CD-09003

No. Condition

- 1. THAT this draft approval applies to the Draft Plan of Vacant Land Condominium, File No. 23CD-09003, as prepared and lastly revised on May 12, 2010 by Astrid J. Clos Planning Consultants (Project No. 0816), depicting 15 single detached residential units, Common Element servicing blocks, open space and roads A and B, for a total area of 16.72 hectares (41.3 acres).
- THAT the Township of Puslinch review the final plan that is to be presented to the County of Wellington for its final approval.
- 3. THAT the Owner shall provide to the County of Wellington and to the Township of Puslinch for their review and approval the proposed condominium description and declaration and any arrangements for shared use of facilities and any related agreements and easements in respect of this condominium development.
- 4. THAT the Township of Puslinch provides written confirmation to the County of Wellington that the appropriate zoning is in effect for the development of the subject lands
- THAT the Owner shall upgrade Fox Run Drive, at the Owner's cost, to the satisfaction of the Township of Puslinch to provide for traffic calming improvements, if required.
- 6. THAT the condominium streets shall be named and the units numbered to the satisfaction of the Township of Puslinch and the County of Wellington; and that such street names shall not be a duplicate in wording or phonetic sounding of any street name elsewhere in the County of Wellington.
- THAT the Owner satisfies the requirements of the Township of Puslinch for parkland dedication in accordance with the provisions of the Planning Act, R.S.O. 1990, as amended.
- 8. THAT prior to final approval by the County of Wellington, the Owner shall prepare an Archaeological Assessment by a qualified archaeologist licensed to practice in the Province of Ontario and submit same to the Ministry of Culture for approval; and further, that the Owner provide the County with a copy of the Ministry's letter of acceptance to the assessment.
- THAT the owner conveys easements to the Township of Puslinch for stormwater drainage purposes.
- 10. THAT the Owner obtains necessary approvals/permits from the Ministry of the Environment for storm water management systems and that a copy of the approvals/permits be provided to the County of Wellington and to the Township of Puslinch.
- 11. THAT the Owner enter into a Development Agreement with the Township of Puslinch for the purposes of satisfying all the requirements, financial and otherwise, of the Township. Without limiting the generality of the foregoing, the condominium development agreement shall contain provisions which are satisfactory to the Township of Puslinch concerning the provision of roads, signage, street lighting, installation of services, and potable water facilities, environmental monitoring, protection and enhancement of natural areas, waste

disposal systems, storm water management and drainage, and also include provisions which address the following:

- The detailed engineering designs to determine the width and alignment of easements for stormwater drainage purposes;
- Any road improvements to Fox Run Drive as may be deemed necessary by the Township of Puslinch for purposes of traffic calming;
- The installation, completion, operation and maintenance of individual privately owned tertiary sewage disposal facilities to the satisfaction of the Townshlp of Puslinch;
- d) The installation, completion and maintenance of individual privately owned wells to satisfaction of the Township of Puslinch;
- e) The installation, completion, operation, and maintenance of all storm water management systems in accordance with the approved plans throughout all phases of grading and construction;
- f) That the Owner shall develop the common elements component of the plan of condominium in accordance with the Ontario Building Code and all approved plans, including but not limited to, site plan, servicing plan, grading and drainage plan, building elevations and building drawings and mechanical drawings approved by the Township of Puslinch and the Environmental Implementation Report for this development, prior to the final approval of the plan of condominium. For those parts of the common elements component not completed prior to final approval, the Owner shall provide financial assurances to the satisfaction of the Township of Puslinch to ensure that all common elements (i.e. land, buildings, structures, facilities and services) are completed in a timely and satisfactory manner;
- g) That the Owner shall grade, construct services and develop the lands in accordance with the detailed site plan(s) as approved by the Township. And that prior to the Township of Puslinch's issuance of Use Permits for individual lots, final grading for the leaching bed areas and sodding requirements shall be completed to the municipality's satisfaction:
- h) That eavestrough, foundation drains and surface/storm water drainage must not be directed to the sewage disposal system, nor unto or into the ground surface in the vicinity of the tile bed area in order to limit the impact of storm water on the operation of the leaching beds;
- That the Owner shall not permit the installation of any underground lawn irrigation systems within the primary leaching bed area, or an area which detrimentally affects the operation and effectiveness of the leaching bed. The Owner agrees to insert a provision in any Agreement of Purchase and Sale to this effect;
- j) That no structures, including accessory buildings and swimming pools, foundations for antennae and dishes, and no landscaping involving decks, berms, foundations, paving stones or trees shall be located within the sewage disposal envelope, the primary leaching bed area, or in an area which detrimentally affects the operation and effectiveness of the leaching bed. The Owner/Developer agrees to insert a provision in any Agreement of Purchase and Sale to this effect;
- k) That the Owner shall provide a "Condominium Home Owner's Guide" to the satisfaction of the Township which provides the maintenance and obligations related to the private individual tertiary treatment services and water supply systems.
- That the Owner shall establish a well installation and maintenance program to the satisfaction of the Township of Puslinch and that such a program (including the unit owner's maintenance obligations related to the individual privately owned wells) shall be included within the declaration of this plan of condominium and within all Purchase and Sale Agreements.
- m) That the Owner shall make satisfactory arrangements with the appropriate Hydro Provider for the provision of permanent and/or temporary electrical services to this plan of condominium;
- That the Owner shall make satisfactory arrangements with the appropriate Telephone Provider for the provision of permanent and/or temporary telephone services to this plan of condominium.

- 12. THAT the Development Agreement between the Owner and the Township of Puslinch shall contain provisions whereby the Owner shall undertake to register the Vacant Land Condominium plan as one condominium corporation to the satisfaction of the Township of Puslinch and the County of Wellington.
- 13. THAT the Development Agreement between the Owner and the Township of Puslinch shall be registered against the lands to which it applies and that a copy of the condominium development agreement as registered be filed with the County of Wellington.
- 14. THAT the Development Agreement between the Owner and the Township of Puslinch shall include a provision satisfactory to the Township of Puslinch whereby the Owner satisfies the requirements of the Puslinch Fire Department including the provision of water reservoirs for fire protection.
- 15. THAT the Development Agreement between the Owner and the Township of Puslinch contain wording to the satisfaction of the Township that addresses the following matters which shall be included within the declaration of this plan of condominium and within all Purchase and Sale Agreements:
 - a) advise all persons who make first purchases of land/units within the plan of condominium, after final approval, of the development charges related to this plan of condominium:
 - advise all purchasers that each lot/unit shall be serviced with a privately-owned individual water supply system and a privately-owned individual septic system with tertiary treatment and identify the installation and maintenance requirements of these systems.
- 16. THAT prior to any grading or construction on the site and prior to final approval of the plan of condominium, the Owner shall submit the following plans and reports to the satisfaction of the Grand River Conservation Authority and the Township of Puslinch:
 - a) a detailed storm water management report and plans in accordance with the 2003 Ministry of the Environment Report entitled, "Stormwater Management Practices Planning and Design Manual". This report should include geotechnical information addressing the infiltration potential on the site. In addition, a storm servicing plan should be included. The detailed storm water management report shall also include landscaping plans;
 - an erosion and siltation control plan in accordance with the Grand River Conservation Authority Guidelines for sediment and erosion control, indicating the means whereby erosion will be minimized and silt maintained on site throughout all phases of grading and construction;
 - c) detailed lot grading and drainage plans showing the limits of all grading, including existing and proposed grades and information such as the tentative house locations and elevations for each lot, adequate swimming pool envelopes, tile field locations with their sizes and elevations complete with any other special features necessary to ensure adequacy of the septic system and drainage for each lot;
 - d) a Tree Saving Plan to support lot grading on the lots;
 - e) an Environmental Implementation Report (EIR) to the satisfaction of the Grand River Conservation Authority in consultation with the Township of Puslinch. The EIR shall include the above noted reports. In addition, the EIR shall address how mitigation measures outlined in the EIS have been addressed. The EIR shall also provide a "Condominium Home Owner's Guide" regarding wetland, shoreline and natural area protection information:
 - f) a Development, Interference with Wetlands and Alterations to Shorelines and Watercourses permit for proposed works within the regulated area.
- 17. THAT the Development Agreement between the Owner and the Township of Puslinch contain provisions for the completion and maintenance of the works in accordance with the approved plans and reports noted in Condition No. 16 above.
- 18. THAT the Development Agreement between the Owner and the Township of Puslinch shall contain a provision which requires the Owner to advise all prospective purchasers, through Purchase and Sale Agreements, that mail delivery will be in the form of designated Centralized Mail Box and shall also inform all purchasers, prior to closing of any home sale, the exact location of such facilities within the community.

- 19. THAT the Owner provide, at their expense, a centralized mail facility within the condominium in keeping with the requirements of Canada Post's Community Mailbox Program. The Owner shall also provide proper notification to future purchasers of the condominium of such a mail facility to the satisfaction of Canada Post Corporation.
- 20. THAT the Owner agrees to compete to the satisfaction of Canada Post the following:
 - Work with Canada Post to determine and provide temporary suitable Centralized Mail Box locations which may be utilized by Canada Post until the roadways are in place in the remainder of the subdivision.
 - ii) Determine the location of all centralized mail receiving facilities in co-operation with Canada Post and to indicate the location of the centralized mail facilities on appropriate maps, information boards and plans. Maps are also to be prominently displayed in the sales office showing specific Centralized Mail Facility locations.
- 21. THAT the development agreement between the Owner and the Township of Puslinch contain provisions whereby adequate snow removal is to be provided to allow children to walk safely to a designated bus pick up point.
- 22. THAT the Owner and the Wellington Catholic District School Board shall reach an agreement regarding the supply and erection of a sign on the subject land, at the owner's expense, advertising potential Wellington Catholic District School Board supporters of the location of the schools serving the area and the current practice of busing students outside the immediate area should schools in the area be at capacity.
- 23. THAT the Development Agreement between the Owner and the Township of Puslinch shall contain a provision which requires the Owner to advise all prospective purchasers, through Purchase and Sale Agreements that school buses operated by or for the Wellington Catholic District School Board will not travel on privately owned or maintained right-of-ways, and that if students are eligible to be bused, they may be picked up along existing or future public roadways.
- 24. THAT the Owner provide the Upper Grand District School Board with a digital file of the plan of condominium in either ARC/INFO export or DXF format containing parcel fabric and street network.
- 25. THAT the Owner provide, to the satisfaction of the County of Wellington Planning Department, a copy of the final plan of subdivision created in Autocad (.dwg) format and submitted on CD (compact disc) media or by email.
- 26. THAT the Owner's surveyor shall submit to the County of Wellington a written undertaking to provide to the County of Wellington a mylar copy and two white prints of the final plan of condominium as registered in the Land Titles Office for Wellington (No. 61) within 21 days of the plan's having been registered in the event that the Land Registry Office does not forward such documents to the County of Wellington.
- 27. THAT the Owner's solicitor shall submit to the County of Wellington a written undertaking to provide to the County of Wellington a copy of the registered declaration as registered in the Land Titles Office for Wellington (No. 61) within 21 days of the plans and declarations having been registered.
- 28. THAT, if final approval is not given to this draft plan of condominium No. 23CD-09003 within five (5) years of this draft approval, and if no extensions to draft approval have been granted, draft approval shall lapse. If the Owner wishes to request an extension to draft approval, a written explanation, together with a resolution of support from the Council for the Township of Puslinch must be received by the Director of Planning for the County of Wellington prior to the lapsing date of <u>December 21, 2016.</u>
- 29. THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by the Township of Puslinch how conditions 2 to 7, 9 to 18, 21 and 23 have been satisfied.
- 30. THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by the **Ministry of Culture** how **condition 8** has been satisfied.
- THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by the Ministry of Environment how condition 10 has been satisfied.
- 32. THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by the **Grand River Conservation Authority** how **conditions 16 and 17** have been satisfied.

- 33. THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by Canada Post Corporation how condition 19 and 20 have been satisfied.
- 34. THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by the Wellington Catholic District School Board how condition 22 and 23 have been satisfied.
- THAT prior to final approval by the County of Wellington, the County of Wellington is to be advised in writing by the Upper Grand District School Board how condition 24 has been exterior
- 36. THAT the County of Wellington be advised in writing by the County of Wellington Planning Department how condition 25 has been satisfied.
- 37. THAT prior to final approval by the County of Wellington, the Owner remit to the County of Wellington the applicable final approval fee which is in effect at the time of the presentation of the final plan for final approval.

NOTES TO DRAFT APPROVAL

- It is the applicant's responsibility to fulfill the conditions of draft approval and to ensure that the required clearance letters are forwarded by the appropriate agencies to the County of Wellington, quoting the County plan of condominium file number (23CD-09003). 1.
- 2
- We suggest that you make yourself aware of the following subsections of the Land Titles Act:

 i) subsection 143(1) requires that all new plans be registered in a Land Titles system if the land is situated in a land titles division; and
 - subsection 143(2) allows certain exceptions.
- Clearances are required from the following agencies: 3

Township of Puslinch Ministry of Culture
Ministry of the Environment
Grand River Conservation Authority Canada Post Corporation
Wellington Catholic District School Board Upper Grand District School Board County of Wellington Planning Department

If the agency condition relates to a condition(s) in the subdivision or development agreement, a copy of said agreement should be sent to them. This will expedite the clearance of the final plan.

- The Developer is hereby advised that the transmission lines abutting this condominium operate at 500,000, 230,000 or 115,000 volts. Section 186 Proximity of the Regulations for Construction Projects in the Occupational Health and Safety Act, require that no object be brought closer than 6 6. metres (20 feet) to an energized 500 kV conductor. The distance for 230kV conductors is 4.5 metres (15 feet), and for 115kV conductors is 3 metres (10 feet). It is the proponent's responsibility to be aware, and to make all personnel on site aware, that all equipment and personnel must come no closer than the distance specified in the Act. They should also be aware that the electrical conductors can raise and lower without warning, depending on the electrical demand placed on the
- The final plan approved by the County of Wellington must be registered within 30 days of final approval or the County of Wellington may withdraw its approval. 7.
- Measurements in final plans may be presented in metric or imperial units of measurement, 8.
- It is the Owner's responsibility to fulfill the conditions of draft approval and to ensure that the required clearance letters are forwarded by the appropriate agencies to the County of Wellington, attention of the Director of Planning, 74 Woolwich Street, Guelph, Ontario, N1H 3T9. 9.
- The final plan approved by the County of Wellington must be registered within 30 days of final approval or the County of Wellington may withdraw its approval under subsection 51(59) of the Planning Act, R.S.O. 1990 as amended. 10.
- The Developer is hereby advised that prior to commencing any work within the Plan, the Developer must confirm that sufficient wire-line communication/telecommunication infrastructure is currently available within the proposed development to provide communication/telecommunication service to the proposed development. In the event that such infrastructure is not available, the Developer is hereby advised that the Developer may be required to pay for the connection to and/or extension of the existing communication/telecommunication infrastructure, the Developer shall be required to demonstrate to the municipality that sufficient alternative communication/telecommunication facilities are available within the proposed development to enable, at a minimum, the effective delivery of communication/telecommunication services for emergency management services (i.e., 911 Emergency).



REPORT ADM-2023-008

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Municipal Clerk

PRESENTED BY: Courtenay Hoytfox, Municipal Clerk

MEETING DATE: February 8, 2023

SUBJECT: 2022 Annual Water Report – Drinking Water System Number 260021034

File: E13PUS

RECOMMENDATION

That Report ADM-2023-008 regarding the 2022 Annual Water Report - Drinking Water System Number 260021034 be received; and

That the 2022 Annual Water Report be submitted to the Ministry and the applicable agencies as outlined in Report ADM-2023-008.

Background

The Township completes, in accordance with Ontario Regulation 170/03, an annual report for Drinking Water System Number 260021034. A copy of 2022 Annual Report is attached as Schedule A.

Notification and Posting

The Annual Drinking Water System Report is submitted to:

Ministry of Environment & Climate Change **Ontario Government Building** 4th Floor 1 Stone Road West

Guelph, ON N1G 4Y2 Fax: 519-826-4286

Email: caterina.luberti@ontario.ca

Ministry of Environment & Climate Change

Suite 200

6733 Mississauga Road Mississauga, ON L5N 6J5

Email: <u>tina.patel@ontario.ca</u> colleen.watts@ontario.ca

Wellington Dufferin Guelph Public Health 160 Chancellors Way Guelph, ON N1G 0E1

Fax: 519-836-7215

The Whistle Stop Co-operative Pre-School Inc. 23 Brock Road South RR #3 Guelph, ON N1H 6H9

Attention: Sandra Gunson

The Annual Drinking Water System Report is posted on the:

- Township's website
- Township Office Bulletin Board
- Puslinch Community Centre Bulletin Board and Black Binder
- Library Bulletin Board
- Concession Booth

Financial Implications

None

Applicable Legislation and Requirements

Ontario Regulation 170/03 – Ontario Water Resources Act

Engagement Opportunities

None

Attachments

Schedule "A" 2022 Drinking Water System Number 260021034 Annual Report

Respectfully submitted,	Reviewed by:
Courtenay Hoytfox,	Glenn Schwendinger,
Municipal Clerk	CAO

OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:260021034Drinking-Water System Name:Puslinch Community CentreDrinking-Water System Owner:Township of PuslinchDrinking-Water System Category:SMNR – Small Municipal Non-ResidentialPeriod being reported:January 1, 2022 to December 31, 2022

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [] No [] Is your annual report available to the public at no charge on a web site on the Internet? Yes [] No [] Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Designated Facilities served: 1 Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [X] No [] Number of Interested Authorities you report to: 3 (Puslinch Community Centre, Library and Whistlestop Preschool) Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [X] No []

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Puslinch Community Centre, Whistlestop	260021034
Preschool, Library, Concession Booth	

are	• •	a copy of your annual you and to whom you []	-		·	wners that
	rge. [X] Public a [X] Public a [] Public a [X] Public a [X] Public a	u notified system users access/notice via the we access/notice via Gover access/notice via a news access/notice via Public access/notice via a Publ	eb nment O spaper Request lic Libran	ffice	eport is available, a	nd is free of
	Describe you	r Drinking-Water Sys	tem			
	There is a So	IV System in the Pusli oftener and UV System Preschool and The On	n in Pusl	inch Comr	nunity Centre that	•
	List all water	r treatment chemicals	used over	this repor	ting period	
	N/A			•		
	[] Instal [] Repai [] Repla	gnificant expenses incu I required equipment or required equipment once required equipment once a brief description a			monetary expenses	incurred
	Tieuse provid	ae a brief description a	ind d bloc	inuowii oi	moneury expenses	meurreu
		ils on the notices subm				` '
	Drinking-Wa Spills Action	ater Act or section 16-4 Centre	oi Sched	tale 19 of (J.Keg.170/03 and re	eportea to
	Incident	Parameter	Result	Unit of	Corrective Action	Corrective

n/a

Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	13	0	0-2	10	0-<10
Treated	136	0	0-7	100	<10 - 40
Distribution	N/A				

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the

period covered by this Annual Report.

period covered by time rimidal Report.						
	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure			
Turbidity	0					
Chlorine	0					
Fluoride (If the DWS provides fluoridation)	0					

NOTE: For continuous monitors use 8760 as the number of samples.

Summary of additional testing and sampling carried out in accordance with the

requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Nov. 22/21	0.6	ug/L	
Arsenic	Nov. 22/21	0.2	ug/L	
Barium	Nov. 22/21	0.14	ug/L	
Boron	Nov. 22/21	24	ug/L	
Cadmium	Nov. 22/21	0.003	ug/L	
Chromium	Nov. 22/21	0.13	ug/L	
*Lead	Oct. 21/22	0.41/1.68	ug/L	
Mercury	Nov. 22/21	0.01	ug/L	
Selenium	Nov. 22/21	0.04	ug/L	
Sodium	Nov. 22/21	160/0.01	mg/L	
Uranium	Nov. 22/21	0.073	ug/L	
Fluoride	Nov. 22/21	0.36	mg/L	
Nitrite	Oct. 28/22	0.003	mg/L	
Nitrate	Oct. 28/22	0.006	mg/L	

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing				
Distribution				

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Nov.22/21	0.02	ug/L	
Atrazine	Nov.22/21	0.01	ug/L	
Atrazine + N-dealkylated metobolites	Nov.22/21	0.01	ug/L	
Azinphos-methyl	Nov.22/21	0.05	ug/L ug/L	
Benzene	Nov.22/21	0.32	ug/L	
Benzo(a)pyrene	Nov.22/21	0.004	ug/L	
Bromoxynil	Nov.22/21	0.33	ug/L	
Carbaryl	Nov.22/21	0.05	ug/L	
Carbofuran	Nov.22/21	0.01	ug/L	
Carbon Tetrachloride	Nov.22/21	0.17	ug/L	
Chlorpyrifos	Nov.22/21	0.02	ug/L	
Desethyl Atrazine	Nov.22/21	0.01	ug/L	
Diazinon	Nov.22/21	0.02	ug/L	
Dicamba	Nov.22/21	0.20	ug/L	
1,2-Dichlorobenzene	Nov.22/21	0.41	ug/L	
1,4-Dichlorobenzene	Nov.22/21	0.36	ug/L	
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Nov.22/21	0.01	ug/L	
1,2-Dichloroethane	Nov.22/21	0.35	ug/L	
1,1-Dichloroethylene (vinylidene chloride)	Nov.22/21	0.33	ug/L	
Dichloromethane	Nov.22/21	0.35	ug/L	
2-4 Dichlorophenol	Nov.22/21	0.15	ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	Nov.22/21	0.19	ug/L	
Diclofop-methyl	Nov.22/21	0.40	ug/L	
Dimethoate	Nov.22/21	0.06	ug/L	

Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Diquat	Nov.22/21	1	ug/L	
Diuron	Nov.22/21	0.03	ug/L	
Glyphosate	Nov.22/21	1	ug/L	
Epoxide	Nov.22/21	0.01	ug/L	
Malathion	Nov.22/21	0.02	ug/L	
MCPA	Nov.22/21	0.00012	ug/L	
Metolachlor	Nov.22/21	0.01	ug/L	
Metribuzin	Nov.22/21	0.02	ug/L	
Monochlorobenzene	Nov.22/21	0.30	ug/L	
Paraquat	Nov.22/21	1	ug/L	
Pentachlorophenol	Nov.22/21	0.15	ug/L	
Phorate	Nov.22/21	0.01	ug/L	
Picloram	Nov.22/21	1	ug/L	
Polychlorinated Biphenyls(PCB)	Nov.22/21	0.04	ug/L	
Prometryne	Nov.22/21	0.03	ug/L	
Simazine	Nov.22/21	0.01	ug/L	
Terbufos	Nov.22/21	0.01	ug/L	
Tetrachloroethylene	Nov.22/21	0.35	ug/L	
2,3,4,6-Tetrachlorophenol	Nov.22/21	0.2	ug/L	
Triallate	Nov.22/21	0.01	ug/L	
Trichloroethylene	Nov.22/21	0.44	ug/L	
2,4,6-Trichlorophenol	Nov.22/21	0.25	ug/L	
Trifluralin	Nov.22/21	0.02	ug/L	
Vinyl Chloride	Nov.22/21	0.17	ug/L	

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample



REPORT PD-2023-001

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Municipal Clerk

Lynne Banks, Development & Legislative Coordinator

PRESENTED BY: Courtenay Hoytfox, Municipal Clerk

MEETING DATE: February 8, 2023

SUBJECT: Zoning By-law Amendment Application (D14/WEL)

Wellington Motor Freight

Pt. Lt. 24, Concession 7; Pt. Lt 24, Concession 8; Part Road Allowance

between Concessions 7 & 8; Township of Puslinch

128 Brock Road South

File: D/14WEL

RECOMMENDATION

That Report PD-2023-001 entitled Zoning By-law Amendment Application D14/WEL) be received;

That Council deem the application to be complete for the purpose of proceeding to the Statutory Public Information Meeting; and

That Council authorize the holding of a Statutory Public Meeting on Wednesday, March 8, 2023, at 7:00 pm at the Puslinch Community Center.

Purpose

The purpose of this report is to:

1. Advise Council of the application for a Site Specific Zoning By-law Amendment for the property located at 128 Brock Road South. The site is currently zoned Highway Commercial (Special Provision 89) (HC 89) to Site Specific Industrial (IND-) to permit a warehouse and transportation hub;

- Obtain confirmation from Council that the application can be deemed to be complete, as well as receive direction from Council to schedule the Statutory Public Meeting for Wellington Motor Freight – Rezoning Application D14/WEL; and
- 3. That Council authorize staff to proceed with holding a Public Information Meeting on March 22, 2023.

Background

<u>Application</u>

The proposed Zoning By-law Amendment is to amend the Township of Puslinch Zoning By-law 23-2018 to rezone the lands from Highway Commercial (Special Provision 89) (HC 89) to Site Specific Industrial (IND-) to permit a warehouse and transportation hub.

The Township has circulated the application and supporting documents to the required agencies, Township consultants, Township Staff and the County of Wellington Planners and County of Wellington Transportation for comments, and is also included in the February 14, 2021 PDAC Meeting agenda for comment by the Planning and Development Advisory Committee.

The following reports have been submitted with this application:

- Planning Justification Report MHBC Planning, dated January 2023.
- Environmental Impact Study NRSI, dated January 2023.
- Scoped Hydrogeological Assessment Chung & Vander Doelen Engineering Ltd., dated December 2022.
- Geotechnical Investigation Chung & Vander Doelen Engineering Ltd,, dated December 2022.
- Transportation Impact Study Paradigm Transportation Solutions Limited, dated December 2022.
- Preliminary Servicing & Stormwater Management Report Meritech , dated December 2022.

Prior to any development, Site Plan Approval would be required detailing a specific design of the site.

Consultation:

1. Pre-Consultation

A pre-submission consultation for the proposed rezoning was submitted on August 30, 2022 and the applicant was provided with preliminary comments from Township Staff and its consultants representing the Township, County of Wellington Planners and external agencies.

2. Staff and Agency Circulation Comments

The zoning amendment application was circulated for review January 17, 2023 to the Township's consultants, staff, County of Wellington staff and external agencies for review and comments. Comments received will be incorporated into the final Recommendation Report.

The comments provided to date by the commenting agencies from the first submission circulation are attached as Schedule "A" to this report. It should be noted that the County planners have advised that a Noise Study was not requested in the preconsultation comments and therefore, wasn't submitted as part of the required documents for the zoning amendment, however they further note that application can still be deemed complete and recommend that the Noise Study be completed prior to zoning approval. The planners further stated that it could also be addressed through a Holding provision if the use was approved.

Notice

Notice regarding the Public Meeting will be given in accordance with the *Planning Act*, as amended.

Financial Implications

None

Applicable Legislation and Requirements

County of Wellington Official Plan Township of Puslinch Zoning By-law 2018-023 Planning Act, R.S.O. 1990, as amended

Attachments

Attachment "A" – Comment Summary

Engagement Opportunities

Township Website;
Public Information Meeting (Statutory);
Print Advertisements/Notices (Statutory);
Planning and Development Advisory Committee

Respectfully submitted,	Reviewed by:
Lynne Banks	Courtenay Hoytfox
Development & Legislative Coordinator	Municipal Clerk

KEY MAP



SCHEDULE "A"



Comment Summary – Zoning By-law Amendment Application – 128 Brock Rd. S.

Consultant	Comments
GM BluePlan - Engineers	See letter attached
County of Wellington	See letter attached
Ecologist	See letter attached
Stan Denhoed-Township Hydrogeologist	See letter attached
Township of Puslinch Fire Department – Brent Smith	 Show the fire route on the site plan. If the overhead walkway between the office building and the warehouse building are constructed above the fire route, the overhead clearance above the fire route shall be a minimum of 5m in clear height above the road surface. Show the water supply for firefighting purposes on the site plan. Attached are the Puslinch requirements. Show the fire department pumper connection for the sprinklered warehouse. A fire safety plan could be required before occupancy. Please refer to 2.8.2 of the Ontario Fire Code for requirements.
Township of Puslinch Building Department	No major building code concerns with the proposed zoning change. More detailed Building Department comments will be made during the site plan approval process when more detail information is provided.



	Please note a fully detailed OBC matrix, building classifications and spatial calculations are to be provided at time of site plan application.
County of Wellington Transportation Department	In general, the provided site plan concept of accessing the existing entrance onto Brock Road and a new access on Gilmore Rd is acceptable to the Wellington Roads. Additional access points along Brock Rd will Not be provided for this development as outlined in our policy and official plan requirements. The TIS will be peer review and official comments will be provided as the zoning bylaw amendment moves along through the process.
Township of Puslinch Public Works	Public works has no comment as this is a County road.
Township of Puslinch By-law	By-law has no concerns with the proposed Zoning By-law Amendment application
GRCA	See letter attached
Source Water	See letter attached



January 27, 2023 Our File: 122006-018

Township of Puslinch 7404 Wellington Road 34 Guelph, ON N0B 2J0

Attention: Ms. Lynne Banks

Re: Zoning Bylaw Amendment Application 128 Brock Road South, Township of Puslinch

Dear Ms. Banks,

An email was received on January 17, 2023, requesting comments regarding a first submission for zoning bylaw amendment related to a proposed future industrial development, on the subject lands located at 128 Brock Road South, in the Township of Puslinch. The proposed development consists of a one-storey warehouse facility, a two-storey office facility and trailer parking and loading spaces, with one access to Brock Road South for heavy vehicles and one access to Gilmour Road for employees.

The Township requested that GM BluePlan Engineering (GMBP) review the submission from an engineering perspective. As such, the following documents and drawings were received and reviewed by GMBP as part of the first submission for zoning bylaw amendment:

- Zoning Bylaw Amendment Application Form, dated December 16, 2022.
- Zoning Bylaw Amendment Application Cover Letter, prepared by MHBC Planning, dated January 9, 2023.
- Conceptual Site Plan and Conceptual Enlarged Site Plan, prepared by Tacoma Engineers, dated December 21, 2022.
- Elevations, prepared by Edge Architects Ltd., dated December 15, 2022.
- Preliminary Servicing and Stormwater Management Report, prepared by Meritech Engineering, dated December 21, 2022.
- Base Plan, prepared by Meritech Engineering, dated November 22, 2022.
- Preliminary Serving and Grading Pla, prepared by Meritech Engineering, dated December 20, 2022.
- Geotechnical Investigation, prepared by Chung and Vander Doelen Engineering, dated December 20, 2022.
- Parcel Register, dated January 12, 2023.

We defer review of the following documents to the Township Hydrogeologist and Township Ecologist:

- Scoped Environmental Impact Study, prepared by Natural Resource Solutions Incorporated, dated January 2023.
- Scoped Hydrogeological Assessment, prepared by Chung and Vander Doelen Engineering, dated December 22, 2022.

We defer review of the following to the County of Wellington Planning and Development Department:

• Planning Justification Report, prepared by MHBC Planning, dated January 2023.





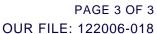
We defer review of the following document to the County of Wellington Roads Department:

• Transportation Impact Study, prepared by Paradigm Transportation Solutions, dated December 2022.

Based on our review of the site and associated documents, we have the following comments. We have no concerns with the zoning bylaw amendment from an engineering perspective. Further detailed review will be provided at the time of detailed design and site plan application.

Deficiencies/Outstanding Matters

Item No.	Matter / Requirement	Drawing / Document Reference	Date Issue Identified	Comment
1.	Stormwater Management Quantity Control	Preliminary Servicing and Stormwater Management Report	January 27, 2023	The County of Wellington prescribed matching post-development flows to predevelopment flows for the 2-year through 100-year design storm events. At the time of detailed design and site plan application, please provide analysis for the 25 and 50-year design storms, as well as the historical storm. Further review of quantity control of minor and major events will be completed at the time of detailed design and site plan application.
2.	Stormwater Management Quality Control	Preliminary Servicing and Stormwater Management Report	January 27, 2023	Sizing of the oil-grit separator and other water quality mitigation will be reviewed at the time of detailed design and site plan application.
3.	Water Balance and Infiltration	Preliminary Servicing and Stormwater Management Report	January 27, 2023	The water balance for the subject lands and details of the proposed infiltration galleries will be reviewed further at the time of detailed design and site plan application. All concerns expressed by the Township Hydrogeologist and GRCA with regards to water balance will need to be satisfactorily addressed.
4.	Wastewater Treatment System	Preliminary Servicing and Stormwater Management Report and Preliminary Servicing Plan	January 27, 2023	Further refinement of the wastewater treatment system will be required at the time of detailed design and site plan application. Of concern at this time are the proximity to property line, as raised by the Township Hydrogeologist, and the major overland flow route directly across the





 Item No.
 Matter / Requirement
 Drawing / Document Reference
 Date Issue Identified
 Comment Septic dispersal bed per the Preliminary Grading Plan.

Additional Commentary

Item No.	Additional Commentary
1.	It has been noted that an MECP ECA will be required for the wastewater treatment system as the estimated wastewater flows will exceed 10000 L/day. The Township and MECP will need to review and approve the detailed design of the wastewater treatment system when available.
2.	At the time of detailed design and site plan application, the Township Fire Department should comment on fire access route, fire water supply tank sizing and hydrant location.
3.	The County Roads Department should comment on the proposed right turn lane on Brock Road South and the reconfiguration of the existing ditch.

Completed/Approved

Item No.	Matter / Requirement	Drawing / Document Reference	Date Issue Identified	Date Issue Cleared	Comment

If you have any questions or require additional information, please do not hesitate to contact us.

Yours truly,

GM BLUEPLAN ENGINEERING



Andrea Reed, P. Eng. Project Engineer



COUNTY OF WELLINGTON

PLANNING AND DEVELOPMENT DEPARTMENT ALDO SALIS, BES, M.Sc. MCIP, RPP, DIRECTOR OF PLANNING AND DEVELOPMENT TEL: (519) 837-2600 EXT. 2064 FAX: (519) 823-1694 1-800-663-0750 ADMINISTRATION CENTRE 74 WOOLWICH STREET GUELPH, ONTARIO N1H 3T9

January 27th, 2023

Glenn Schwindinger CAO Township of Puslinch 7404 Wellington County Rd 34 Puslinch, On NOB 2JO

Dear Glenn:

Re: ZONING BY-LAW AMMENDMENT – Initial Comments

Wellington Motor Freight 128 Brock Road South Township of Puslinch

Please find the Planning comments below in reference to the above noted Zoning By-law amendment based on our preliminary review of the documents below. These comments are provided based on a review of the following:

Reports Submitted:

- Planning Justification Report prepared by MHBC (January 2023)
- Draft Zoning By-law by MHBC
- Preliminary Servicing and Stormwater Management Report by Meritech (December 2022)
- Environmental Impact Study by NRSI (January 2023)
- Geotechnical Investigation by Chung & Vander Doelen (December 20, 2022)
- 'Scoped' Hydrogeological Assessment by Chung & Vander Doelen (December 22, 2022)
- Transportation Impact Study by Paradigm (December 2022)
- Conceptual Site Plan by Tacoma Engineers (December 21, 2022)
- Draft building elevations by Edge Architects (December 15, 2022)

Planning Comments:

- 1. The subject property is designated as Secondary Agricultural and is included in Special Policy Area PA7-1 in the County's Official Plan. PA7-1 Puslinch Economic Development Area allows for "locations for economic activity and employment opportunities. This area is the predominant location for business and industry in the Township"
- 2. Staff will also review the proposal in relation to Official Plan policy 9.8.1 regarding access to Brock Road.
- 3. The property is located in WHPA Q1 and Q2. The County's Risk Management Official will provide additional comments on the proposal related to sourcewater protection requirements and policies.
- 4. The County's Roads department will provide further information regarding submitted traffic impact study. Staff note that a Right Turn lane entering in to the site is recommended.
- 5. The property is zoned Highway Commercial Site Specific (HC[sp89]) in the Township's zoning by-

- law. The current site specific zoning permits a variety of uses including, "conference or meeting facility, professional office, restaurant, retail store..."
- 6. The applicant is proposing to revise the existing zoning to an Industrial zone to permit a warehouse and transport terminal.
- 7. The property is subject to the Township's Urban Design guidelines and a 3m landscaping buffer is required at the front of the property per the Township's zoning by-law.
- 8. Staff note that the concept plan has changed significantly from the initial pre consultation comments were provided in September 2022.
- 9. The initial concept plan provided for a stormwater management pond, the revised proposal does not appear to provide an area for a pond, the Township's peer reviewing engineer should provide comments on the proposed stormwater management plan. The County's Road department will also review the submitted stormwater management plan as it relates to Brock Road S.
- 10. The Township's zoning by-law does permit Dry Industrial Uses including warehousing provided there are no significant water or sewage requirements, the Township should confirm the proposed volume of water taking and sewage produced on the site. Staff note the servicing strategy includes a requirement for an MECP approved ECA.
- 11. Due to the additional entrance on McLean Road and the number and proximity of loading bays on the site a noise assessment should be completed to determine if any mitigation measures are required for the proposed use to existing residential uses. Considering the proximity of the residence at 5 Gilmour Road and the Aberfoyle Urban Boundary an evaluation of the MOEE D Series Guidelines should be provided.

These comments are intended to provide initial feedback to the applicant and Township on the initial zoning By-law submission. As more information is provided and detailed review of the application is completed more comments may arise. I trust these initial comments will be of assistance.

Regards,

Zach Prince, RPP MCIP Senior Planner January 27th, 2023

Lynne Banks
Development and Legislative Coordinator
Township of Puslinch
7404 Wellington Rd. 34, Puslinch, Ontario NOB 2J0
lbanks@puslinch.ca

RE: Ecology Review of Scoped Environmental Impact Study (EIS) supporting Zoning Bylaw Amendment Application for 128 Brock Road South, Puslinch

INTRODUCTION

Dougan & Associates (D&A) was retained by the Township of Puslinch in September 2022 to complete a pre-consultation ecology review of a site plan submitted by Wellington Motor Freight for their property at 128 Brock Road South, Puslinch. The subject property is located just south of Gilmour Road on Brock Road South (Wellington Road 46). According to our review of the pre-consultation application in 2022, the owner was proposing to develop a warehouse and office on the property, with an ancillary truck depot. Based on our review and the proposal and desktop review of existing natural heritage features and policy, it was concluded that an Environmental Impact Study (EIS) was required to demonstrate that the proposal will not result in negative impacts to identified natural heritage features or their ecological functions, and that the EIS should be prepared in accordance with Section 4.6.3 of the County's Official Plan. Furthermore, it was recommended that a Terms of reference (TOR) be established with the County, Township and Grand River Conservation Authority (GRCA) to confirm the scope. This ecology review was submitted to the Township on September 20, 2022.

The proponent has submitted a Zoning Bylaw Amendment (ZBA) application dated January 9, 2023 which includes a revised site plan. The proposed development includes a warehouse and trucking facility and 3-storey office building with associated parking, stormwater management and septic infrastructure. A Scoped EIS (hereafter referred to as the "EIS") was prepared by NRSI (January 2023) as part of the ZBA application. It is noted that an approved EIS was completed in 2014 by Aboud & Associates for the previous property owner to allow for site grading and filling. The NRSI EIS acknowledges that the January 2023 EIS has been prepared as an update to the 2014 EIS.

D&A has been retained by the Township to complete an ecology review of NRSI's Scoped EIS for 128 Brock Road South dated January 2023, prepared in support of the ZBA. D&A's comments on the EIS are provided below.

KEY COMMENTS

The following is a summary of the primary concerns and requests for clarification based on our review of the EIS:

- 1. There is no indication whether the Terms of Reference for the Scoped EIS were reviewed or approved by any reviewing agencies. This is concerning given the fact that most of the field surveys conducted by NRSI occurred prior to the submission of the TOR, and because the Scoped EIS relies heavily on field data collected by Aboud & Associates as part of a 2014 EIS. The field data collected by Aboud & Associates in 2013/2014 is considered out-of-date (i.e., > 5 years old). Since that time, the site has undergone significant changes (e.g. clearing and filling of some portions of the property, years of natural vegetation regeneration). Some of the surveys completed by Aboud & Associates were not repeated by NRSI during appropriate survey/breeding windows. As a result, the 2014 data and surveys conducted outside of appropriate survey windows should not be used to draw conclusions about the existing conditions and significance of features on site.
- 2. Seasonally appropriate field surveys should be conducted to address the above noted deficiencies. Alternatively, (i.e., In absence of such information), a conservative interpretation should be applied to the evaluation and status of existing natural heritage features, unless it can be explicitly explained (preferably with more detailed information) why such an interpretation is not appropriate, and the deficiencies are not of concern. Please refer to the detailed comments below for further reference/guidance.
- 3. The EIS concludes that there will be no negative impacts on natural features onsite or adjacent lands, however this conclusion is likely premature; adequate field studies have not been carried out to support the EIS.

DETAILED COMMENTS

Table 1 summarizes our comments, which identify specific concerns and/or requests for clarification based on the review of the Scoped EIS.

Table 1 Detailed comments on NRSI's Scoped Environmental Impact Study

Comment Number	Section Number	Section Title	Comment	Recommendation
1	2.2	Collection and Review of Background Information	One additional source of background information should have been consulted, i.e., the Nestlé Waters Canada Biological Monitoring Program data collected at the 101 Brock Street South location, directly across the road from the subject lands.	Consult with Nestlé Waters Canada to see if they will release their monitoring data for review.
2	2.2.1	Significant Species Screening	The text indicates that there is suitable habitat	Please indicate why the SWM pond directly south

Comment Number	Section Number	Section Title	Comment	Recommendation
			present in the study area for only one SAR/SCC 3listed species, Eastern Wood-Pewee.	of the property, and the two Dufferin Aggregates ponds, are not considered suitable habitat for Snapping Turtle.
3	2.2.1	Significant Species Screening	The text indicates that there is suitable habitat present in the study area for only one SAR/SCC listed species, Eastern Wood-Pewee.	Please indicate why the trees on the subject lands (e.g., CUW1, H1, H2) and adjacent to the property (e.g., FOD5) are not considered suitable maternity roost habitat for SAR listed bats. Text in Section 2.2.2 states that there is potential Bat Maternity Colonies SWH within FOD5.
4	2.2	Significant Wildlife Habitat Screening	The EIS text states that "The subject property does not contain habitats that may be significant for wildlife." However, the statement could not be verified because the SWH screening/assessment was not included in the EIS for review.	Please provide the complete SWH screening/assessment for review (i.e., including those features not considered SWH). For example, please indicate why Reptile Hibernaculum SWH (i.e., for snakes) is not present on or adjacent to the subject lands.
5	3.0	Relevant Policies, Legislation and Planning Studies Table 1: Provincial Policy Statement (OMMAH, 2020)	The Natural Heritage Reference Manual and Significant Wildlife Habitat Technical Guide (OMNR, 2000) were listed as relevant policy documents pertaining to the Provincial Policy Statement. However, the Significant Wildlife Habitat Criteria Schedule (SWHCS) for Ecoregion 6E (OMNR, 2015) was not listed.	Please include the SWHCS for Ecoregion 6E on this list. Reference to this document is made in the Terms of Reference.
6	3.0	Relevant Policies, Legislation and Planning Studies, Table 1	Puslinch Zoning bylaw is a relevant policy document missing from the table.	The Puslinch Zoning By- law should be reviewed and added to the table.
7	3.0	Relevant Policies, Legislation and	In the County of Wellington Official Plan section, there is a	Refer to Schedule A7 instead of Schedule A7-3

Comment Number	Section Number	Section Title	Comment	Recommendation
		Planning Studies, Table 1	reference to Schedule A7-3. This schedule only shows Greenbelt designations and there are none related to this property. Likely this was intended to refer to Schedule A7, which shows the property designated as "secondary agriculture" and illustrates a patch of Core Greenlands adjacent to the property.	
8	3.0	Relevant Policies, Legislation and Planning Studies, Table 1	With respect to the County Official Plan, Schedule B7 shows the property within the "Paris Galt Moraine Policy Area". The EIS has not considered this policy designation.	Review County Official Plan Schedule B7 and policies related to the Paris Galt Moraine Policy Area designation and clarify whether there are implications that should be addressed in the EIS.
9	3.0	Relevant Policies, Legislation and Planning Studies, Table 1	The Wellington County Official Plan has policies related to wetlands and woodlands that are not clearly noted in Table 1.	Table 1, Wellington County Official Plan, under "project relevance" it should refer to relevant policies regarding wetlands and woodlands.
10	3.0	Relevant Policies, Legislation and Planning Studies, Table 1	It is noted that the unevaluated wetlands may be suitable for complexing with the Mill Creek PSW, however, in result of very recent changes to the OWES system this is no longer the case.	The concept of complexing has been removed from OWES protocol as of January 1, 2023. Please note that if a wetland evaluation were required, these unevaluated wetlands would have to be considered as individual units. No action required at this time.
11	4.0	Field Methods	None of the field surveys took place during the standard wildlife breeding windows. The 2014 survey data is 8.5 years old and considered out-of-date.	Please conduct seasonally appropriate breeding bird, amphibian, and reptile surveys and include the survey results in an EIS addendum. In absence of such information, a conservative interpretation should be applied to the evaluation

Comment Number	Section Number	Section Title	Comment	Recommendation
rrumiser.	rumse.			and status of existing natural heritage features, unless explicitly explained why such an interpretation is not appropriate.
12	4.1.2	Vegetation Inventories	Aboud & Associates vegetation inventories included only 2 site visits: August 2013 and June 2014. The site has undergone significant change since this time including clearing, fill/grading, and 8+ years of time for natural vegetation regeneration to occur. The 2013/ 2014 data is therefore of very minimal value at this point. The NRSI vegetation inventories included only mid- to late October visits, which is insufficient to characterize the flora of the site.	Spring and summer vegetation surveys should be completed to accurately characterize the current vegetation composition of the site.
13	4.1.3	Wetland Boundary Delineation	The report states "The GRCA confirmed that no on-site verification with their ecologist was required (email from J. Simons, GRCA November 16, 2022). A GRCA mapped wetland is shown within the woodland to the east of the subject property. This area was investigated during the fall 2022 field work and the wetland was found not to exist. The area in question is a hilly wooded landform feature and has no wetland present as shown on Map 2."	Please provide the email correspondence with GRCA indicating that onsite verification of the wetland is not required. Similarly, please provide additional evidence/field notes to confirm the mapped wetland does not exist including photographs, soil texture and moisture regime, plant species.
14	4.1.5	Additional Wildlife	The EIS text states: "The house on-site was	Please indicate what protocols were used to

Comment Number	Section Number	Section Title	Comment	Recommendation
			inspected for any evidence of use by nesting birds and/or bats. Individual trees were assessed for the presence of cavities suitable for SAR bats."	conduct the bat surveys in order to ensure that they were conducted appropriately.
15	5.1	Soils, Terrain and Drainage	The last paragraph states that the small wetlands are largely surface water dependent, and that "The proposed development and the associated grading are not expected to have any impact on this wetland feature, since it is sustained by overland runoff (and possibly some shallow interflow) originating from higher topographic areas located further east from the property (CVD 2022b)."	This statement needs to be substantiated. Wetlands sustained by overland runoff may be vulnerable to changes in surficial hydrology. The EIS should clearly demonstrate no negative impact to wetland hydrology.
16	5.2.2	Vascular Flora	The second paragraph states that one SAR plant is reported from the vicinity of the property, but there is no habitat for this species within the study area. The common and scientific names of this plant are spelled incorrectly (should be Fern-leaved Yellow False Foxglove (Aureolaria pedicularia)). We agree this species is unlikely to exist on the property due to lack of suitable habitat, however this should be justified more specifically in the text.	Please correct the spelling error and qualify this statement by providing a brief overview of the species' habitat vs. habitats within the study area.
17	5.2.2	Vascular Flora	The second paragraph states that no provincially or federally significant species were recorded in the 2014 study or during 2022 field investigations, however, local status does	Please confirm whether any locally significant plant species were documented, using the "Significant Plant List for Wellington County" which can be found on page 128 of the Guelph Natural Heritage Strategy -

Comment Number	Section Number	Section Title	Comment	Recommendation
			not appear to have been considered.	Phase 2: Terrestrial Inventory and Natural Heritage System document (Dougan & Associates, 2009) available online.
18	5.3.2	Amphibians and Reptiles	It is stated that: "NRSI biologists did not observe any herpetofauna species during any of the field investigations. Aboud and Associates also did not document any amphibian or reptile species during their 2014 EIS." However, except for the turtle nesting surveys carried out by Aboud & Associates, no dedicated reptile and amphibian surveys were carried out by Aboud & Associates or NRSI. For example, no nocturnal amphibian call surveys were conducted at the unevaluated wetland features at the NE edge of the property. Similarly, no snake surveys were conducted. Certainly, the information provided did not indicate that the unevaluated wetland features did not provide suitable amphibian breeding habitat.	Please qualify this statement by acknowledging that with the exception of turtle nesting surveys conducted by Aboud & Associates in 2014, no dedicated surveys to document the presence of herpetofauna were conducted on or adjacent to the subject lands, and as a result it can't be concluded that none are presently utilizing the natural features on or adjacent to the property. Also, please indicate whether the SWM pond directly to the south or the Dufferin Aggregates (Aberfoyle Pit 1) ponds across Brock Road were surveyed?
19	5.3.2	Amphibians and Reptiles	The EIS text states: "Their study included turtle nesting surveys during the nesting season with no evidence of turtles recorded".	For clarity, please indicate how many turtle nesting survey visits were conducted by Aboud & Associates and whether NRSI considers the effort consistent with standard survey protocol.
20	5.3.3	Mammals	The EIS text states: "Based on available background information, 1 mammal SCC and 5 mammal SAR	Please include the list of SAR/SCC mammal species and indicate why they are not expected to be

Comment Number	Section Number	Section Title	Comment	Recommendation
			are reported from the vicinity of the study area (Dobbyn 1994; MNRF 2022). No regionally, provincially or federally significant species, or their preferred habitats, were observed within the subject property during the 2014 or 2022 field surveys and none are expected to be present."	present within the study area.
21	5.3.4	Butterflies	NRSI states: "NRSI biologists and Abound and Associates did not observe any butterfly species during any of the field investigations."	At least as it applies to NRSI's field surveys, please qualify this statement by indicating that NRSI field surveys were conducted well outside the prime survey windows for documenting butterflies, explaining why none were observed. With respect to the surveys conducted by Aboud & Associates, please indicate whether any dedicated butterfly surveys were carried out. If not, please qualify the statement to indicate that and that the results may not be considered reflective of the species present.
22	5.3.5	Insects	NRSI states: "No regionally, provincially or federally significant species were observed within the subject property during the 2022 field surveys and none are expected to be present."	While the conclusion is not necessarily disputed, please provide rationale to support the statement.
23	6.0	Significance and Sensitivity	Please note that the discussion regarding wetland complexing is no longer necessary as complexing has been removed from the OWES	N/A. See comment 10.

Comment Number	Section Number	Section Title	Comment	Recommendation
Number	Namber		system as of January 1, 2023.	
24	6.0	Significance and Sensitivity	The EIS concludes that "A 15 m buffer to the wetland is recommended to maintain its limited water balance and to protect it from any direct impacts of the development." It is later stated that "The previous depression created a considerably higher than normal groundwater recharge and a lower runoff from the property. These influences are to be factored into the pre-post water balance assessment and in the stormwater management plan to maintain and enhance the groundwater discharge function to Mill Creek." Appendix I: TOR notes that a grading limit of 19 m from the wetlands was implemented in 2014 to maintain wetland hydrology. The 2014 EIS indicates that grading would be limited to approximately 19 m or more from the wetlands in order to cause no impact to wetland hydrology (Aboud & Associates, 2014, page 7).	Please demonstrate that there will be no changes to wetland hydrology of the unevaluated wetlands if a 15 m buffer is applied vs. the recommended 19 m buffer in the 2014 EIS. Justification for the basis of the 15 m buffer should be clearly provided. Also, please note that section 4.1.7 and 4.3.4 of the Planning Justification Report (MHBC, 2023) state that a buffer of 37 m is applied between the development and environmental features (including unevaluated wetlands). This should be reviewed for consistency between reports.
25	6.0	Significance and Sensitivity	The second last paragraph recommends the trees in HR1 be protected at or 1m beyond their surveyed dripline. The last sentence recommends that a Tree Preservation Plan should be prepared to inventory and assess trees and	While we do not disagree with this statement, please include a recommendation that trees should be protected using standard tree protection fencing in which no site alteration or disturbance may occur. A Tree Preservation Plan

Comment Number	Section Number	Section Title	Comment	Recommendation
			recommend protection measures.	should be submitted for review at the Site Plan Application/detailed design phase.
26	6.0	Significance and Sensitivity	With respect to the Significant Woodland, it is stated that "a 5m buffer from the new dripline to any grading has been recommended, and an additional 5m buffer be provided to any structures or impervious surfaces."	Section 4.31 of the Puslinch Zoning By-law requires a 30 m setback for buildings or structures from lands designated "Natural Environment Zone". As per the bylaw mapping, the Significant Woodland is considered Natural Environment Zone, and therefore this setback is applicable. The EIS should clarified whether the proposed development is in compliance with bylaw setback requirements (e.g. the proposed retaining wall is only 10 m from the dripline. If the Township planners consider this a structure, the required setback will need to be considered).
27	6.0	Significance and Sensitivity	The EIS states that "There are no significant species or other habitats present on the property"	There is insufficient information to support this conclusion. Presence/absence of significant species cannot be confirmed based on the scope of field surveys completed.
28	7.1	Proposed Development	The EIS states: "A Conceptual Site Plan has been prepared by Tacoma Engineers (2022) and is superimposed onto the natural feature mapping and shown on Map 3." In addition, a more detailed version of the Conceptual Site Plan is included at the end of Appendix I.	Please indicate whether land along the southeastern periphery of the property will be dedicated as a terrestrial linkage, to provide connectivity between the natural habitats around the unevaluated wetlands and the SWM pond immediately to the south.

Comment Number	Section Number	Section Title	Comment	Recommendation
29	7.3.1	Tree and Vegetation Removal	It is unclear why a retaining wall would be required "to match grade with root zones of offsite trees". Installation of the retaining wall could negatively impact tree root zones and result in hazard trees. No avoidance/ mitigation measures have been recommended to address this potential impact.	Clarify why the retaining wall is needed. Elaborate on impacts regarding how the retaining wall could impact tree roots and avoidance/mitigation measures to address this.
30	7.3.2	Birds and Their Nests	On page 23, the EIS states: "Should any active nest be identified,"	Given that it is not recommended to search vegetatively dense or otherwise complex natural habitats for fear of disturbing nesting birds and contravening the Act, please consider revising the text to read, "Should any active nest be identified, or signs of an active nest be observed, there shall be"
31	7.4.1	Alterations to Drainage and Flow Patterns, Water Quality, Groundwater	This section is missing a discussion of potential hydrological impacts to wetlands. The EIS should clearly demonstrate that wetland hydrology will be maintained.	Please include a clear demonstration that wetland hydrology will be maintained post- development.
32	7.4.2	Wildlife Disturbance	The EIS states: "Common and tolerant species of wildlife were documented using the wetlands and woodland during the 2014 EIS and this study." While this statement singles out wildlife use of wetlands and woodlands, all wildlife species, regardless of the habitats they use, can be disturbed by the proposed development. In addition, some of the wildlife species	Please revise the statement to acknowledge the potential presence of the significant species noted in the 2014 EIS, and discuss any potential impacts to these species resulting from the proposed development.

Comment Number	Section Number	Section Title	Comment	Recommendation
			documented by Aboud & Associates and NRSI are not considered 'common'. Three Species at Risk were documented (i.e., BANS, BARS, & EAWP), as well as 7 locally significant species (i.e., significant in Wellington County): AMRE, BAOR, EAKI, FISP, NOFL, RBGR, and RBWO. Please refer to Appendix B (Significant Wildlife List for Wellington County) in the Guelph Natural Heritage Strategy, Phase 2: Terrestrial Inventory & Natural Heritage System – Volume 2: Technical Appendices (2009) for more details.	
33	7.4.2	Wildlife Disturbance	The EIS states: "To avoid and minimize disturbance to wildlife during operation it is recommended that truck movements and noise be limited to the extent possible during the breeding season for birds and wildlife which includes April to August, including nighttime." The EIS goes on to state: "Construction noise [should] be restricted during spring and summer (April to August) to between 7:00 am and 7:00 pm."	While such a general statement is always desirable, is it feasible given the proposed purpose of the development? If so, please provide examples of tangible restrictions that could be implemented considered to limit truck movement and noise. According to the Township of Puslinch Noise Control bylaw (5001-05), it appears that noise restrictions apply between 9:00 p.m. and 7:00 a.m. Therefore, this recommendation would reduce daily construction noise by of 2 hours. However, given that wildlife species are likely to be more active early in the morning vs. early in the evening, it is recommended that the

Comment Number	Section Number	Section Title	Comment	Recommendation
				onset of construction activities be delayed 2 hours in the morning to 9:00 a.m.
34	7.4.2	Wildlife Disturbance	The EIS states: "Permanent parking lot lighting should be shielded and directed away from the adjacent natural features so as to prevent 'lightwash' of these areas."	While these recommendations are supported, please also include a recommendation that the height of the light standards be reduced as much as possible, to further reduce the incidence of 'lightwash'.
35	7.4.3	Erosion and Sedimentation	It is unclear whether there are any possible impacts related to runoff entering the wetlands.	Clarify whether there could be any impacts to the wetlands regarding erosion and sedimentation and how such impacts would be addressed.
36	7.5	Induced Impacts	Dumping of debris is listed as an example of an induced impact.	Although it seems unlikely intentional dumping would occur during normal operations, please confirm if any mitigation measures are proposed to help ensure debris associated with the normal operation of the facility will not collect in adjacent natural areas.
37	8.0	Summary	The EIS concludes that there will be no negative impacts on natural features onsite or adjacent lands, however this conclusion is premature; adequate field studies to support the EIS have not been completed.	See comments 11, 12, 18,21, and 27.
38	Appendix I	Terms of Reference	Text in the Reporting Section states: "Recommendations to avoid, or otherwise minimize or mitigate impacts to significant natural features and functions will be presented in the EIS report.	Given the previous and proposed loss of natural habitat, ecological enhancement and restoration opportunities should be recommended. One area that could be considered for

Comment Number	Section Number	Section Title	Comment	Recommendation
			Opportunities for ecological enhancement and restoration on the Subject Property, will be highlighted." Ecological enhancement and restoration opportunities are not mentioned in the EIS.	enhancement is the land between the unevaluated wetland at the NE corner of the property and the proposed parking area. In addition, the connection between this same area and the SWM pond to the south could be enhanced.
39	Appendix I	SAR/SCC Screening	The table indicates that there is no suitable woodland or treed habitat for: Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tricolored Bat. However, based on MECP's Survey Protocol for SAR Bats in Treed Habitats (2021), the following ELC codes present suitable habitat for SAR bats: FOD, FOM, FOC, SWD, SWM, SWC. The FOD5 community therefore present potentially suitable habitat for these species. Further, the EIS notes that many mature isolated trees are present within the study area. These trees may provide similar habitat for SAR bats.	Please revise this table to indicate that suitable habitat is present for these species. It is recommended that snag trees be inventoried during the forthcoming Tree Preservation Plan in accordance with MECP survey protocols. Note that an Information Gathering Form (IGF) should be submitted to MECP if impacts to suitable SAR bat habitat are anticipated.
40	Appendix II	Plant Species List	This table does not include regional/local status information.	Please update to include species status information from the Guelph Natural Heritage Strategy, Phase 2: Terrestrial Inventory & Natural Heritage System (D&A, 2009). Any locally significant species and their habitats within the study area should be addressed in the EIS.

Comment Number	Section Number	Section Title	Comment	Recommendation
41	Appendix II	Plant Species List	Appendix H of the Aboud & Associates report, "Additional Vegetation Study for Wet Depression in Gravel Pit" appears to contain additional plant species that were not incorporated into the NRSI report.	Please review Appendix H of the Aboud & Associates report and ensure all plant species are incorporated into the plant species list.
42	Appendix II	Plant Species List	False Hop Sedge (Carex lupuliformis) is recorded on the plant list and attributed to the Aboud & Associates 2014 study. This is an extremely rare sedge that is easily confused with the much more common Hop Sedge (Carex lupulina). A review of Aboud & Associates field data sheets suggests that False Hop Sedge was reported erroneously.	Please confirm whether False Hop Sedge (<i>C. lupuliformis</i>) was reported erroneously and, if so, correct the record to Hop Sedge (<i>C. lupulina</i>).

Feel free to contact us if you have any questions about the foregoing.

Respectfully submitted,

Todd Fell, OALA, CSLA, CERP Principal, Landscape Architect, Restoration Ecologist

Christina Olar, HBSc, Eco. Mgmt. Tech. Ecology Manager, Ecologist, Arborist



Harden Environmental Services Ltd. 4622 Nassagaweya-Puslinch Townline Moffat, Ontario, L0P 1J0

Phone: (519) 826-0099 Fax: (519) 826-9099

Groundwater Studies

Geochemistry

Phase I / II

Regional Flow Studies

Contaminant Investigations

OMB Hearings

Water Quality Sampling

Monitoring

Groundwater Protection

Studies

Groundwater Modelling

Groundwater Mapping

Permits to Take Water

Environmental Compliance Approvals Our File: 2309

January 26, 2023

Township of Puslinch 7404 Wellington Road 34 Guelph, ON, N1H 6H9

Attention: Glenn Schwendinger

CAO

Dear Glenn;

Re: 128 Brock Road South

Hydrogeological Review Comments

There are three issues that need to be addressed by the applicant.

1) Existing 12" Water Well

We note that this well may be used as a water supply. The well is a multiple aquifer penetrating well within the area of influence of the Blue Triton extraction well. There is a significant drawdown in the lower aquifer beneath this site. The existing well has a casing that terminates at the top of rock and penetrates the Guelph, Eramosa and Goat Island/Gasport aquifers.

Action Required: This well should either be decommissioned or retrofitted to obtain water only from the Guelph Formation or Goat Island/Gasport formations. Groundwater from the Guelph Formation should not be permitted to flow to the lower formations.

2) On-Site Recharge

As shown on Figure 3 of the Scoped Hydrogeology Report, there was a depression in the northwest are of this site that captured the majority of site runoff. The previous owner filled in the depression (minimum elevation 312 m AMSL), now slated to be a parking area as shown in the site plans. The recharge function of this depression has not been recognized in the scoped hydrogeological study or storm water management study.

The base plan provided by Meritech Engineering shows the elevation of the filled in depression to be approximately 319 m AMSL with a smaller depression





remaining with a minimum elevation of 314 m AMSL. The proposal is to fill in the remaining depression and direct storm water off-site.

Harden Environmental has commented to the Township in this regard since 2014 and provided our review comments (November 2, 2022) to the hydrogeologist representing the applicant Wellington Motor Freight. This concern echoes that of Jen Simmons of the GRCA in her email of 15 November 2022.

Action Required: Provide water balance that confirms that recharge conditions prior to the filling in of the depressions can be met post development. This water balance has not been provided in the existing documentation.

3) Septic System

The proposed septic system is located at the downgradient property boundary with very little potential for dilution from recharge occurring above the contaminant plume. Our experience is that even with the most advanced septic systems, a considerable area is required above the contaminant plume to achieve the required dilution.

Action Required: Although the Township is not responsible for approving this septic system, we recommend that the Township review and comment on the required Environmental Compliance Approval.

Harden Environmental Services Ltd.



Stan Denhoed, P.Eng., M.Sc. Harden Environmental Services Ltd.



Phone: 519-621-2761 Toll free: 1-866-900-4722 Fax: 519-621-4844 www.grandriver.ca

January 30, 2023 via email

GRCA File: ZBA - 128 Brock Road South

Lynne Banks Development and Legislative Coordinator Township of Puslinch 7404 Wellington Road 34 Puslinch, ON, N0B 2J0

Dear Ms. Banks,

Re: Zoning By-law Amendment

128 Brock Road South, Township of Puslinch 2795848 Ontario Inc. c/o Sam Mann – Owner MHBC Planning c/o Pierre Chauvin – Agent

Grand River Conservation Authority (GRCA) staff has reviewed the above-noted Zoning By-law Amendment (ZBA) Application to facilitate the construction of a warehouse and transportation terminal at 128 Brock Road South in the Township of Puslinch.

Recommendation

The GRCA has no objection to the above noted application provided that the existing Natural Environment zone on the subject property remains.

GRCA Comments

GRCA has reviewed this application as per our delegated responsibility from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS, 2020) and as a regulatory authority under Ontario Regulation 150/06. GRCA has also provided comments as a public body under the Planning Act as per our CA Board approved policies.

Information currently available at this office indicates that the subject property includes an unevaluated wetland and its regulated allowance, as well as the regulated allowance of a separate offsite wetland. Due to the presence these features, a portion of the property is regulated by the GRCA under Ontario Regulation 150/06 - Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation. Future development or other alteration within the regulated area will require prior written approval from GRCA in the form of a permit pursuant to Ontario Regulation 150/06.

GRCA staff will review submitted technical reports and provide additional comment at Site Plan Control (SPC).

Consistent with GRCA's 2023 approved fee schedule, this application is considered a minor Zoning By-law Amendment and the applicant will be invoiced in the amount of \$465.00 for the GRCA's review of this application.

Should you have any questions, please contact Chris Lorenz at 519-621-2763 ext. 2236 or clorenz@grandriver.ca.

Sincerely,



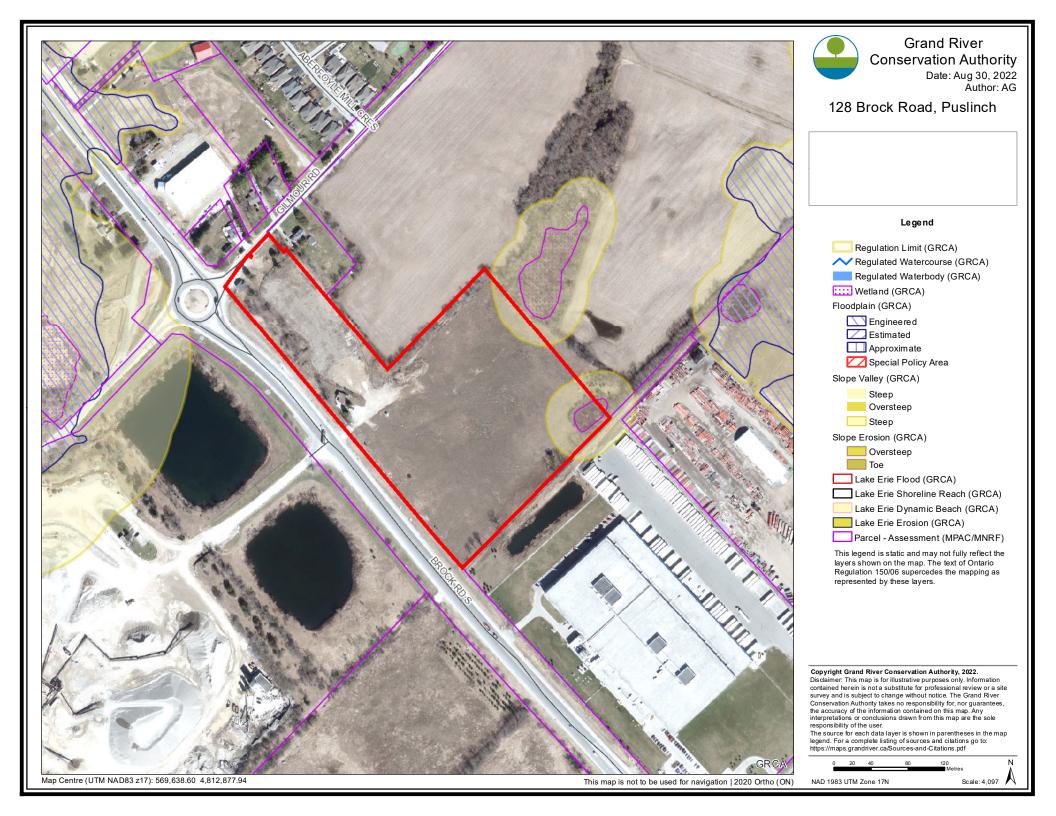
Chris Lorenz, M.Sc. Resource Planner Grand River Conservation Authority

Enclosed: GRCA Mapping

Copy: 2795848 Ontario Inc. c/o Sam Mann (via email)

MHBC Planning c/o Pierre Chauvin (via email)

County of Wellington (via email)







January 27, 2023

Memorandum

To: Lynne Banks – Development and Legislative Coordinator, Township of Puslinch

Cc: Meagan Ferris – Manager of Planning and Environment, Wellington County

From: Danielle Walker, Source Protection Coordinator, Wellington Source Water Protection

RE: 128 Brock Road South, Township of Puslinch – Zoning By-law amendment

Please note that the following conditions and recommendations can be satisfied during the site plan approval process, however, it is requested that the applicant complete the attached Drinking Water Threats Screening form and submit prior to the site plan submission. If this form is not submitted prior, we request that its submission be made a condition of Site Plan Approval, see below.

1. Clean Water Act Part IV Requirements

Due to the site's location outside any water quality WHPA or ICA, and because the draft WHPA-Q is not yet in legal effect, a Section 59 Notice under the *Clean Water Act* is not required for all applications under the *Planning Act* or *Ontario Building Code*.

2. Conditions and recommendations

Wellington Source Water Protection recommends approval of this application subject to the applicant fulfilling the following conditions and recommendations to the satisfaction of the Township's Risk Management Official.

- a) That the Drinking Water Threats Screening Form be completed and submitted.
- b) That the applicant provide a liquid fuel handling / storage and spill response procedure, to the satisfaction of the Risk Management Official, for liquid fuel handling and storage during construction.
- c) That the existing wells are decommissioned as per *Ontario Regulation 903* and that this documentation is submitted to the Township and Risk Management Official.
- d) That the applicant provide the Environmental Compliance Approval (ECA) documentation for the proposed sewage works, once available.
- e) That the applicant confirm if any transport pathways are proposed for this development.





2. Recommendations

- a) That the Township require the applicant to install a flow meter to monitor water takings.
- b) That the Township require the applicant to submit a Spills Management Plan for the property.

3. Rationale

Drinking Water Threats Screening Form

- This form is an important tool that the Risk Management office uses to determine how
 Source Protection Plan policies may affect the property.
- Depending on answers to the screening form, a Threats Disclosure Report (TDR), and associated Management Plan(s), may be recommended to be completed to discuss all Prescribed Drinking Water Threats, specifically winter maintenance activities, chemical handling, fuel, and waste.
- o If the tenants are not known at this point, the TDR can be completed at a later time. The applicant would need to discuss and negotiate this with the Risk Management office.

Liquid Fuel Handling

O During future submissions, please address whether there will be fuel storage on site temporarily during construction. If liquid fuel storage over 250 litres will occur during construction, it is requested that the applicant provide details on temporary fuel usage (quantity anticipated on site and a liquid fuel handling / storage and spill response procedure) during the application approval process.

Transport Pathways

- Any preferential pathways (transport pathways) existing or created must be reported to the Source Protection Authority by the Township. These include, but are not limited to:
 - a. old and/or unused wells that have not been properly abandoned
 - b. new vertical geothermal systems
 - c. underground infrastructure (parking garages, maintenance tunnels etc.)
 - d. removal of large portions of overburden (gravel pits, fill removal)
 - e. construction of deep pilings

Please confirm that there are no transport pathways proposed in this development.





Water usage

 Given the size of the development proposed, we recommend that a flow meter be installed to monitor water takings. Although not a legal requirement yet, when the policies do become in legal effect, it may be a requirement.

Further Information

The subject property is located in:

- a) a draft Wellhead Protection Area Q (WHPA-Q); and
- b) a Significant Groundwater Recharge Area (SGRA).

Attachments show the relevant mapping. Please note the subject property is not located in a Wellhead Protection Area for Quality, a Highly Vulnerable Aquifer (HVA), or Issue Contributing Area (ICA).

Please note that we are in support of the Township Hydrogeologist's comments that a water balance be submitted for review that confirms that recharge conditions can be met post development, and that the Township review and comment on the required septic system Environmental Compliance Approval.

For more information, please contact the undersigned: Sincerely,



2023/01/27

Danielle Walker, Source Protection Coordinator 519-846-9691 ext 236 dwalker@centrewellington.ca

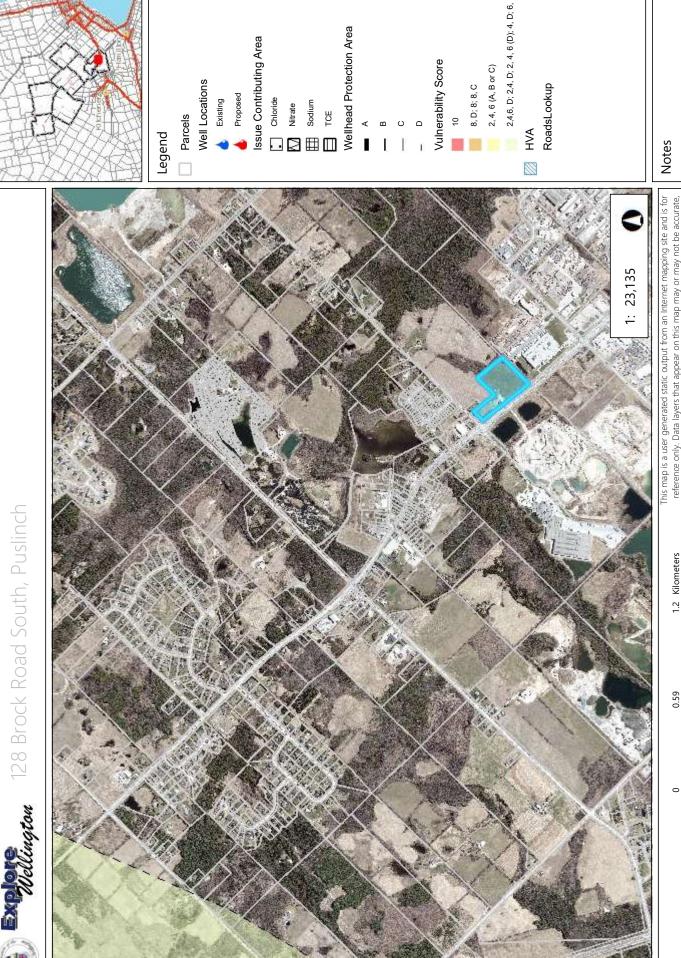
Attachments: DWT Screening Form

WHPA Maps

WMCMP Measures

Recharge Design Measures



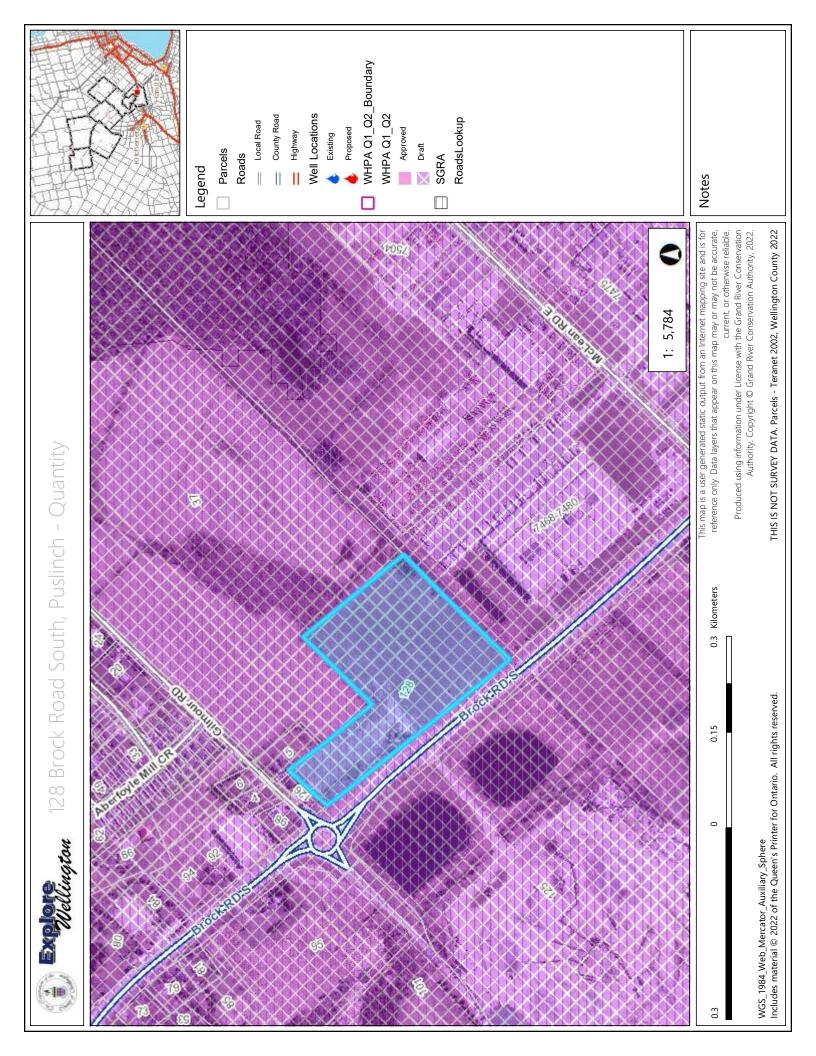


his map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Produced using information under License with the Grand River Conservation Authority. Copyright © Grand River Conservation Authority, 2022.

THIS IS NOT SURVEY DATA. Parcels - Teranet 2002, Wellington County 2022

WGS_1984_Web_Mercator_Auxiliary_Sphere Includes material © 2022 of the Queen's Printer for Ontario. All rights reserved.



Winter Maintenance (Chemical Management Plan) Measures

- 1. If the property ownership changes, the responsible party shall provide written notice to the Risk Management Official (RMO) within 30 days of the ownership transfer.
- 2. The owner shall inform the RMO in writing of the name and contact information for the person responsible for the maintenance of the property (e.g. operations manager, building manager, superintendant, contractor) within 30 days of the person being hired.
- 3. Introductory training sessions for new employees/contractors shall include an overview of Source Water Protection, why it is important, the location of the local drinking water source and vulnerable areas, and information about activities or products at the facility that may pose a significant threat to the drinking water source. The measures in the winter maintenance chemical management plan will be reviewed and staff responsibilities will be explained.
- 4. Employees/contractors responsible for spill response shall be trained to understand the contents of the Spill Response Plan and know the location and proper use of spill response supplies and personal protective equipment. Employee training shall be refreshed periodically as set out in the Spill Response Plan.
- 5. Employees shall be trained whenever new equipment is installed, new procedures are implemented, or new products are introduced. They should be familiar with the hazards associated with the material they are using and be aware of potential sources of contamination.
- 6. Monthly inspections of all winter maintenance chemical storage areas shall be conducted on the schedule set out in this plan. A checklist log shall be maintained that includes the following:
 - the date and person(s) responsible for the inspections
 - condition of all items inspected
 - condition of leak detection and spills prevention systems (valves, overfill protection, secondary containment, etc.) where applicable.
- 7. Checklist logs from periodic inspections shall be kept on site and made available to the RMO/RMI upon request.
- 8. All records required as part of this winter maintenance chemical management plan shall be kept on site for a period of five (5) years from date of creation and made available to Risk Management Official and/or Risk Management Inspector (RMO/RMI) upon request.

- 9. Records of employee training regarding the winter maintenance chemical management plan and Spill Response Plan shall be maintained and provided to the RMO/RMI upon request.
- 10. An up-to-date Safety Data Sheet (SDS) and/or Safety Data Sheet (SDS), available from the product's supplier, should be available on-site for each product stored.
- 11. The responsible party shall maintain and implement the spill prevention and response plan.
- 12. The facility shall have a Spill Prevention and Response Plan that specifies
 - a) the contents and location of the on-site spill response kit(s),
 - b) the specific procedures to be followed by the operator and/or staff in the event of any spill, reportable and non-reportable
 - c) Definition of reportable & non-reportable spills
 - d) contact information and protocol for reporting a reportable spill events to the SAC as well as the RMO/RMI,
 - e) procedures and forms for recording and reporting details about a reportable and non-reportable spill event,
 - f) the frequency of spill response training to be completed by staff,
 - g) procedure for receiving reportable and non-reportable spill events and recommending corrective actions to prevent a spill reoccurrence. The corrective actions and record of reportable and/or non-reportable spills shall be maintained.
- 13. The facility shall have a site plan that includes the locations of winter maintenance chemical storage and handling areas (including loading/unloading), location of spill kits/spill containment trays, location of drains within the building, direction of flow of the drains (using arrows), location of on-site well and septic system and any ditches or depressions present where drainage may flow. The site plan should also indicate the floor covering (ie concrete) and the outside covering (ie asphalt and gravel). This site plan should be posted in an accessible location with the spill response procedure and emergency contact numbers.
- 14. Spill response procedures, including the Spills Action Centre number (1-800-268-6060), shall be posted in an easy to find and read location for staff to use in the event of a spill.
- 15. Absorbent and/or containment materials, as specified in the Spill Response Plan for the facility, shall be on hand at all times for responding to spills of any reasonable size.

 The property shall have a Winter Maintenance Site Map that outlines the locations of:
 - winter maintenance chemical application areas
 - product storage areas
 - snow storage areas
 - drains, downspouts, and potential migratory pathways (i.e. wells, ditches,

depressions, storm sewers, etc.)

- areas to be closed off during winter maintenance season

A copy of the Winter Maintenance Site Map shall be posted in an accessible location with the spill prevention and response plan and, once completed, shall form part of this winter maintenance chemical management plan. The Winter Maintenance Site Map shall be reviewed annually and updated whenever any of the information pertaining to the content of the Winter Maintenance Site Map has changed. The Winter Maintenance Site Map shall include a version number and date. The Winter Maintenance Site Map shall be submitted to the Risk Management Official within sixty (60) days of the first date of occupancy. Subsequent updates of the Winter Maintenance Site Map shall be maintained on site and made available upon request.

- 16. Roof gutters and downspouts shall be directed away from or under paved or impermeable areas. If runoff to paved surfaces cannot be mitigated in this manner, directing roof runoff directly into storm sewers shall be considered.
- 17. All pavement on the subject property shall be maintained to prevent areas of ponding water, and allow for complete snow removal. Newly paved areas on the subject property shall be graded to prevent ponding.
- 18. Low traffic, under used, or high risk areas, walkways, and entrances shall be closed during the winter maintenance season. Examples include, but are not limited to, overflow parking areas, seasonal walkways, or redundant stairways.
- 19. Remove areas of drifting snow to ensure that reapplication of winter maintenance chemicals does not become necessary.
- 20. Clean up excess applied winter maintenance chemical prior to each precipitation event and at the end of the winter maintenance season.
- 21. Prepare and implement a winter maintenance strategy for temperatures below -10°C, when salt is less effective.
- 22. The owner shall notify the RMO of whether winter maintenance is to be dealt with inhouse, or if a contractor will be hired within 30 days of date of signing the contract, if applicable. If a contract is to be negotiated with a contractor, clauses 3.2 and 3.3 will be required.
- 23. When a new winter maintenance contract is negotiated, a written agreement stating that the contractor understands, and will implement, the terms of the winter maintenance chemical management plan will be signed by the contractor and property owner/manager at the time of contractor hire. A copy of the agreement shall be made available upon request by RMO/RMI.

- 24. New winter maintenance contracts shall ensure that payment for road salt application services on the subject property is not based upon on the total amount of salt used. To encourage contractors to use less salt, the basis of payment for new contracts can be unit price per event or lump sum per season.
- 25. Any person responsible for winter maintenance chemical application to the parking lot shall complete the Smart About Salt™ training or equivalent and renew every 5 years. In addition, winter maintenance contractors will be required to maintain Smart About Salt™ certification or equivalent. In lieu of Smart About Salt™ training or certification, the responsible party is required to obtain agreement in writing from the RMO on an equivalent training or certification.
- 26. All onsite staff applying winter maintenance chemicals to areas other than the parking lot shall be provided with annual orientation training based on practices outlined in Transportation Association of Canada's entitled: Syntheses of Best Practices Road Salt Management (specifically Chapter 10 Salt Use on Private Roads, Parking Lots and Walkways).

https://www.tac-atc.ca/sites/tac-atc.ca/files/site/doc/resources/roadsalt-10.pdf

- 27. Snow shall be cleared prior to winter maintenance chemical application in order to maximize the effectiveness and minimize the quantity of product that needs to be applied.
- 28. The required and recommended measures outlined in Smart About Salt™ training and certification or equivalent shall be completed for the site. This includes, but is not limited to:
 - Weather and site condition logs
 - Application records
 - Inspection and training records
 - Spreader calibration logs
- 29. Product application practices and rates shall be adjusted to suit current and forecasted conditions for each product application event. The amount of residual road salt on the impervious areas will be assessed prior to product application and removed where excessive application has occurred.
- 30. Use an alternative to dry sodium chloride (rock salt) when current and forecasted temperatures is lower than -10 degrees Celsius (alternatives include Magnesium Chloride, Calcium Chloride, Calcium Magnesium Acetate, Potassium Acetate, plant-based additives, or abrasives).
- 31. Product application practices shall be annually reviewed to identify potential reductions in material use.

- 32. An accurate inventory shall be maintained that identifies all winter maintenance products stored onsite, including:
 - Amount
 - State (dry/solid or liquid)
 - Storage locations
 - Amount/state of product retained after the winter maintenance season
 - This inventory shall be updated on an annual basis.
- 33. Winter maintenance chemical containers shall be stored in a location that minimizes risk of spills due to collisions with vehicles, equipment, or other hazards and located away from floor drains, cracks, catch basins, ditches or any other potential pathways to groundwater or surface water.
- 34. Winter maintenance chemical storage containers shall be inspected at the beginning of the winter maintenance season and then on the schedule laid out in this plan. If a container is damaged in such a way as to cause a spill, it shall be replaced immediately.
- 35. The measures related to containers shall also apply to winter maintenance chemical storage in a shed, lean to, tarp structure and/or covered piles.
- 36. Uncovered, outside storage of winter maintenance chemicals is prohibited.
- 37. Snow storage areas shall not be located on top of catch basins, in ditches, etc. so as to not obstruct drainage at the site.
- 38. Snow storage area(s) shall be located on the low side of paved areas to alleviate the formation of ice as a result of meltwater, if possible.
- 39. Where possible, snow storage area shall be located directly up-gradient and in the immediate vicinity of a catch basin to minimize the area subject to meltwater runoff.
- 40. Litter, debris, salt and sediment from snow storage areas and site shall be collected and disposed of at the end of every winter maintenance season to prevent these materials from being released into the environment through precipitation, runoff, and snowmelt.
- 41. Snow shall not be stored in areas where it will impede the operations associated with Emergency Services (i.e. in front of fire hydrants, in fire lanes, etc.).
- 42. Record and retain documentation related to winter maintenance chemical and snow management by contractor and/or property management office for the calendar year, plus an additional five years, including:
 - Weather and site condition logs
 - Application records
 - Inspection and training records

- Spreader calibration logs, if applicable
- 43. Records of employee training regarding the winter maintenance chemical management plan, including winter maintenance chemical best management practices, and Spill Response Plan shall be maintained.
- 44. Inspections of all winter maintenance chemical storage areas shall be conducted monthly during the winter maintenance season. A checklist log shall be maintained that includes the following:
 - Date and person(s) responsible for the inspections
 - Condition of all items inspected
 - Condition of secondary containment, traffic calming measures where applicable.



Recharge Measures

Design measures to ensure that recharge to the aquifer is maintained, and that the recharge is as contaminant-free as possible. These include, but are not limited to:

- Maintenance of pre-development recharge or maximization of off-site recharge, if predevelopment levels cannot be maintained on-site. If off-site recharge is the preferred option, please contact the undersigned
- To maintain pre-development recharge, maximization of lot-level infiltration, including directing roof runoff to pervious surfaces, such as landscaped areas, gravelled areas with no pedestrian or vehicle traffic and/or infiltration galleries, rather than paved or gravel surfaces with pedestrian or vehicle traffic where ice accumulation, and therefore salt application, may occur. This will involve identifying where downspouts will be located and to where they will drain
- If roof run-off cannot be directed for infiltration, then it is recommended it is piped directly to the storm sewer and/or stormwater management facility to avoid icing of surfaces. Note the preference is some level of roof run-off infiltration to achieve a pre- to post-development water balance
- Reduction of impervious surfaces, including use of pervious materials in areas that would not require salt application, such as patios, pathways or amenities
- Ensuring that any stormwater management facility that would receive parking lot runoff have an impervious liner, to avoid recharge of water containing contaminants, particularly sodium and chloride, back to the aquifer. Please note a stormwater management facility may also need provincial approval.



REPORT BLD-2023-001

TO: Mayor and Members of Council

PREPARED BY: Sarah Huether, Taxation & Customer Service Supervisor

PRESENTED BY: Andrew Hartholt, Chief Building Official

MEETING DATE: February 8, 2023

SUBJECT: Building Department Forth Quarter Update – October to December 2022

RECOMMENDATION

That Report BLD-2023-001 entitled Building Department Fourth Quarter Update – October to December 2022 be received; and

Purpose

The purpose of this report is to provide Council with an update of the activities in the Building Department for the Fourth Quarter of 2022 (October, November and December).

Background

Council receives a summary of the Township building permits on a quarterly basis.

Financial Implications

The Building Code Act requires that the total amount of building permit fees meets the total costs for the municipality to administer and enforce the Building Code Act and Regulations. Building permit fees were established to fully recover the Township's cost of providing building permit services, including an allocation of administrative overhead/indirect costs. Any surplus revenue from building permit fees is transferred to a restricted reserve, to be drawn upon in years of declining building activity.

Applicable Legislation and Requirements

Building Code Act, 1992, S.O. 1992, c. 23

Attachments

Schedule A - Fourth Quarter 2022 report and Comparison Charts

Respectfully submitted,

Reviewed by:

Sarah Huether

Taxation & Customer Service

Supervisor

Andrew Hartholt Chief Building Official

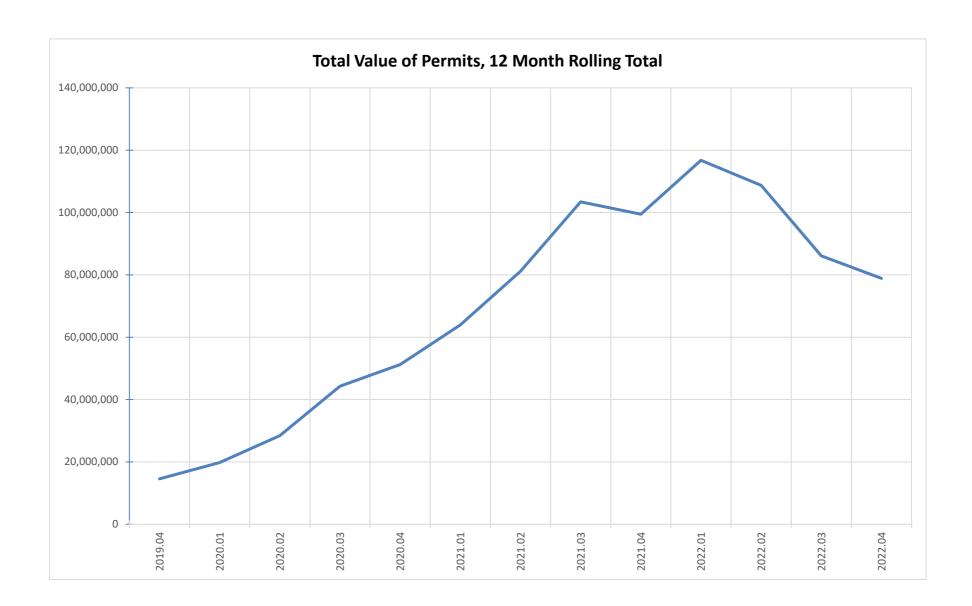
Building Permit Comparison Summary - Schedule A

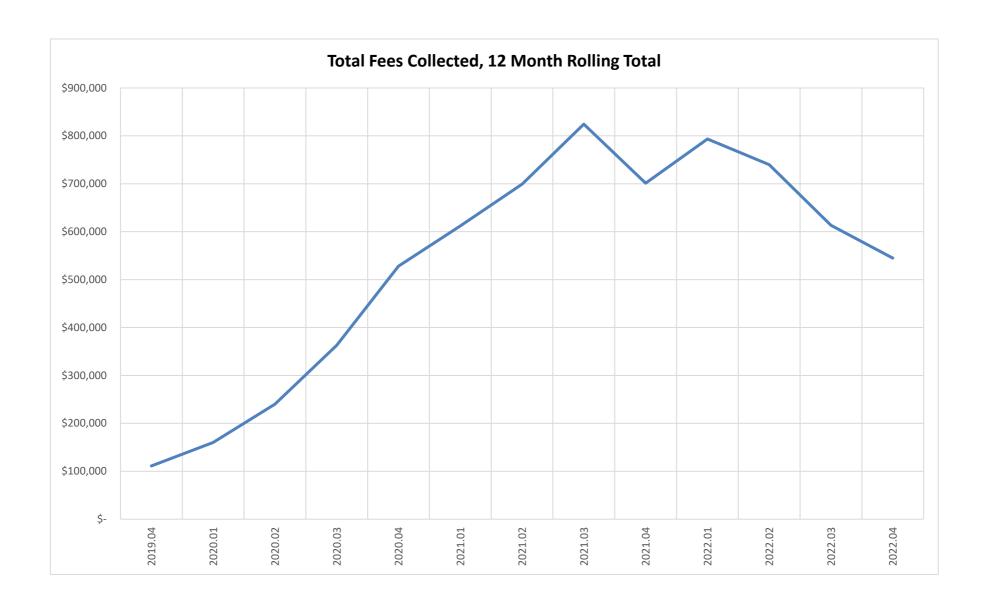
Report BLD-2023-001

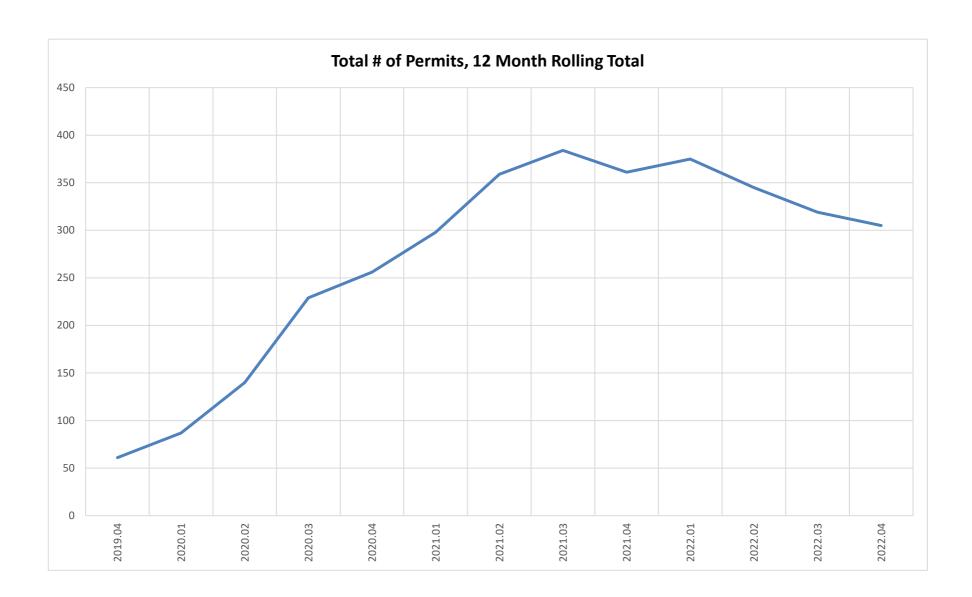
Fourth Quarter - October to December 2022

Category	Permit Count		Total Permit Fees		Cost of Construction	
	2022	2021	2022	2021	2022	2021
Accessory Structures	11	11	\$13,413	\$3,319	\$1,292,875	\$277,000
Agricultural Structures	2	1	\$2,104	\$10,117	\$764,095	\$800,000
Commercial/Industrial	0	3	\$0	\$29,290	\$0	\$2,200,000
Demolition	1	2	\$164	\$322	\$20,000	\$6,000
Miscellaneous Permits	4	5	\$772	\$15,776	\$23,500	\$346,392
Plans Resubmission	4	3	\$1,310	\$1,315	n/a	n/a
Pools Enclosure	4	3	\$906	\$666	\$319,000	\$229,000
Residential Buildings	13	20	\$58,014	\$81,916	\$7,563,300	\$12,762,668
Residential Sewage System	12	17	\$8,096	\$10,338	\$363,600	\$950,180

SUMMARY TOTALS	2022	2021
Total Permits Issued	51	65
Total Dwellings Created	4	10
Total Permit Value	\$10,346,370	\$17,571,240
Total Permit Fees	\$84,778	\$153,059









December 8, 2022 Our File: 199024

Township of Puslinch RR3, 7404 Wellington Road 34 Guelph, ON N1H 6H9

Attention: Ms. Courtenay Hoytfox Municipal Clerk

Re: Wellington Common Elements

Condominium Corporation No. 214 (CECC #214), Annual Operations and Maintenance Report for the Wastewater Treatment System - 2021

Dear Ms. Hoytfox,

As requested, GM BluePlan Engineering Limited (GMBP) has reviewed the '2021 Annual Operations and Maintenance Report for the Wastewater Treatment System' prepared for the Wellington Common Elements Condominium Corporation #214 (WCECC #214) by the Ontario Clean Water Agency (OCWA) dated March 4, 2022 (hereafter referred to as the annual report). The annual report is required as per the 2014 Operations and Maintenance agreement between CECC #214 and the Township of Puslinch (the Township).

WCECC #214, formerly known as the Mini Lakes Mobile Home Community, is located on Wellington County Road 34 in the Township of Puslinch and is serviced with a communal collection and Wastewater Treatment System (WWTS) with subsurface disposal beds. The Wastewater Treatment System (WWTS) serves approximately 292 residential units and common amenities and has a rated capacity of 158 m³/day average daily flow. The collection system consists of five sewage pumping stations discharging into a wastewater treatment plant. The treatment process is a dual train aerobic system each consisting of a primary settlement tank, rotating biological contactors (RBCs), alum injection system, intermediate clarifier, denitrification tank with carbon dosing, and final clarifier. An effluent pump station discharges treated effluent to the subsurface disposal system.

In October 2017, OCWA was retained as the Operating Authority for the WWTS, which was previously operated by American Water Canada Corporation until the end of September 2017. The WWTS is operated under Ministry of the Environment, Conservation and Parks (MECP) Amended Environmental Compliance Approval (ECA) # 8154-AR4J2T dated September 18, 2017. The current ECA replaced the previously issued Amended ECA No. 2391-9KCJUS dated June 1, 2016.

1.0 EFFLUENT QUALITY

The treated sewage effluent is monitored twice a month prior to discharge to the leaching bed is required by the ECA. Treated effluent samples are collected from the effluent pump chamber prior to discharge to the leaching bed. A total of 26 effluent quality samples were reported to be collected during 2021.

Table 1 summarizes the average effluent quality for the year 2021, presented as year to date (YTD) average concentrations (Column 2), previous YTD average (2020) (Column 3) and ECA Compliance Limit (Column 4). It is noted that the effluent limits in the ECA are based on annual average concentrations for any calendar year. As per the ECA, a non-compliance, with respect to effluent quality, occurs when the annual average





concentration of any of the treated effluent parameters, based on all grab samples collected in accordance with the ECA requirements, during any calendar year, exceeds its effluent compliance limit concentration.

Table 1. Effluent Limits, ECA No. 8154-AR4J2T

1	2	3	4	
Parameters (mg/L)	YTD Avg., (Jan. 1, 2021 to Dec. 31, 2021) ^a (mg/L)	Previous YTD Avg., (Jan. 1, 2020 to Dec. 31, 2020) ^a (mg/L)	Amended ECA Compliance Limit (mg/L)	
CBOD ₅ b	20.04	23.75	20	
TSS ^c	33.85	40.26	20	
TPd	0.58	0.58	1	
NO ₃ e (Nitrate-Nitrogen)	7.18	7.60	8	

- a. Year to date (YTD), or annual average concentration, as reported by OCWA.
- b. CBOD₅ = 5 day Carbonaceous Biological Oxygen Demand
- c. TSS = Total Suspended Solids
- d. TP = Total Phosphorous
- e. $NO_3 = Nitrate$

Based on reported concentrations, the YTD or average annual concentrations of TSS and CBOD₅, exceed the ECA compliance limits for these parameters. The YTD average annual concentrations of NO₃ and TP are within the ECA compliance limits for the 2021 monitoring period for these parameters. Additional details are discussed below.

Total Phosphorus (TP)

Effluent TP concentrations were reported below the effluent limit for this parameter during the effluent quality sampling events in 2021, with the exception of one exceedance in Q1 in January (1.20 mg/L), two exceedances in Q2 in April (1.17 mg/L) and May (1.48 mg/L), and one exceedance in Q4 in December (1.14 mg/L). The average reported annual TP concentration was 0.58 mg/L, which is below the effluent limit of 1.0 mg/L. Although there were more exceedances than the 2020 TP concentrations, the annual average was the same. In the Q1 2022 report, TP was reported to be less than 1 mg/L for each month of sampling. As noted in 2021 during the review of the 2020 annual report, TP levels appear to be rising year over year since 2018, although there appears to be some stabilization in 2021. It is recommended that TP continues to be closely monitored and potentially further investigated if levels are seen to increase further in 2022.

Carbonaceous Biological Oxygen Demand (CBOD₅)

Effluent CBOD $_5$ concentrations were reported above the effluent compliance limit for ten out of 26 bimonthly samples collected in 2021. The effluent CBOD $_5$ concentrations were reported above the compliance limit of 20 mg/L on occasions in Q1, Q2, and Q4 in 2021 (exceedances were from 22 to 62 mg/L). The overall average annual CBOD $_5$ concentration was 20.04 mg/L, which is just above the effluent compliance limit for this parameter. 2021 is the second year (after 2020) since 2012 that this parameter has been out of compliance with the ECA. The Q1 2022 sampling results show CBOD $_5$ levels lower than Q1 2021. Reportedly mechanical failures of the RBC treatment system occurred throughout 2020 and early 2021. The number of failures is an indication that the unit may be reaching end of life and as such a condition assessment (Process Optimization and Technical Services (POTS) Site Visit) was completed in September 2021.





Nitrate (NO₃)

The NO₃ concentrations were above the limit during eleven of the 26 effluent quality sampling events in 2021. The annual average effluent NO₃ concentration was reported at 7.18 mg/L, below the ECA compliance limit of 8.0 mg/L for this parameter and slightly below the 2020 average of 7.60 mg/L. In Q1 and Q4, every sample except two exceeded the compliance limit, with exceedances ranging from 8.15 mg/L to 18.60 mg/L. There were no exceedances in Q2 and Q3, which may be due to the warmer weather favouring nitrate removal.

As per the POTS Process Optimization Report from November 2021, the DO level of the anoxic tanks being above the target operation level may be the cause of the elevated nitrate levels. Two solutions were proposed by the report to mitigate this.

Steps were taken in February 2020 to remedy shortcomings of the WWTP. This resulted in an overall reduction in the annual average effluent level for nitrates in 2020 and 2021 compared to 2018 and 2019. However, the annual report states that although 2020 and 2021 results show an improvement in effluent nitrate levels, the lower nitrates concentration in the effluent may be attributed to an overall reduction in the incoming ammonia concentration in the raw sewage, as opposed to better removal. Sampling of raw sewage will confirm if this assumption is correct.

Total Suspended Solids (TSS)

The annual average effluent TSS concentration was reported at 33.85 mg/L, which is above the effluent compliance limit of 20 mg/L. In 20 out of the 26 bi-monthly grab samples of the treated effluent, the TSS concentrations were reported at above 20 mg/L (exceedances ranging from 22 to 141 mg/L). These recent exceedances are well above the TSS annual average concentrations reported during 2012 to 2017, but lower than the annual average TSS concentration in 2020 (40.26 mg/L). The upwards trend in effluent TSS concentrations appears to have started in the second quarter of 2018 and continued throughout 2019 and 2020 and 2021, with the highest quarterly average to date since 2012 recorded in Q2 of 2020 (Q2 of 2021 was very similar). The quarterly averages for all quarters in 2021 are slightly lower than the corresponding ones in 2020. The Q1 2022 effluent TSS results indicate that levels continue to be high, although lower than results for Q1 in 2021. There is considered to be a high likelihood that effluent TSS results will be out of compliance again in 2022, although they may continue to decrease from 2021 levels, possibly due to the increased sludge hauling frequency identified in the annual report.

The annual report identifies significant challenges with the sludge management systems resulting in carry over of solids and debris through the treatment process as a contributor to solids removal performance. Steps have been taken to improve the system and maintenance/optimization should be continued on an ongoing basis as per the annual report, however sludge management should be addressed more comprehensively in the proposed future upgrades.

TSS exceedances have the potential to affect the long-term performance of leaching beds and therefore it is important that this issue be addressed, especially given the reported concerns with the sewage disposal beds as discussed further below.

2.0 SUBSURFACE DISPOSAL SYSTEM

It appears that during 2021 concerns related to the presence of standing water and sludge breakthrough in the vicinity of the five (5) sewage disposal beds, first identified in 2018, continued to be an issue. An inspection was completed in June 2021, including some excavation. The inspection found that the tile beds are plugged and not level, and pooling is occurring due to soil saturation. The annual report states that repair work for Tile Bed 1 was in the process of being coordinated in March 2022, with other tile beds to be repaired in the future using a phase approach. No further information has been provided to date regarding the status of repairs in 2022. Further reporting on this issue is required.





3.0 SEWAGE FLOWS

Monthly average flows to the plant ranged from approximately 119.35 m³/day (January 2021) to 162.37 m³/day (August 2021). Maximum daily flows exceeded the rated capacity of 158 m³/day on some days in Q1 2021 in March, the highest of which was on March 13th at 253 m³/day. Q2 2021 had six flow exceedances, with the highest exceedance of 215 m³/day on June 29th. Q3 2021 had the highest number of exceedances (35) in any year with the highest recorded on August 13th at 230 m³/day. In Q4 2021, there were 22 flow exceedances, the highest of which was 221 m³/day on October 30th. The exceedances are attributed to weather events (increased precipitation and temperatures) and higher domestic water consumption due to COVID-19 restrictions and public health measures.

The WWTS is rated for an "Average Daily Flow" rate of 158 m³/day. "Average Daily Flow" as defined in the ECA as the *cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year.* The Average Daily Flow for 2021 to the plant was 138.90 m³/day which represents approximately 88% of the current rated plant capacity. The plant is considered in compliance with the ECA with respect to effluent flows. This is a significant increase over the flows recorded in 2020. Q1 2022 effluent flows continue to be relatively high, with February 2022 significantly higher than February 2021 despite having lower precipitation. However, 2022 flows are still within compliance with the ECA.

Although there is evidence that some infiltration and inflow is occurring, the "Average Daily Flow" to the plant is well within the compliance limits of the ECA and appears to be within the maximum hydraulic capacity of the plant (237 m³/day, based on a 1.5 peaking factor). It is recommended that the peak flows to the plant are closely monitored moving forward. Practices which reduce inflow may also be proactively considered, such as installation of inflow dishes on low lying maintenance hole lids.

It is noted that high groundwater elevations are known to occur in many areas of the site and are likely the main contributor to sewer system infiltration.

4.0 GROUNDWATER LEVEL

In accordance with the ECA, groundwater level and groundwater quality monitoring is completed at the site in nine (9) existing groundwater monitoring wells and two additional monitoring wells. As reported, groundwater level fluctuations were observed in 2021, which is expected based on climatic conditions and seasonal variations in weather, such as the amount and type (e.g., snow vs. rainfall) of precipitation as well as regional fluctuations in groundwater levels.

5.0 GROUNDWATER QUALITY MONITORING

With respect to sewage indicator parameters, based on the results of the quarterly groundwater quality monitoring, slightly elevated nitrate concentrations (up to 6.11 mg/L) were reported in the two (2) monitoring wells located in close proximity and down gradient (west) of the disposal beds (MW#2 and MW#4). Elevated nitrate concentrations near the sewage subsurface disposal beds are expected and are in-line with historical test results for these locations. These concentrations are below the Ontario Drinking Water Quality Standards (ODWQS) of 10 mg/L for nitrate. More importantly, the concentration of nitrate was reported at well below the ODWQS at the monitoring wells which are located near property lines.

Total phosphorus concentrations in the groundwater were within levels expected for shallow groundwater, although slightly higher concentrations were found in monitoring wells MW#1 and MW#9. These wells measure incoming flows into Mini Lakes from the northeast so the higher concentrations could be due to agricultural run-off or nearby ponds. However, the present levels of phosphorus do not appear to be a concern.



E. coli levels were elevated at all monitoring wells for all quarters except Q1 during 2021. Elevated levels were all 2 cfu/100 Ml or less, with the exception of Q2 for MW#1, Q3 for MW#8, and Q3 for MW#9, which were at 5 cfu/100 mL, 10 cfu/100 mL, and 4 cfu/100 mL respectively. E. coli levels below 100 cfu/100 mL are generally considered to be a result of surface water influences, rather than attributed to a sewage collection system leak or from the subsurface disposal system. The location of these three wells also indicates the influence of surface water.

High concentrations of DOC were found at MW#1, MW#8, MW#9 and MW#11 during 2021. This is consistent with previous years. The DOC can be attributed to the local presence of water with high levels of organic material. The ponds throughout the community and the high elevation of groundwater levels could explain these results.

6.0 SURFACE WATER QUALITY MONITORING

Quarterly surface water quality samples were collected in 2021 at five (5) locations, as required by the ECA. Generally, the analytical results of water quality with respect to key indicator parameters for surface water including nitrates, total phosphorus and ammonia are comparable for the upstream, throughout the property and downstream monitoring locations.

One instance of a very large E. coli spike was reported at the inflowing tributaries at County Road No. 34 (SW#5) in Q2 at 600 cfu/100 mL. This one exceedance brought the annual average to above the 100 cfu/100 mL limit. More explanation of this spike should be provided, it appears that a sentence of the report in this section is incomplete. E. coli levels at all other surface monitoring locations was below the 100 cfu/100 mL limit.

All surface water phosphorus concentration results for 2021 were below 0.03 mg/L and could not be precisely determined. Therefore, it is not known if any phosphorus results in 2021 exceeded the 0.02 mg/L limit.

All surface water nitrate concentrations were below 0.5 mg/L, which is well below the 13 mg/L limit.

7.0 OPERATIONAL ISSUES AND SYSTEM MAINTENANCE

System maintenance activities and operational issues are summarized in the 2021 annual report. For the most part, the undertaken maintenance activities comprise general housekeeping items typically needed in the operation of a wastewater treatment plant and sewage collection system as well as upgrades to equipment identified to cause operational issues. The 2021 activities included monitoring of sludge levels and removal as needed, repair, maintenance and/or replacement of various system components including a pumps, RBCs, flow and level monitoring equipment, valves, and injectors. Sludge was regularly hauled from the primary clarifiers and on occasion floating solids were removed from the intermediate clarifiers.

8.0 CONDITION ASSESSMENTS AND INVESTIGATIONS

A Process Optimization and Technical Services (POTS) Site Visit was conducted in September 2021 to determine if operational changes could be made to improve the RBC process system until upgrades can be implemented. The site visit and subsequent reporting found that the nitrate exceedances are related to the high DO (dissolved oxygen) in the RBC process as a result of lower flows and carbonaceous biological oxygen demand (cBOD) loading in the RBC trains than the design had intended for. This is resulting in poor performance of the anoxic process. In addition, unbalanced biofilm weight across the RBC shaft is leading to mechanical issues.

Recommendations were made for operational changes that could improve the RBC process. It appears that as of November 2021, some of these changes were beginning to be implemented, whereas additional investigation was needed prior to implementing others. No further update has been provided. The Process Optimization Report recommends that design of the WWTP upgrades being undertaken by Associated





Engineering, including upgrade of the RBCs to an SBR system, be paused until the impact of the recommended RBC operational changes could be implemented and assessed. It is not known if recommended changes to the RBC process were completed and if improvements were observed, or if the design process has recommenced. Reportedly, due to increasing costs associated with installing an SBR system, it may be determined that updating the existing RBC system is preferable to designing and installing a new SBR system.

The Process Optimization also made several other recommendations for overall plant upgrades, including updates to buildings, electrical power, SCADA integration, and odour control.

A preliminary inspection of the subsurface disposal system (tile beds) was completed in June 2021 by Howden Edgar. The tile beds were found to be plugged. It is also observed that they are not level. This is causing surface water accumulation due to soil saturation.

Previously, a site visit was conducted in February 2020 to assess the conditions of the facility and correct deficiencies were possible. Many deficiencies were reportedly corrected in spring 2020; however, based on the 2020 annual report, the following items did not appear to have been addressed, and have not been further reported on in 2021/2022:

- SCADA upgrades.
- Review of feasibility of changing flocculant/coagulant chemicals for RBCs.
- Ongoing review of revision of MicroC dosage for denitrification tank.

A Sewage Treatment System Trade-Off Study by was completed by OCWA in 2018. The study concluded that the likelihood of failure and consequence of failure scores are sufficiently high enough that a system upgrade is warranted. As noted above, design of upgrades was reportedly paused during 2021 and the status of the design is currently unknown. A status update is required.

A Standby Power Study completed in 2018 presented five options to provide emergency power for all sewage pumping stations (SPS), of which the board selected a preferred option. However, the project was cancelled when proposed upgrades were voted against by residents after a public presentation in September 2019.

9.0 REQUIRED IMPROVEMENTS

Several recommendations to improve the overall system performance were identified throughout this and previous annual reports. Outstanding items identified that do not appear to have been addressed to date include the following:

- It appears that operational changes to the RBC process, recommended in the November 2021 Process Optimization Report, may not have been fully implemented and assessed. A further status update is required.
- In addition, the Process Optimization Report states that the building housing the RBCs and the control room housing the MCCs and disconnect switches are leaking, poorly lit and require better ventilation.
- Currently only single-phase power is available for the community and an upgrade to three phase power is necessary to allow for many of the necessary upgrades.
- It appears that SCADA and historian system upgrades are still required to improve accessibility, control and data recording capabilities.
- The Process Optimization Report recommends that odour control be incorporated into any future plant upgrades.
- Both the November 2021 Process Optimization Report and 2020 Condition Assessment report
 make sampling and monitoring recommendations in order to allow for better optimization of
 chemical dosing at various stages in the treatment system.





- As noted in previous review letters, previously the wastewater treatment plant was found to be out of compliance with the requirements for chemical storage. It appears from the 2021 annual report that these required upgrades have not yet been made. The June 1, 2016, Amended ECA included approval for this upgrade. In order to achieve conformance with the Amended ECA, a 900 L carbon tank and 2,300 L alum tank, complete with secondary spill containment were required to be installed. Previously it was reported that a new chemical storage building was planned to resolve this issue and a temporary storage site may be used until then. An update regarding the status of the proposed work, to bring the wastewater treatment plant into compliance with respect to ECA requirements, is once again requested.
- In addition, the 2016 ECA included upgrades to the chemical dosing system, improvements to the primary equalization tank, and the addition of crossover connections between the two anoxic tanks. We understand that none of these updates have been completed to date.
- Sludge management is a continued issue. Sludge removal frequency has been increased but the addition of an equalization tank for variable flow conditions to improve sludge accumulation in the intermediate clarifiers would reportedly be beneficial.
- It is reported that Tile Bed 1 repairs were being planned by OCWA in 2021, with remaining tile beds to be repaired at a later stage in phases. No further update has been provided.
- It has previously been reported that characterization of the raw (incoming) sewage commenced in late 2018. Discussion of wastewater characterization has not yet been provided. As recommended previously, it would be helpful to discuss this analysis in future reports.
- It has been noted previously that a Wastewater Treatment System Process Flow Diagram (PFD) would be beneficial with subsequent reports to assist with overall process understanding and analysis.
- Easy to implement practices to reduce sewer inflow should be considered, such as installation of inflow dishes on low lying maintenance hole lids or raising sanitary maintenance hole covers.

The above matters, and issues should be addressed, and any progress or resolutions reported on in future quarterly and annual monitoring reports.

10.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the information provided in the '2021 Annual Operations and Maintenance Report for the Wastewater Treatment System' prepared by OCWA (March 4, 2022), the WCECC #214 wastewater treatment plant effluent did not meet the MECP ECA compliance limits for CBOD₅ and TSS based on an annual average effluent quality basis during 2021. The effluent did meet the compliance limits for TP and NO₃.

The 2021 average effluent flow was reported at 138.90 m³/day which represents approximately 88% of the current rated plant capacity of 158 m³/day and is below the sewage flow compliance limit stipulated in the ECA.

Based on our review of the 2021 Annual Monitoring Report we recommend that:

- The design of future system upgrades should be completed as soon as possible, with a goal of construction within the next one to two years. The Owner and Operators should take appropriate action to bring the wastewater treatment plant into compliance with respect to ECA requirements.
- Plant effluent flow rates should be monitored closely moving forward.
- Operators should continue to closely monitor effluent parameters and take corrective action, as required.





We trust this is sufficient for your requirements. If you have any questions, please do not hesitate to contact us.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:

Andrea Reed, P.Eng.

ASReed



Wellington Common
Elements Condominium
Corporation #214 (WCECC
#214)

2021 Annual Operations and Maintenance Report for the Wastewater Treatment System

SUBMITTED BY

Ontario Clean Water Agency 2225 Erin Mills Parkway, Suite 1200 Mississauga, 19N L5K 1T9

Date: March. 4th, 2022

Project No: WELCOY1417-1816

Rev: 0



Issue and Revision Record								
Rev. No.	Date	Reviewed by:	Rev. Description					
0	March 4 th , 2022	Yikai Liu	Jose Casal					



STATEMENT OF CONFIDENTIALITY

OCWA's Report to

Wellington Common Elements Condominium Corporation #214 (WCECC #214) for the Annual Wastewater Treatment System Operations and Maintenance Report

This document has been developed by the Ontario Clean Water Agency in response to the WCECC #214 requests. Information has been provided for the express review of the WCECC #214 and is not to be copied or submitted in any way or form to any person(s) or organization(s) without the written authorization of the Ontario Clean Water Agency. All copyright and intellectual rights to the material provided remain in the ownership of the Ontario Clean Water Agency.



Table of Contents

Statement of Confidentiality

1	Introduction	1
2	Wastewater Treatment System (WWTS)	1
	2.1 Wastewater Collection System	1
	2.2 Wastewater Treatment Plant (WWTP)	2
	2.3 Subsurface Disposal System	3
3	Monitoring Program	3
	3.1 Monthly Effluent Monitoring & Sampling	4
	3.2 Quarterly Groundwater Monitoring and Sampling	4
	3.3 Quarterly Surface Water Monitoring and Sampling	5
4	Sewage Effluent Flows	6
5	Effluent Quality	7
	5.1 Total Phosphorus (TP)	9
	5.2 Carbonaceous Biological Oxygen Demand (CBOD ₅)	10
	5.3 Nitrate (NO₃-N)	11
	5.4 Total Suspended Solids (TSS)	13
6	Site Visit / Condition Assessment	14
7	Subsurface Disposal System (Tile Beds)	18
8	Groundwater Monitoring Results	18
	8.1 Groundwater Level	18
	8.2 Groundwater Quality	19
	8.3 Nitrate	22
	8.4 Total Phosphorus	22
	8.5 Escherichia coli (E. coli)	
	8.6 Dissolved Organic Carbon (DOC)	23
	Surface Water Quality Sampling Results	
10	0 Summary of 2021's Operational Activities	24
	10.1 Major Maintenance and Minor Repair	24
	10.2 Unscheduled Work	26
	10.3 Operational Issues and Identified Deficiencies	26
	1 Proposed Works for 2021	26



List of Figures

Figure 4-1: Monthly Maximum and Average WWTP Effluent Flow (2021)	6
Figure 4-2: Historical Average Effluent Flows (Jan 201 – Dec 2021)	7
Figure 5-1: 2021 Monthly and Quarterly Total Phosphorous (TP) Concentration (mg/L)	9
Figure 5-3: 2021 Monthly and Quarterly NO3-N Concentration (mg/L)	12
Figure 5-4: 2021 Monthly and Quarterly TSS Concentration (mg/L)	13
Figure 6-1: Recommended Sampling for Process Trouble-Shooting.	16
Figure 7-1: Tile Bed Inspection (June 2021)	18
Figure 8-1: Change in Groundwater Depth in Monitoring Wells during 2021	19
List of Tables	
Table 2-1: Mini Lakes Sewage Pumping Stations	2
Table 2-2: Mini Lakes WWTP	3
Table 3-1: Mini Lakes WWTS Effluent Sampling Program and Effluent Compliance Limits	4
Table 3-2: Mini Lakes Groundwater Monitoring Wells and Sampling Program	4
Table 3-3: Mini Lakes Surface Monitoring Stations and Sampling Program	5
Table 5-1: Mini Lakes Effluent Compliance Limits	7
Table 5-2: Mini Lakes Monthly Effluent Quality Results (2021)	8
Table 5-3: Historical Effluent CBOD ₅ Concentrations	11
Table 5-4: Historical Nitrate Concentrations in WWTP Effluent	13
Table 5-5: Historical TSS Concentrations in Effluent	14
Table 6-1: Wastewater Treatment System – Unscheduled Work	14
Table 6-2: Recommended Sampling Schedule and Frequency	17
Table 6-3: Operational / Process Recommendations	17
Table 8-1: Groundwater Monitoring Wells - Sampling Results	20
Table 8-2: Groundwater Monitoring Wells	21
Table 9-1: Surface Water - Sampling Results	23
Table 9-1: Wastewater Treatment System Maintenance	24
Table 9-1: Wastewater Treatment System – Unscheduled Work	26
Table 11-1: Wastewater Treatment System Proposed Improvement	27



Appendix A: Environmental Compliance Approval Number 2391-9KCJUS

Appendix B: Groundwater Monitoring Wells & Surface Water Sampling Locations

Appendix C: Laboratory Certificates of Analysis for Wastewater Treatment Plant

Appendix D: O&M Contract

Appendix E: 2021 Condition Assessment Report



1 Introduction

The Ontario Clean Water Agency (OCWA) was contracted by the Wellington Common Elements Condominium Corporation #214 (CECC #214) to prepare an Annual Operations and Maintenance Report for the Mini Lakes Wastewater Treatment System (WWTS) as required by Section 2.5 of the 2014 Operations and Maintenance agreement between CECC#214 and the Township of Puslinch.

This report includes:

- 1. A summary of the test results from the monitoring program,
- 2. A list of the monitored flows with a summary of average use per unit,
- 3. A list of equipment or components scheduled for replacement,
- 4. A summary of the conditions of the treatment system,
- 5. A list of operating issues/problems encountered during the year and repairs made to the WWTS,
- 6. A copy of the Operations and Maintenance Contract for the following year.

2 Wastewater Treatment System (WWTS)

The Mini Lakes community is located on Wellington County Road #34 directly northeast of Aberfolye in the Township of Puslinch. At present, there is an Operation and Maintenance Agreement between Mini Lakes and the Township of Puslinch to ensure the general requirements for operation and maintenance, repair and replacement of the WWTS are met.

In October 2017, the Mini Lake Board retained the Ontario Clean Water Agency (OCWA) as the Operating Authority to operate and maintain the WWTS. It should be noted that American Water Canada Corporation (AWC) was the operating authority until the end of September 2017.

At present, the system operates under the Amended Environmental Compliance Approval (ECA) number 8154-AR4J2T issued in September 18; 2017. A copy of the amended ECA is included in Appendix A.

The Mini Lakes WWTS is composed of the following areas:

- Wastewater Collection System
- Wastewater Treatment Plant
- Subsurface Disposal System

2.1 Wastewater Collection System

Domestic sewage from the residences is collected via gravity mains into five Sewage Pumping Stations (SPS). All five SPS discharge directly into the existing Wastewater Treatment Plant (WWTP). A description of the five SPS is provided in Table 1.



Table 2-1: Mini Lakes Sewage Pumping Stations

SEWAGE PUMPING STATION (SPS)	DESCRIPTION
SPS-1	One 1,200 mm diameter fibreglass package duplex sewage pumping station (located at the intersection of Ash Avenue, Cross Street and Pine Street servicing approximately 77 units), equipped with two submersible pumps, each pump rated at 1.8 L/s at 28.98 m TDH and having a working volume of 0.405 m³, and a forcemain, approx. 29 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-2 and PS-3, where the common forcemain continues approximately 621 m to discharge directly to the WWTP.
SPS-2	One 1,200 mm diameter fibreglass package duplex sewage pumping station (located on Jasper Heights Drive approximately 110 m northeast of Garden Parkway servicing approximately 132 units), equipped with two submersible pumps, each pump rated at 2.225 L/s at 33.82 m TDH and having a working volume of 0.501 m³, and a forcemain, approx. 224 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-3, where the common forcemain continues approximately 215 m to the junction with PS-1 and a further 621 m to discharge directly to the WWTP.
SPS-3	One 1,200 mm diameter fibreglass package duplex sewage pumping station (located on Lot 62 Hemlock, servicing approximately 42 units), equipped with two submersible pumps, each pump rated at 1.075 L/s at 32.2 m TDH and having a working volume of 0.242 m³, and a forcemain, approx. 229 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-3, where the common forcemain continues approximately 215 m to the junction with PS-1 and a further 621 m to discharge directly to the WWTP.
SPS-4	One 1,200 mm diameter fibreglass package duplex sewage pumping station (located adjacent and on the north corner of Lot 227 on Cedarbush Crescent, servicing approximately 53 units and a community centre), equipped with two submersible pumps, each pump rated at 1.35 L/s at 7.27 m TDH and having a working volume of 0.304 m³, and a forcemain, approx. 358 m long, extending from the pump station before discharging directly to the WWTP.
SPS-5	One 1,200 mm diameter precast concrete duplex sewage pumping station (located at the intersection of Water Street and Basswood to service Phase 2 and 3 development, and will ultimately service approximately 79 units), equipped with two submersible pumps, each pump rated at 2.55 L/s at 14.75 m TDH and having a working volume of 0.469 m³, and a forcemain, approx. 207 m long, discharging into the 75 mm diameter forcemain from PS-4, where the common forcemain continues for approximately 29 m before discharging directly to the WWTP.

2.2 Wastewater Treatment Plant (WWTP)

The Mini Lakes WWTP has a rated capacity of 158 m³/d average daily flow and serves 292 residential units and common elements within the complex. The existing facility features dual RBC trains operating in parallel inside a building which also houses a primary settlement tank, intermediate clarifier, a denitrification tank and final clarifiers and effluent pump chamber. Table 2-2 describes the main process equipment and components currently present at the Mini Lakes WWTP.



Table 2-2: Mini Lakes WWTP

WWTP PROCESS UNITS	DESCRIPTION
Primary Settlement Tank	A concrete common primary settlement tank with cover, approx. 8.1 m wide x 8.5 m long x 1.73 m liquid depth discharging (via an outlet pipe to each treatment train) to the rotating biological contactors, complete with gear motor and drive mechanism.
Rotating Biological Contactors	Two rotating biological contactors (RBCs) with 2.35 m diameter rotor, each equipped with low profile fixed baffles and establish four zones per rotor, and providing approx. 4,179 m ² of bio-support media area.
Intermediate Clarifiers	Two hopper bottom 3 m x 3.6 m intermediate clarifiers per treatment train, complete with inlet and outlet weir, sludge and scum transfer equipment and pumping systems.
Denitrification Tanks	Two denitrification tanks (approx. 5.06 m x 3.6 m) each consisting with 4,704 m ² of submerged rigid media, complete with an adjustable flow distribution box; one 900 L capacity chemical tank and chemical metering pump capable of feeding a carbon source to the denitrification tanks, complete with spill containment facilities.
Chemical Feed System	Chemical feed system comprising of one 2,300 L capacity polyethylene chemical storage tank and metering pump (with standby pump) capable of feeding approximately 1.5 L/hr of alum into the last stage of the RBC rotor complete with spill containment facilities.
Final Clarifiers	Two hopper bottom final clarifiers (3 m \times 3.6 m) per treatment train, complete with inlet and outlet weirs and sludge transfer equipment and pumping systems.
Effluent Pump Chamber	A 50,000 L capacity effluent pump chamber equipped with five submersible pumps (with one additional standby pump), each rated at 2.7 L/s at 11 m TDH (max.), to discharge treated effluent via a splitter valve and five 75 mm diameter forcemains, one forcemain to each absorption cell of the subsurface disposal system.

2.3 Subsurface Disposal System

The Mini Lake Sewage Treatment System also contain a subsurface disposal system comprising of five shallow buried trench absorption cells, with each cell comprising of:

- Six zones with eight laterals and each lateral is located within a trench 18 m long and 0.6 m wide.
- A hollow inverted semi-circular chamber housing a 25 mm PVC pressurized pipe with 3.2 mm holes spaced at 1 m c/c per zone, for a total of approximately 864 m of piping per cell (total of approximately 4,320 m of piping) with distribution valve assembly and manifold.

3 Monitoring Program

The monitoring program currently in place for the Mini Lake WWTS involves a combination of monthly effluent quality sampling and groundwater and surface water quarterly sampling as follows:



3.1 Monthly Effluent Monitoring & Sampling

According to the current ECA, Mini Lakes is required to analyze monthly effluent samples to assess compliance with the effluent quality limits as per the program defined in Table 3-1.

Table 3-1: Mini Lakes WWTS Effluent Sampling Program and Effluent Compliance Limits

SAMPLING LOCATION	PARAMETER	TYPE OF SAMPLE	FREQUENCY	
_	Carbonaceous Biological Oxygen Demand (CBOD ₅)	Grab	Monthly	
_	Total Suspended Solids (TSS)	Grab	Monthly	
_	Total Phosphorus (TP)	Grab	Monthly	
Effluent Pump	Total Ammonia Nitrogen (TAN)	Grab	Monthly	
Chamber – (upstream of	Nitrate – Nitrogen (NO ₃ -N)	Grab	Monthly	
subsurface disposal –	Nitrite – Nitrogen (NO ₂ -N)	Grab	Monthly	
system)	Total Kjeldahl Nitrogen (TKN)	Grab	Monthly	
_	E. coli	Grab	Monthly	
_	Dissolved Oxygen (DO)	Grab	Monthly	
_	рН	Grab	Monthly	

3.2 Quarterly Groundwater Monitoring and Sampling

To assess the risk of possible groundwater contamination, there are nine groundwater monitoring wells and two piezometers located throughout the Mini Lakes community. These wells are required to be sampled quarterly (every 3 months) for the parameters defined in Table 3-2. In addition, groundwater depths for each of the monitoring wells must also be recorded to assess groundwater elevation and flow paths through the site.

Table 3-2: Mini Lakes Groundwater Monitoring Wells and Sampling Program

WELL		PARAMETER	TYPE OF SAMPLE	FREQUENCY
MW-1	Located near the eastern gate entrance on Bull Frog Drive approximately 410 m North-West of the subsurface disposal system. This well is considered a background well, useful for estimating incoming groundwater flow from outside the property boundary.	, CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , DOC	Grab	Quarterly
MW-2	Located only 30 m northwest of the subsurface disposal system.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , DOC	Grab	Quarterly
MW-4	Located 25 m southwest of the subsurface disposal systems.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , DOC	Grab	Quarterly
MW-5	Located 200m southwest of the subsurface disposal systems.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , DOC	Grab	Quarterly
MW-6	Located 220m west of MW#5 and 20m southeast of the nearest residence on Ash Avenue.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , DOC	Grab	Quarterly



WELL		PARAMETER	TYPE OF	FREQUENCY
MW-7	Located 515m west of the subsurface disposal systems, northwest of MW#6 and on the south side of the west end of Ash Avenue.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, E. coli. DOC	Grab	Quarterly
MW-8	Located 750 m west of the subsurface disposal systems, located at the far west of the community. It is the most down gradient monitoring well, and is 20m from the nearest pond.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, E. coli. DOC	Grab	Quarterly
MW-9	Located off of Water St., 27 0m North-north-west of the subsurface disposal system. This well is considered a background well, useful for estimating the properties of incoming subsurface flow. The well similar to MW#1, which it is located 200 m directly west off and share several of the same properties.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, E. coli. DOC	Grab	Quarterly
MW-10	Located 5 m directly north-east of the subsurface disposal system.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, E. coli. DOC	Grab	Quarterly
MW-11 (SP1)	Located on the southeastern shore of the central pond. Installed in the fall of 2016, this well intercepts potential contamination from the subsurface disposal system entering the pond.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, E. coli. DOC	Grab	Quarterly
MW-12 (SP2)	Located on the northeast shoreline of the central pond. Installed in the summer of 2016, this well is to intercept potential plume contamination from the subsurface disposal system entering the central pond.	CBOD ₅ , TSS, TP, TAN, NO ₃ -N, NO ₂ -N, TKN, E. coli. DOC	Grab	Quarterly

3.3 Quarterly Surface Water Monitoring and Sampling

In addition to the groundwater monitoring wells, there are five surface water monitoring stations at different locations throughout the Mini Lakes community which are required to be sampled quarterly (every 3 months) for the parameters as defined in Table 3-3.

Table 3-3: Mini Lakes Surface Monitoring Stations and Sampling Program

STATION	LOCATION	PARAMETER	TYPE OF SAMPLE	FREQUENCY
SW-1	Up-gradient background	TP, TAN, NO $_3$ -N, NO $_2$ -N, TKN, <i>E. coli.</i> , pH, Temperature	Grab	Quarterly
SW-3	Within the main pond	TP, TAN, NO $_3$ -N, NO $_2$ -N, TKN, <i>E. coli.</i> , pH, Temperature	Grab	Quarterly
SW-4	Outlet from the main pond	TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , pH, Temperature	Grab	Quarterly
SW-5	Up-gradient tributaries	TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , pH, Temperature	Grab	Quarterly
SW-6	Outlet from the property	TP, TAN, NO ₃ -N, NO ₂ -N, TKN, <i>E. coli.</i> , pH, Temperature	Grab	Quarterly



4 Sewage Effluent Flows

Figure 4-1 shows the monthly average and maximum flows for the Mini Lakes WWTP in 2021, as reported by the operating authority (OCWA). Numerous flow exceedances were reported throughout the year, however, all monthly average flow remained below the rated capacity.

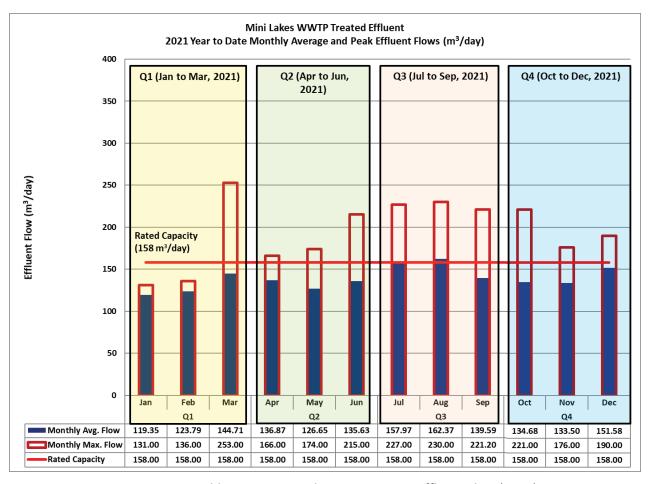


Figure 4-1: Monthly Maximum and Average WWTP Effluent Flow (2021)

With the exception of March, all daily flows recorded during Q1 were below the facility's rated capacity. During the month of March, although the monthly average remained below the rated capacity threshold, there were some daily exceedances recorded. Based on meteorological information for the area, the warmer temperatures above the freezing mark (March 8th - March 12th) causing accelerated melt down of snow/ice most likely exacerbated the prevailing I&I conditions; which appears to justify the flow exceedance experienced in March 2021 (March 13th at 253 m³/day¹).

As shown in Figure 4-1, the daily flows experienced a similar increasing trend to March 2021 during the rest of the months in 2021. In total, 6 flow exceedances were recorded from Q2, with the highest recorded flow on June 29th (215 m³/day). Another 35 flow exceedances were reported in Q3, with the

¹ https://www.theweathernetwork.com/ca/monthly/ontario/mini-lakes?year=2021&month=3&dispt=calendar-container-monthly



highest recorded flow on August 13th (230 m³/day) whereas 22 flow exceedances were reported in Q4, with the highest recorded flow on October 30th (221 m³/day).

In general, a combination of weather events associated to higher precipitations and/or high temperatures together with increasing domestic water consumption due to the COVID-19 restrictions and other emergency measures (i.e. "Stay Home" mandate) seem to have substantially contributed to the upward flow trend experienced in 2020 and 2021 (Figure 4-2).

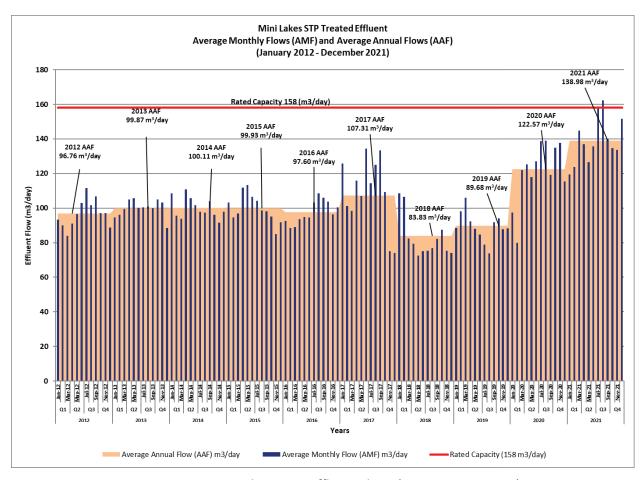


Figure 4-2: Historical Average Effluent Flows (Jan 201 – Dec 2021)

5 Effluent Quality

According to the terms and conditions of the ECA currently in place, non-compliance is deemed to have occurred when the <u>annual average concentration</u> of each parameter (Total Phosphorus, Nitrate, CBOD₅ and TSS) during the calendar year exceeds the corresponding compliance limit as shown in Table 5-1.

Table 5-1: Mini Lakes Effluent Compliance Limits

EFFLUENT PARAMETERS	ANNUAL AVERAGE CONCENTRATION
Carbonaceous Biological Oxygen Demand (CBOD ₅)	20 mg/L
Total Suspended Solids (TSS)	20 mg/L



EFFLUENT PARAMETERS	ANNUAL AVERAGE CONCENTRATION			
Nitrate Nitrogen (NO ₃ -N)	8 mg/L			
Total Phosphorus (TP)	1 mg/L			

Table 5-2 below shows the monthly/quarterly results of the effluent quality monitoring sampling completed in 2021. Highlighted text (RED) indicates monthly individual exceedances of the effluent concentration limits (Table 5-1) stated in the ECA currently in place. In terms of performance, 2021 was critical since many exceedances were reported monthly/quarterly for all the compliance parameters.

Table 5-2: Mini Lakes Monthly Effluent Quality Results (2021)

DATE	2021	NITRITE (mg/L)	NITRATE (mg/L)	рН	CBOD₅ (mg/L)	TSS (mg/L)	AMMONIA (mg/L)	TKN (mg/L)	TP (mg/L)	DO (mg/L)	E. COLI (CFU/100 mL)
ECA Limit			8		20	20			1		
01/06/21		2.75	14.40	7.21	18.00	49.00	0.10	3.60	0.83	8.90	10200
01/20/21		2.80	11.00	7.37	34.00	42.00	3.80	5.50	1.20	8.70	80000
02/03/21		3.49	9.98	7.74	22.00	38.00	1.20	4.70	0.69	8.90	17500
02/17/21	Q1	1.42	11.70	7.40	15.00	29.00	1.30	2.20	0.43	9.60	72000
03/03/21		1.06	8.54	7.26	26.00	29.00	0.80	2.20	0.31	8.50	100000
03/17/21		1.44	8.15	7.87	22.00	17.00	4.60	5.40	0.41	8.70	58000
03/31/21		1.44	4.32	7.34	43.00	24.00	2.40	3.40	0.26	8.70	24000
04/14/21		0.87	4.71	7.71	37.00	13.00	1.70	2.50	0.17	9.00	6100
04/28/21		1.16	0.50	7.09	62.00	141.00	10.20	15.00	1.17	4.40	78000
05/12/21	03	0.03	0.06	7.42	40.00	38.00	7.00	9.60	0.40	5.20	38000
05/26/21	Q2	0.14	0.06	7.39	36.00	62.00	14.00	16.50	1.48	3.70	90000
06/09/21		0.95	1.78	7.44	16.00	22.00	9.20	11.30	0.50	5.70	2000
06/23/21		0.64	3.45	7.60	7.00	18.00	4.10	5.40	0.38	7.10	3700
07/07/21		2.00	1.54	7.30	13.00	26.00	2.00	4.10	0.32	6.20	22400
07/21/21		1.28	3.26	7.58	9.00	20.00	1.10	2.10	0.38	7.90	2980
08/05/21		1.47	4.45	7.51	9.00	26.00	0.60	1.90	0.53	6.90	2900
08/18/21	Q3	0.25	7.02	7.63	5.00	20.00	1.20	2.50	0.46	7.80	5700
09/01/21		3.17	2.51	7.38	18.00	41.00	3.50	6.00	0.70	6.70	76000
09/15/21		0.71	5.27	7.43	10.00	32.00	0.90	1.60	0.58	5.90	3300
09/29/21		0.57	7.94	7.50	6.00	18.00	0.80	1.70	0.38	7.10	5900
10/13/21		0.59	9.23	7.55	3.00	27.00	1.00	1.80	0.30	6.80	4100
10/27/21	04	0.47	9.81	7.50	6.00	22.00	0.70	1.50	0.48	7.20	13400
11/10/21	Q4	2.49	5.98	7.36	26.00	37.00	<0.1	2.40	0.71	3.60	32000
11/24/21		2.01	16.00	7.25	12.00	26.00	0.70	2.10	0.32	5.60	10400



DATE	2021	NITRITE (mg/L)	NITRATE (mg/L)	рН	CBOD₅ (mg/L)	TSS (mg/L)	AMMONIA (mg/L)	TKN (mg/L)	TP (mg/L)	DO (mg/L)	E. COLI (CFU/100 mL)
ECA Limit			8		20	20			1		
12/01/21		0.98	18.60	7.35	14.00	35.00	0.60	2.00	0.55	5.90	10000
12/22/21		0.94	16.40	7.44	12.00	28.00	1.20	3.00	1.14	9.50	8400
2021 Avg.		1.29	7.18	7.45	20.04	33.85	2.99	4.62	0.58	7.08	29883.85

Despite some monthly exceedances registered throughout the year, the system was able to met compliance with the regulatory requirements for Phosphorus (TP) and Nitrates (NO3-N) as shown in Table 5-2. However; the system was unable to meet compliance with Carbonaceous Biological Oxygen Demand (CBOD $_5$) and Total Suspended Solids (TSS). It should be noted that TSS was the most critical parameter in 2021, since the effluent TSS concentration exceeded the compliance limit (20 mg/L) at least once every month.

5.1 Total Phosphorus (TP)

A snapshot of the monthly TP concentration in the treated effluent is illustrated in Figure 5-1.

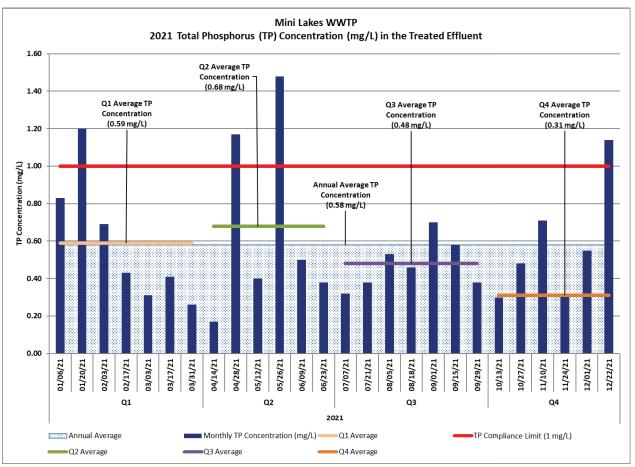


Figure 5-1: 2021 Monthly and Quarterly Total Phosphorous (TP) Concentration (mq/L)



Monthly TP exceedances above the compliance limit (1 mg/L) were reported in January, April, May and December. However; in general the overall quarterly and annual average concentration remained within the above noted limit as shown in Table 5-3.

Table 5-3: Historical TP Concentrations in Effluent

		TP CONCENTRATION (mg/L)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	COMPLIANCE LIMIT (mg/L)
Q1 Average	0.48	0.57	0.20	0.08	0.08	0.11	0.32	0.31	0.52	0.59	
Q2 Average	0.43	0.36	0.21	0.06	0.11	0.09	0.31	0.45	0.80	0.68	_
Q3 Average	0.47	0.29	0.82	0.06	0.07	0.15	0.48	0.31	0.33	0.48	1.00
Q4 Average	0.32	0.39	0.23	0.12	0.08	0.09	0.20	0.33	0.66	0.31	_
Annual Average	0.42	0.40	0.37	0.08	0.09	0.11	0.33	0.35	0.58	0.58	_

5.2 Carbonaceous Biological Oxygen Demand (CBOD5)

A snapshot of the monthly CBOD₅ concentration in the treated effluent is illustrated in Figure 5-2.

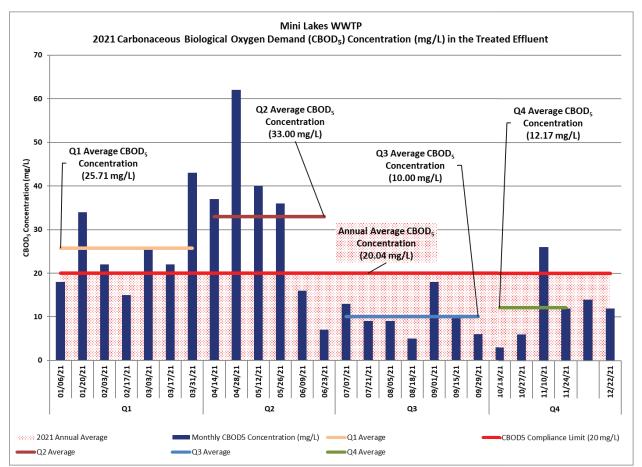


Figure 5-2: 2021 Monthly and Quarterly CBOD5 Concentration (mg/L)



The annual average $CBOD_5$ concentration for 2021 (20.04 mg/L) merely exceeds the compliance limit of 20 mg/L stated in the ECA, therefore an effluent $CBOD_5$ non-compliance was triggered. The highest effluent $CBOD_5$ level was recorded on Apr. 4th, 2021 with a value of 62 mg/L. It is also the second highest value ever recorded since 2012. Since the beginning of 2020, the RBC treatment system experienced some mechanical issues which certainly impacted the performance of the unit. Later in that year, towards the end of Q4 additional mechanical failures occurred causing the unit to stop operating in early 2021, causing the $CBOD_5$ of the first two quarter to exceed to compliance limit of 20 mg/L.

In terms of historical trends, Table 5-4 illustrates the quarterly and annual average $CBOD_5$ concentration in the treated effluent for the last 10 years (2012-2021). Historically and despite some monthly exceedances, the Mini Lakes sewage treatment system has been able to effectively remove the Carbonaceous Biological Oxygen Demand ($CBOD_5$) for the past 10 years except in 2020 and 2022. These $CBOD_5$ exceedances two years in a row are of high concern and they are currently been looked at carefully.

		CBOD₅ CONCENTRATION (mg/L)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	COMPLIANC E LIMIT (mg/L)
Q1 Average	13.50	8.67	16.50	8.00	6.00	12.00	12.67	17.67	12.00	25.71	
Q2 Average	9.33	11.67	18.67	5.00	13.67	19.67	23.00	11.67	21.71	33.00	_
Q3 Average	10.67	14.33	23.50	3.67	12.67	5.33	14.00	7.67	24.80	10.00	20
Q4 Average	13.67	18.00	13.67	7.67	14.00	2.00	22.33	22.33	36.50	12.17	_
Annual Average	11.64	12.73	18.36	6.08	11.58	11.30	18.00	14.83	23.75	20.04	_

Table 5-3: Historical Effluent CBOD₅ Concentrations

Being the RBC system considered the "heart" of this sewage treatment system and the enabler for the $CBOD_5$ removal, any functional issue and/or mechanical failure with this process unit impact the overall performance of the system. The current state of this RBC units largely justify the consistent underperformance in the $CBOD_5$ removal experienced in 2020 and 2021. More importantly, the number and frequency of mechanical issues reported during this year could be considered indicator that the unit is nearing its end of life. In September 2021; a condition assessment was performed by OCWA (POTS & PPD) resulting in a number of action items and strategies implemented in an attempt to optimize and improve the overall efficiency of the existing treatment system. Details of this Condition Assessment are further discussed in Section 6 of this report.

5.3 Nitrate (NO₃-N)

The annual average effluent nitrate concentration (7.18 mg/L) lies below the compliance limit of 8 mg/L. A snapshot of the monthly nitrate concentration in the treated effluent is illustrated in Figure 5-3.



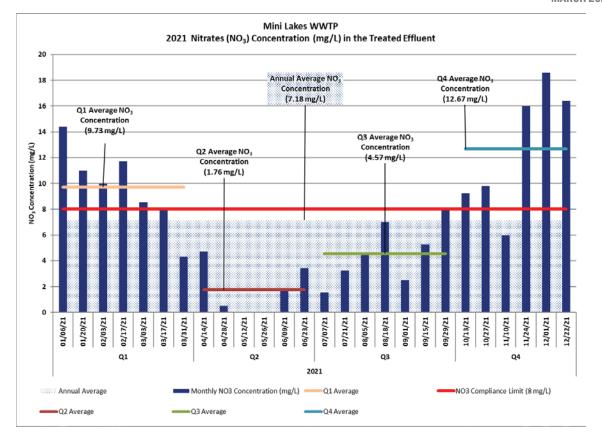


Figure 5-2: 2021 Monthly and Quarterly NO₃-N Concentration (mg/L)

The nitrate removal is always favored in warmer weather, hence both Q2 and Q3 are all well below the 8 mg/L limit. However, Q1 and Q4 have passed the limit by a huge margin. POTS Process Optimization Report from November 2021 stated the main reason causing the plant unable to consistently meet the effluent nitrate limit is the DO level of the anoxic tanks (1.8 mg/L-4.8 mg/L) are way above the target operation level (<0.5 mg/L). The solution mentioned in the report was to include adding a crossover between the inlet of the denitrification tank, which will lower the DO level and ultimately increase the nitrate removal performance. Another solution mentioned was to add a MICROC2000TM, which will reduce the nitrate by converting nitrate to nitrogen gas with the addition of biodegradable carbon.

Table 5-5 illustrates the historical average nitrate concentration (quarterly and annual) in the treated effluent for the last 10 years (2012-2021) as compared to the compliance limit stated in the ECA. Highlighted text (RED) indicates monthly individual exceedances of the effluent concentration limits stated in the ECA currently in place.

The lower Nitrates concentration in the effluent are more likely attributed to an overall reduction in the incoming Ammonia concentration in the raw sewage. Additional raw sewage sampling has been added to the existing monitoring and sampling requirements for Mini Lakes to further investigate this hypothesis.

7.18



ANNUAL

AVERAGE

			NITRATE CONCENTRATION (MG/L)								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	COMPLIANCE LIMIT (mg/L)
Q1 AVERAGE	9.27	8.93	9.99	8.93	5.80	8.08	8.59	12.50	13.90	9.73	
Q2 AVERAGE	6.14	7.03	2.95	5.95	5.01	6.07	7.31	8.03	5.82	1.76	
Q3 AVERAGE	2.68	3.43	2.96	2.26	3.22	4.16	9.18	9.19	5.02	4.57	8
O4 AVERAGE	3 71	3 13	4 33	2 91	7 29	7 31	11 39	9 58	5 67	12 67	

Table 5-4: Historical Nitrate Concentrations in WWTP Effluent

5.4 Total Suspended Solids (TSS)

5.63

5.45

5.06

5.01

The annual average effluent TSS concentration (33.85 mg/L) exceeded the compliance limit of 20 mg/L. A snapshot of the monthly TSS concentration in the treated effluent is illustrated in Figure 5-4.

5.33

6.41

9.12

9.83

7.60

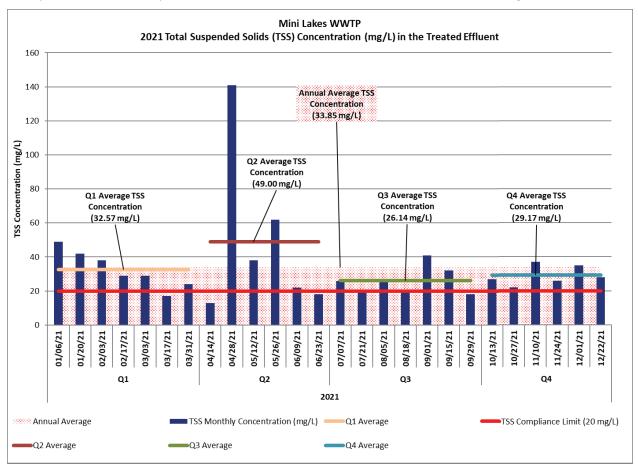


Figure 5-3: 2021 Monthly and Quarterly TSS Concentration (mg/L)

Table 5-6 illustrates the historical average TSS concentration (quarterly and annual) found in the treated effluent for the last 10 years (2012-2021) as compared to the compliance limit stated in the ECA.



Highlighted text (RED) indicates exceedances of the effluent concentration limits (Table 5-1) stated in the ECA currently in place.

TSS CONCENTRATION (mg/L) **COMPLIANCE** 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 LIMIT (mg/L) Q1 Average 21.00 17.33 8.50 3.00 5.33 7.00 13.33 20.33 34.33 32.57 5.33 8.00 3.67 4.33 **Q2** Average 11.00 10.00 19.33 21.67 49.86 49.00 22.75 19.67 10.00 3.67 6.67 10.00 24.67 20 Q3 Average 13.33 30.17 26.14 Q4 Average 11.50 20.50 13.00 5.33 4.33 5.00 23.67 32.33 46.67 29.17 17.18 16.55 9.92 3.92 5.17 7.20 20.25 21.92 40.26 33.85 **Annual Average**

Table 5-5: Historical TSS Concentrations in Effluent

In 2021, TSS removal performance increase compared to 2020, however the TSS concentration still exceeded the compliance limit every quarter, which resulted in an annual average concentration that is almost 50% more than the compliance limit. It should be noted that the despite increasing the solids hauling frequency, the solids generation/accumulation still remains critical to this facility. In addition, the lack of pre-treatment, does not allow for the coarse/gross solids (i.e. rags and other debris) to be removed and disposed-of prior to the effluent entering the plant, which cause significant process upsets and will accumulate solids overtime. The issues with the TSS are further discussed in Section 6 of this report.

6 Site Visit / Condition Assessment

In light of the consistent performance issues putting the facility in a state of non-compliance for the past years, OCWA created a taskforce to investigate in details the issues and how to address them.

During a site visit conducted in early February 2020, the conditions of the facility and its treatment process areas were assessed. During the site visit, several deficiencies were spotted and wherever possible corrected immediately. In addition, some optimization measures were implemented in an effort to rehabilitate the facility back to an acceptable operational state until the new wastewater treatment system in plan is finally commissioned and fully operational. Following table summarizes the outcome of the site visit.

Table 6-1: Wastewater Treatment System – Unscheduled Work

AREA	ISSUES/ CONCERNS	REMEDIAL ACTIONS	STATUS	TIMELINE FOR COMPLETION	REMARKS
Primary	Excess biosolids (sludge) accumulation	Immediate Sludge Removal from primary Clarifier followed by an increase in the hauling frequency	Completed	Completed	
Clarifier	Lack of proper biosolids (sludge) removal	Install 4 perforated piping sludge lines (1 per trough) to remove sludge effectively.	Completed	Completed	



AREA	ISSUES/ CONCERNS	REMEDIAL S ACTIONS		TIMELINE FOR COMPLETION	REMARKS
	Inaccurate biosolids (sludge) measurement	Modifications to allow for better sludge judge readings to take place	Cancelled	Cancelled	Unfeasible
	Chemical Dosing	Improve the SR2 dosing mechanism	Completed	Completed	Jar testing done in house on regular basis to adjust dosage as required
	Blockage at the East RBC train after the 1 stage.	Remove blockage	Completed	Completed	
Rotatory	Dissolved Oxygen	Acquire a portable handheld DO meter.	Completed	Completed	
Biological Contactor (RBC)	Chemical Dosing	Adjust Alum dosage calculations. Complete Jar Testing	As needed	As needed	Jar testing done in house o
	Type of Flocculant / Coagulant	Review feasibility of changing chemicals	In Progress	TBD	This alternative will be further explored if no positive results are obtained with the optimization work.
Intermediate Clarifier	Excess biosolids (sludge) accumulation	Immediate Sludge Removal followed by an increase in the hauling frequency	Completed	Completed	
Clarifier	Return Pump Seal	Repair/Replace Seal or eventually replace entire pump	In Progress	Completed	
	Return Pump Cycling	Adjust the cycling from 4 min per hour to 3 min every half hour	Completed	Completed	
Denitrification Tank	Excess biosolids (sludge) accumulation	Clean out the Denitrification Tanks. Assess the state of the submerged media to ensure that sludge buildup and bio- film have not clogged the media.	Completed	Completed	
	Biofilm Buildup	Cleanout the distribution boxes frequently	Completed	Completed	
	Chemical dosage	Review/Revise the MicroC dosage	As needed	As needed	Testing done in house on to adjust dosage as required
Final Clarifiers	Low biosolids (sludge) Levels	Adjust the cycling from 4 min every 2 hour to 2 min every hour	Completed	Completed	
Effluent Tank	Inaccurate flow metering	Improve the flow reading practices. Assess feasibility of selecting a better location for flow metering.	Completed	Completed	
Tile Beds	Condition Assessment	Tile beds must be inspected to assess current condition and state of the pipe and other internal components	Completed	Completed	



AREA	ISSUES/ CONCERNS			TIMELINE FOR COMPLETION	REMARKS
	Chemical Dosing	Improve the SR2 dosing mechanism. Contact SciCorp for further assistance using this chemical.	Completed	Completed	
Monitoring & Sampling	Insufficient Monitoring for critical process parameters	Increase monitoring and sampling frequency using alternative methods as available to operators. Increase number of process parameters to be monitored	Completed	Completed	
	On site analysis	Acquire a portable handheld DO meter	Completed	Completed	
SCADA/Complia	Faulty and unreliable SCADA System	Upgrade the SCADA system.	Pending	Pending	SCADA upgrades are planned to take place as part of the proposed WWTP Upgrades.
nce/H&S	Chemical Dosage	Improve Accuracy in flow metering	Completed	Completed	
	Day Tank Storage	Install Spill Containments	Completed	Completed	

Further to the above action items, another site visit / condition assessment was conducted on September 24th, 2021 by the Process Optimization and Technical Services (POTS) Team. The visit was in response to a request from Operations Staff to assist with the challenge in meeting compliance with the effluent quality limits. A copy of this report is provided in Appendix E.

As part of process diagnostic for this study, a comprehensive sampling program was recommended by POTS to the Operations Group for late September and early October 2021 to determine nitrification and denitrification performance, phosphorus removal and clarifier operation.

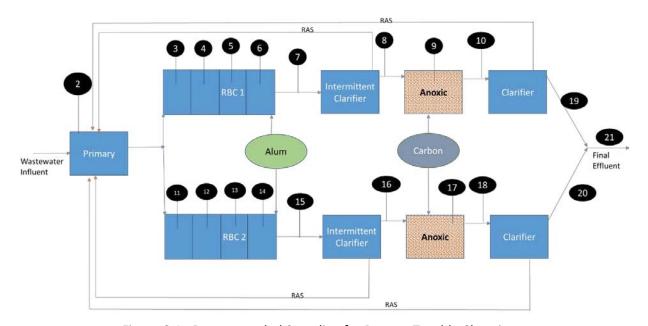


Figure 6-1: Recommended Sampling for Process Trouble-Shooting.



Table 6-2: Recommended Sampling Schedule and Frequency

SAMPLING POINT	PARAMETERS	SAMPLING	COMMENT
2	TSS, TP, CBOD5, TKN, TAN, pH, Alkalinity	Biweekly	Send out to lab
3, 4, 5, 6, 11, 12, 13, 14, 9, 17	DO, pH	Biweekly	In situ
7 and 15	7 and 15 TSS, TP, CBOD ₅ , NH3,		Send out to lab
8, 10, 16, 18	NO ₃ , NO ₂ , NH ₃ , CBOD ₅ , TSS	Biweekly	Send out to lab
8,16	TP	Biweekly	Send out to lab
19 & 20	19 & 20 CBOD ₅ , TSS, TKN, TP, pH, NO ₃ , Alkalinity		Send out to lab
21	As Required by ECA	As Required by ECA	
All Clarifiers Sludge Level		Biweekly	Measure on Site

There are a number of short term recommendations in the report that have been listed below with the current status.

Table 6-3: Operational / Process Recommendations

Operational / Process Recommendations	Status Update
Divert flow from one RBC train to the other (but keep both operating)	November 19, 2021 - OCWA has throttled flow from RBC1 by 50%. There is a possibility that the deterioration of the infrastructure may reduce the effectiveness of controlling flow via the valve but this is being monitored and will be addressed if necessary. Note that with any change to a biological system, it will take several weeks for the operation to stabilize.
Increase recirculation by increasing RAS pump rate	Week of November 15 - OCWA increased pump flow rate from 4 minutes every 3 hours to 4 minutes every 2 hours. This is being monitored and may be re-adjusted if necessary.
Add step feeding of wastewater to RBC halfway down tank	More investigation is needed to determine feasible way to implement this. In progress.
Add crossover connection between anoxic tanks	In progress - The separating wall between the two tanks will need to be perforated. A Request for Information has been submitted to Stantec to collect the information required. This modification was recommended in the 2016 ECA and will need to be completed to allow flow diversion between the tanks to meet nitrate compliance limits in the effluent.
Adjust speed of RBC shaft	In progress – Additional information from the RBC vendor is needed to determine if this is possible with single phase power
Install new peristaltic pumps	These pumps are currently operational and will be replaced if they fail and cannot be repaired.
Adjust chemical dosing for phosphorus and denitrification	OCWA's Operations team has been provided with a new sampling schedule with updates to adjust chemical dosing based on rolling average influent phosphorus levels. The sampling results will also be monitored by OCWA's Engineering team as part of the quarterly reporting and although some improvements may be visible in 2021 Q4, we expect that we will have better visibility on process improvement effectiveness at the end of 2022 Q1.
Partition the clarifier	More study is necessary to confirm if this is required. Will not be done unless the final decision is to maintain the RBC process instead of upgrading the system to an SBR.
Add a chemical storage building	In progress – Regardless of the final treatment technology (RBC or SBR) selected, OCWA is investigating the possibility of constructing temporary storage on the site until a permanent building is designed and constructed under the treatment plant upgrades. As the building must be heated for winter months, it may not be implemented as quickly as the other items.



7 Subsurface Disposal System (Tile Beds)

In June 2021; a preliminary inspection (including some excavation) completed by Howden Edgar to the Subsurface Disposal System (Tile Beds). The above noted inspection was triggered by the presence of some pooling areas around some of the tile beds. As reported by both Howden and OCWA operation's team, the tile beds are plugged. As shown in Figure 6-1, the excavation revealed tile beds aren't level, pooling is happening due to soil saturation.









Figure 7-1: Tile Bed Inspection (June 2021)

At present, OCWA is in the process of coordinating a repair work for Tile Bed # 1, based on the findings of the above noted inspection. It is anticipated that the remaining tile bed cells will be repaired and/or rehabilitated at a later stage using a phased approach. Mini Lakes is in the process of reviewing this capital need in order to make a decision for approval.

8 Groundwater Monitoring Results

All nine groundwater monitoring wells and the two additional monitoring wells (to intercept the plume close to the water's edge) are required to be monitored both qualitatively and quantitatively according to the ECA.

8.1 Groundwater Level

Section 5.3 of the ECA states that the groundwater elevation and flow paths through the site must be recorded. Figure 7-1: Change in Groundwater Depth in Monitoring Wells during 2021 below displays the



groundwater depths reported in 2021. It should be noted that depth is measured from the top of the well; an increase in the depth correspond to lower water level, and vice versa.

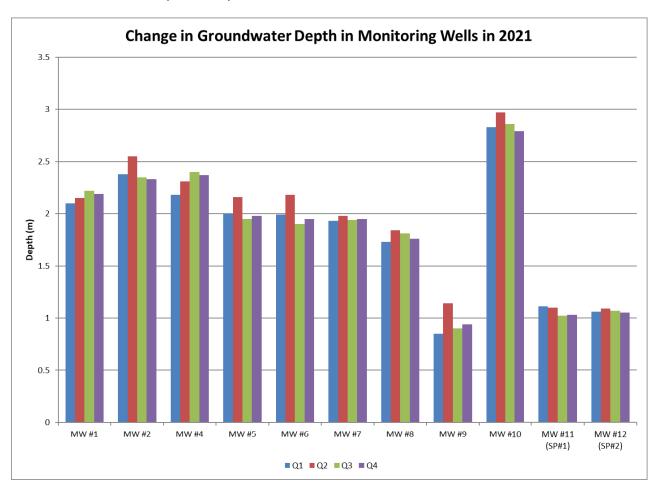


Figure 8-1: Change in Groundwater Depth in Monitoring Wells during 2021

As illustrated in Figure 7-1, during the first quarter of 2021, most of the wells experienced a seasonal increase in water level due to a warmer winter than usual, hence more snow melted quickly and infiltrated into the ground. Later in the second quarter, majority of the wells experienced a drop in the water levels since most snow/ice melted already in the first quarter, so not much additional water is present. During the same period, a significant drop was experienced for MW#9. It should be noted that MW#9 is one of the highest in terms of topographical elevation; it is prone to more drastic drops in water level when the water table drops in the area. During Q4 majority of the wells experienced an increase in water level from Q3 due to more precipitation in those three months.

These changes are in line with seasonal variations based on the geographic location and elevation of the monitoring wells as attached in Appendix B.

8.2 Groundwater Quality

The quarterly reports include sampling results for the following parameters: nitrite, nitrate, BOD, suspended solids, TAN, TKN, phosphorus, DOC, and E. coli. The quarterly sampling results are



summarized in Table 7-1. Highlighted values (RED) indicate exceedances of the limits stated in Ontario Drinking Water Quality Standards (ODWQS).

Table 8-1: Groundwater Monitoring Wells - Sampling Results

DOWGS	WELL	QUARTER	NO2-N (mg/L)	NO3-N (mg/L)	CBOD₅ (mg/L)	TSS (mg/L)	AMMONIA-N (mg/L)	TKN (mg/L)	TP (mg/L)	DOC (mg/L)	<i>E. COLI</i> (cfu/100mL)
MW-1 MW-1	ODWOS				(6/ =/	(6/ =/	(6/ =/	(6/ =/	(8/ =/		
MW-1 Q2		Q1			4	1890	3.9	4.2	0.22		
MW-1 Q3											
MW-10 Q4 Q4 Q5 Q6 Q6 Q6 Q6 Q7 Q7 Q7 Q8 Q8 Q8 Q8 Q8 Q8 Q8	MW-1										
MW-2 MW-2			0.05	<0.6	<4	1700	3.2	4.1	0.45		<2
MW-2 Q3		Q1	0.03	6.11	4	38	0.1		0.03	2	0
MW-6 Outside Color Outsid		Q2	0.03	4.52	4	7	0.1	0.5	0.03	2	2
MW-4 O1	MW-2	Q3	0.03	1.67	12	11	0.1	0.5	0.03	1	2
MW-4 Q2	•	Q4	0.03	0.94	<4	2	<0.1	<0.5	0.03	2	2
MW-4 Q3			0.03	4.8	4		0.1	0.5	0.03		
Q3	•	Q2	0.03	4.74	4	3	0.1	0.5	0.03	2	2
MW-5 Q1	MW-4	Q3	0.03	3.27	10	<2	0.1	0.5	0.03	<1	<2
MW-5 Q2		Q4	0.03	5.7	<4	4	0.1	0.5	0.03	1	<2
MW-5			0.03	0.29	4	7	0.1	0.5	0.03	2	
MW-5 \[\begin{array}{c c c c c c c c c c c c c c c c c c c	•	Q2	0.03	0.29	4	5	0.1	0.5	0.03	2	2
MW-10 Q4 0.03 0.59 <4 <2 0.1 0.5 0.03 1 <2 MW-6 Q1 0.03 0.63 4 5 0.1 0.5 0.03 2 0 Q2 0.03 0.4 4 2 0.1 0.5 0.03 1 2 Q4 0.03 0.61 <4	MW-5		0.03	0.47			0.1	0.5	0.03		
MW-6 Q1	•	Q4	0.03	0.59	<4	<2	0.1	0.5	0.03	1	
MW-6 Q3 0.03 0.61 <4 <2 0.1 0.5 0.03 1 <2 Q4 0.03 0.71 4 12 0.1 0.5 0.03 1 <2			0.03	0.63			0.1	0.5	0.03	2	
MW-7 O3	•	Q2	0.03	0.4	4	2	0.1	0.5	0.03	1	2
MW-7 Q1	MW-6	Q3	0.03	0.61	<4	<2	0.1	0.5	0.03	1	<2
MW-7 Q2	•	Q4	0.03	0.71	4	12	0.1	0.5	0.03	1	<2
MW-7 Q3 0.03 0.06 4 <2 0.1 0.5 0.03 2 <2 Q4 0.03 0.06 4 7 0.1 0.5 0.03 2 <2		Q1	0.03	0.06	4	11	0.1	0.5	0.03	2	0
MW-9 Q3	•	Q2	0.03	0.06	4	4	0.1	0.5	0.03	3	2
MW-8 O1	MW-7	Q3	0.03	0.06	4	<2	0.1	0.5	0.03	2	<2
MW-8 Q2		Q4	0.03	0.06	4	7	0.1	0.5	0.03	2	<2
MW-8 Q3		Q1	0.03	0.06	4	31	2.9	2.8	0.04	7	2
Q3 <0.03 0.06 4 3 2.7 3.2 0.03 11 10 Q4 <0.03		Q2	0.3	0.06	4	35	3.5	3.4	0.09	8	2
MW-9 Q1 Q2 Q2 Q3 Q3 Q3 Q4 Q4 Q5 Q5 Q6 Q6 Q6 Q7 Q6 Q7	IVIVV-8	Q3	<0.03	0.06	4	3	2.7	3.2	0.03	11	10
MW-9 Q2 Q3 Q3 Q3 Q55 Q4 Q4 Q4 Q50 Q5 Q6 Q6 Q7 Q6 Q7	•	Q4	<0.03	0.06	4	10	1.6	1.8	0.04	9	<2
MW-9 Q3 Q3 Q4 Q4 Q4 Q4 Q5 Q5 Q5 Q6 Q7 Q7 Q7 Q7 Q7 Q7 Q7 Q7 Q7		Q1	0.03	0.06	4	30	0.8	0.8	0.03	6	0
Q3 0.03 0.55 4 19 0.8 1.4 0.03 9 4 Q4 0.03 0.14 4 422 0.6 0.8 0.22 8 <2		Q2	0.03	0.06	4	14	5.4	6.5	0.25	19	2
MW-10	MW-9	Q3	0.03	0.55	4	19	0.8	1.4	0.03	9	4
MW-10 Q2 0.03 0.06 4 24 0.1 0.5 0.03 2 2 Q Q3 0.03 0.09 24 <2 <0.1 <0.5 <0.03 <1 <2 Q4 0.03 0.12 <4 3 <0.1 <0.5 <0.03 1 <2	•	Q4	0.03	0.14	4	422	0.6	0.8	0.22	8	<2
MW-10 Q3 0.03 0.09 24 <2 <0.1 <0.5 <0.03 <1 <2 Q4 0.03 0.12 <4 3 <0.1 <0.5 <0.03 1 <2		Q1	0.03	0.08	4	112	0.1	0.5	0.04	2	0
Q3 0.03 0.09 24 <2 <0.1 <0.5 <0.03 <1 <2 Q4 0.03 0.12 <4 3 <0.1 <0.5 <0.03 1 <2	D 4144 4 4 4	Q2	0.03	0.06	4	24	0.1	0.5	0.03	2	2
	IVIVV-10	Q3	0.03	0.09	24	<2	<0.1	<0.5	<0.03	<1	<2
MW-11 Q1 0.03 0.16 4 112 4.8 4.5 0.03 6 0	•	Q4	0.03	0.12	<4	3	<0.1	<0.5	<0.03	1	<2
	MW-11	Q1	0.03	0.16	4	112	4.8	4.5	0.03	6	0



WELL	QUARTER	NO2-N (mg/L)	NO3-N (mg/L)	CBOD₅ (mg/L)	TSS (mg/L)	AMMONIA-N (mg/L)	TKN (mg/L)	TP (mg/L)	DOC (mg/L)	<i>E. COLI</i> (cfu/100mL)
	Q2	0.03	0.06	4	28	5.9	6.5	0.06	7	2
	Q3	0.03	0.06	10	5	6.2	6	<0.03	6	<2
	Q4	0.03	0.06	<4	169	5.4	5.7	<0.03	7	<2
	Q1	0.03	0.58	6	23	0.1	0.5	0.03	2	0
NAVA / 12	Q2	0.03	0.89	4	16	0.1	0.5	0.03	1	2
MW-12	Q3	0.03	1.35	<4	2	<0.1	<0.5	0.03	1	<2
	Q4	0.03	1.03	<5	3	<0.2	<0.6	0.03	2	<2

Red number indicates an exceedance of the Ontario Drinking Water Quality Standards (ODWQS). Table 7-2: Groundwater Monitoring Wells contains a summary of the water quality in each of the monitoring wells.

Table 8-2: Groundwater Monitoring Wells

MONITORING WELLS	WATER QUALITY REMARKS
MW#1	In 2021, the concentration levels of dissolved organic carbon were elevated, though similar to historical levels. MW#1 was also found to exceed the limit for E.Coli however historical results show that MW#1 had experienced periodic hits of E.Coli over the last 5 years. Abnormally high TSS concentration was observed in Q2, which could be resulted from sources of error in sampling and testing.
MW#2	The monitoring well experienced moderate levels of phosphorus and E. coli; however high notable concentrations of nitrate (2021 Avg: 3.31 mg/L) were recorded, which is similar to 2017 and 2018 recorded concentrations. It appears that the well is impacted by the proximity to the subsurface disposal systems, but is distant enough for the phosphorus to be absorbed by the soils and the E. coli to die off.
MW#4	In 2021, the monitoring well experienced moderate concentration levels of nitrates (Avg. 4.6 mg/L) – which is lower than 2018 2019 due to improved nitrate removal efficiency at the treatment plant in Q2 2020. Similar to MW#2, it appears that the well is impacted by the proximity to the subsurface disposal systems, while being at a great enough distance for the phosphorus and E. coli to be removed. Previous years have also recorded E. coli at very low levels, which may indicate that the monitoring well is at the edge of the E. coli subsurface travel time.
MW#5	In 2021, the monitoring well showed much lower nitrate concentration (Avg. 0.41 mg/L) than 2019 level similar to MH#4, but increased a bit compared to 2020. Three quarters of E. Coli was reported to exceed the limit. Low level of phosphorus was maintained throughout the year.
MW#6	This monitoring well shows results similar to MW#5 with slightly higher concentrations of nitrate (Avg. 0.58 mg/L). Three quarters' E.Coli was exceeded in the year.
MW#7	This monitoring well does not appear to be impacted by the subsurface disposal systems, with low phosphorus concentration only detected in the first quarter likely due to its close proximity to the central Mini Lakes pond. Three quarters' E.Coli was exceeded in the year.
MW#8	MW#8 water quality meets the ODWQS requirement in all criteria except for E.coli and DOC. Both E.Coli and DOC concentration exceeded the ODWQS requirement in all four quarter, however, the concentrations were not high (<2 cfu/100ml) except Q3 with experienced 10 cfu/100ml.
MW#9	In 2021, MW#9 saw elevated levels of E. coli contamination in Q2 Q3 Q4 and high levels of dissolved organic carbon in all four quarters. Historically, this well has experienced elevated levels of both dissolved organic carbon and E. coli contamination.
MW#10	From the historical data and the samples taken in 2021, the well appears not to be impacted by the subsurface disposal system although it is in proximity to the disposal system. In 2020, all of the criteria meets ODWQS requirement except for slight E.Coli exceedance in Q2 Q3 Q4.



MONITORING WELLS	WATER QUALITY REMARKS
MW#11/SP1	The samples taken in 2021 show low concentrations of nitrate and phosphorus. The results show that the monitoring well is not being impacted by the subsurface disposal systems. However, dissolved organic carbon (2021 Avg: 6.5 mg/L) and E.Coli are still elevated above recommended level and the overall trend of concentration is moving downwards from historic levels.
MW#12/SP2	There are slightly elevated concentrations for nitrate for 2021 with the maximum concentration reaching 1.35 mg/L in Q3 of 2021. Nitrate concentration is not concerning as the average nitrate concentration remains low compared to ODWQS requirement. Three exceedance of E.Coli. concentration was reported in 2021.

8.3 Nitrate

Nitrate concentrations were found to be low in all monitoring wells except MW# 2 and MW#4. Although the quarterly nitrate readings in these two wells are consistently below the Maximum Allowable Concentration (MAC) of 10 mg/L, it is suspected that the proximity of these wells to the subsurface disposal system combined with the generally higher nitrate concentrations in the effluent being discharged has impacted the nitrate levels in these two monitoring wells. In spite of this, the 2021 concentrations are consistent with historical data and therefore do not present a concern at present. These concentrations will continue to be monitored to ensure no significant trends are detected. The lower nitrate concentration in the monitoring well to the east of the beds indicates an east/west groundwater flow.

8.4 Total Phosphorus

There are no concerns regarding phosphorus concentrations as these are all very low. Phosphorus was high prior to 2015 and only in the monitoring wells located on the eastern side of the Mini Lakes community (MW#1 and MW#9). Monitoring wells MW#1 and MW#9 show slightly higher TP concentrations than other wells which could be attributed to agricultural run-off or the nearby ponds as these wells measure incoming flows into Mini Lakes from the North East (outside boundaries). Regardless, the present concentrations show that phosphorus is not a concern.

8.5 Escherichia coli (E. coli)

The presence of E. coli in groundwater can be attributed to the influence of surface water, a sewage collection system leak, or from a source of E. coli containing water (subsurface disposal systems). Surface water can commonly contain E. coli concentrations between 0-100 cfu/100 mL. E. coli results below 100 cfu/100 mL found at shallow groundwater depths are likely the result of surface water influences rather than a sewage leak or from local subsurface disposal systems. Raw sewage can have concentrations of E. coli in the range of >1,000,000 cfu/100 mL.

Since the monitoring wells are shallow, the presence of E. coli in these wells are not indicative of microbial contamination in much deeper production well, but rather an indication of potential sources of E. coli contamination at or near the surface. Elevated levels of E.Coli were observed for MW#1, 8 and 9. Groundwater contamination from E. coli has been found over the years in several monitoring wells at the site, especially in MW#9 with historical levels up to 1,000 cfu/100 mL, and hitting as high as 3040 cfu/100 mL in Q2 of 2018. Given the location of MW#9 (approximately 269 m northwest of the Subsurface Disposal System), it is unlikely that this monitoring well is impacted by the Subsurface



Disposal System but instead impacted by the surface water (marshy area) in the vicinity of this well. The MW#1 monitoring location is at the water's edge of the local pond and is under the direct influence of the local surface water. MW#8 is 20m away from the nearest pond which would impact E.Coli levels.

8.6 Dissolved Organic Carbon (DOC)

Besides the major parameters that have been discussed in Sections 8.3, 8.4 and 8.5; there was one other parameter concentration that stood out as unusual, Dissolved Organic Carbon (DOC) as shown in Table 8-1. High concentrations of DOC were found at MW#1, MW#8, MW#9 and MW#11. The DOC can be attributed to the local presence of water with high levels of organic material. The ponds throughout the Mini-Lakes community and the high elevation of the ground water table could explain the results seen at these wells.

9 Surface Water Quality Sampling Results

The Mini Lakes site contains several small ponds around which the community was built. These lakes are interconnected and flow from a source on the western side to the ponds on the eastern side and then into the water system of the Mill Creek development.

Sampling from these lakes is important to determine the concentration of contaminants entering and leaving the Mini Lakes community, as well as, the community's surface water quality. The provincial and federal government have guidelines for surface water quality set out in the "Canadian Environmental Quality Guidelines (CEQG)" and the "Provincial Water Quality Objectives (PWQO)". The samples from the five surface water locations are summarized in Table 8-1 with samples that exceeded existing guidelines highlighted in red.

Table 9-1: Surface Water - Sampling Results

SURFACE WATER SAMPLE	SAMPLE DATE & TIME	QUARTER	PHOSPHORUS (TOTAL) [mg/L]	TOTAL KJELDAHL NITROGEN [AS N mg/L]	AMMONIA +AMMONIUM (N) [mg/L]	NITRITE (AS N) [mg/L]	NITRATE (AS N) [mg/L]	E.COLI
CEQG/PWQO			0.02				13	100
	3/18/21	Q1	<0.03	<0.5	<0.1	<0.03	0.08	93
SW1 Up-	6/09/21	Q2	<0.03	<0.5	<0.1	<0.03	<0.06	62
gradient inflow	9/15/21	Q3	<0.03	<0.5	<0.1	<0.03	<0.06	<2
at property boundary	12/09/21	Q4	<0.03	0.6	<0.1	<0.03	0.17	26
boundary	Annual Avg		<0.03	0.5	<0.1	<0.03	0.09	46
SW3-Within Main Pond	3/18/21	Q1	<0.03	<0.5	<0.1	<0.03	0.3	0
	6/09/21	Q2	<0.03	<0.5	<0.1	<0.03	<0.06	22
	9/15/21	Q3	<0.03	<0.5	<0.1	<0.03	<0.06	16
	12/09/21	Q4	<0.03	<0.5	0.3	<0.03	0.15	16
Annual Avg.		<0.03	<0.5	0.2	<0.03	0.14	14	
	3/18/21	Q1	<0.03	<0.5	0.1	<0.03	0.08	0
SW4-Outlet	6/09/21	Q2	<0.03	<0.5	<0.1	<0.03	<0.06	28
From Main	9/15/21	Q3	<0.03	<0.5	<0.1	<0.03	<0.06	48
Pond	12/09/21	Q4	<0.03	<0.5	0.3	<0.03	0.16	4
	Annual Avg		<0.03	<0.5	0.2	<0.03	0.09	20
SW5-Inflowing	3/18/21	Q1	<0.03	<0.5	<0.1	<0.03	0.60	27
Tributaries at	6/09/21	Q2	<0.03	<0.5	<0.1	<0.03	0.41	600
iributaries at	9/15/21	Q3	<0.03	<0.5	<0.1	<0.03	0.48	36



County Rd No	12/09/21	Q4	<0.03	<0.5	<0.1	<0.03	0.47	6
34	Annual Avg.		<0.03	<0.5	<0.1	<0.03	0.49	167.25
SW6-Outlet From Property	3/18/21	Q1	< 0.03	<0.5	0.2	< 0.03	0.12	0
	6/09/21	Q2	< 0.03	<0.5	<0.1	<0.03	<0.06	24
	9/15/21	Q3	<0.03	<0.5	<0.1	<0.03	<0.06	34
	12/09/21	Q4	<0.03	<0.5	0.3	<0.03	0.16	6
	Annual Avg.		<0.03	<0.5	0.2	<0.03	0.10	16

Highlighted indicates an exceedance of Provincial Water Quality Objectives (PWQO) or Canadian Environmental Quality Guidelines (CEQG)

From the surface water samples taken in 2021, it can be concluded that the Mini Lakes water bodies are in good health and there does not appear to be any major issues in term of contamination. The one area of concern is the occasional spike in E. Coli concentration in SW5, which by it self made the annual average in that location to pass the 100 cfu/100 ml limit. This is

Due to lack of more precise lab equipment, phosphorus concentrations that are less than 0.03 mg/L could not be precisely determined, therefore all of the phosphorus results in 2021 returned with a value of <0.03 mg/L. It is unclear that if any concentration has exceeded the 0.02 mg/L limit.

10 Summary of 2021's Operational Activities

10.1 Major Maintenance and Minor Repair

Table 9-1: Wastewater Treatment System Maintenance

MONTH	ACTIVITY
	 5th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 3) and floating solids in intermediate clarifier 1 & 2 13th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 1) and floating solids in intermediate clarifier 1 & 2
	 15th – New flowmeter for effluent pump #5 installed and recording effluent volumes to tile bed #5
January	 19th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 2) and floating solids in intermediate clarifier 1 & 2
	 22nd – RBC#1 failed gearbox replaced with refurbished unit
	 26st – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 4) and floating solids in intermediate clarifier 1 & 2
	 27th – Level sensor installed in effluent tank to help record more accurate effluent volumes pumped to tile beds
	 2nd – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 1) and floating solids in intermediate clarifier 1 & 2
February	 9th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 2) and floating solids in intermediate clarifier 1 & 2
	 16th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 3)
	 23rd - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 4) and floating solids in intermediate clarifier 1 & 2
	 2nd – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 1) and floating solids in intermediate clarifier 1 & 2
	 15th – Tested alarms on SPS 1 and SPS 4 verified system is working normal
March	 17th – Pulled SPS 4 pump 1, cleared extensive grease buildup on the pump; replaced rubber seal and top guiderail bracket
	19th - Pulled SPS 4 pump 2, cleared extensive grease buildup on the pump
	22nd - Pulled SPS 2 pump 1, replace rubber seal on pump



MONTH	ACTIVITY
	1st – Alum pump injector replacement
	 6th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 3) and floating solids in intermediate clarifier 1 & 2
	 9th – Belwood Electric onsite to replace start lead and lag floats on SPS#4
April	• 13th – Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 2)
, γρ. ιι	 20th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 4) and floating solids in intermediate clarifier 1, 2 and RBC #2
	 22nd – Hannah Environment onsite to removed and install new pack sets on RBC #2
	 27th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 1) and floating solids in intermediate clarifier 1 & 2
	3rd - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 2)
	 11th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 3) and floating solids in intermediate clarifier 1 & 2
May	 18th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 4) and floating solids effluent tank
	• 19th – Edgar Howden onsite to inspect tile beds for tile bed rehabilitation
	• 25th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 1)
	27th – Replacement of failed air relief valve on one MicroC pump
	1st - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 2)
	8th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 3)
June	• 15th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 4)
	 22nd - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 1)
	• 29th - Weber Septic on site for sludge haulage from the Primary Clarifier (hatch 2)
	7th - Weber Septic on site for sludge haulage from the Primary Clarifier
	 7th – Howden onsite to recover tile beds
July	13th - Weber Septic on site for sludge haulage from the Primary Clarifier
	20th - Weber Septic on site for sludge haulage from the Primary Clarifier
	27th - Weber Septic on site for sludge haulage from the Primary Clarifier
	5th - Weber Septic on site for sludge haulage from the Primary Clarifier
	 9th – Howden onsite to recover to take soil samples from tile beds
	10th - Weber Septic on site for sludge haulage from the Primary Clarifier
August	17th - Weber Septic on site for sludge haulage from the Primary Clarifier
	19th – Belwood Electric onsite to replace high level float
	24th - Weber Septic on site for sludge haulage from the Primary Clarifier
	31st - Weber Septic on site for sludge haulage from the Primary Clarifier
	8th - Weber Septic on site for sludge haulage from the Primary Clarifier
	• 9th – Indus Controls onsite to complete flow meter calibrations
September	14th - Weber Septic on site for sludge haulage from the Primary Clarifier
	21st - Weber Septic on site for sludge haulage from the Primary Clarifier
	28th - Weber Septic on site for sludge haulage from the Primary Clarifier
	5th - Weber Septic on site for sludge haulage from the Primary Clarifier
October	12th - Weber Septic on site for sludge haulage from the Primary Clarifier
	19th - Weber Septic on site for sludge haulage from the Primary Clarifier



MONTH	ACTIVITY							
	26th - Weber Septic on site for sludge haulage from the Primary Clarifier							
	2nd - Weber Septic on site for sludge haulage from the Primary Clarifier							
	12th - Weber Septic on site for sludge haulage from the Primary Clarifier							
November	16th - Weber Septic on site for sludge haulage from the Primary Clarifier							
November	23rd - Weber Septic on site for sludge haulage from the Primary Clarifier							
	 26th – Belwood Electric onsite to complete wiring for new pump #2 in SPS 1 							
	30th - Weber Septic on site for sludge haulage from the Primary Clarifier							
	7th - Weber Septic on site for sludge haulage from the Primary Clarifier							
December	14th - Weber Septic on site for sludge haulage from the Primary Clarifier							
December	21st - Weber Septic on site for sludge haulage from the Primary Clarifier							
	29th - Weber Septic on site for sludge haulage from the Primary Clarifier							

10.2 Unscheduled Work

Table 9-2: Wastewater Treatment System – Unscheduled Work

MONTH	ACTIVITY
January	There were no after-hours call backs for the reported period.
February	There were no after-hours call backs for the reported period.
March	13th – SPS 1 Pump 1 Overload
IVIdiCii	14th – SPS 1 Pump 1 Overload
April	4 th – SPS 4 High Level Alarm
May	There were no after-hours call backs for the reported period.
June	12th – SPS #3 Pump #2 Overload
July	There were no after-hours call backs for the reported period.
August	17th – Power Outage Alarm
September	13th – Waste Computer Alarm
October	There were no after-hours call backs for the reported period.
November	16th – SPS 1 Overload Alarm
December	11th – SPS Power Fail Alarm

10.3 Operational Issues and Identified Deficiencies

There were no reportable event during the period covered by this report.

11 Proposed Works for 2021

The Mini Lakes WWTP is starting to see serious degradation in performance of the system. The SPS's are having numerous issues with pump operation and maintenance (rails and chains), the chemical feed



system for alum and micro carbon requires replacement, and the control system has issues with data integrity.

In summary, the Mini Lakes WWTP plant has entered the point of its operational life where much of the original equipment, will requiring replacement. The control systems, chemical feed systems, and many of the system's pumps all require replacement over the next few years in order to continue with present level of operation. Alternatives to individual equipment replacement have been presented to Mini Lakes as part of the "Trade-Off Study" report.

During 2018, several studies/investigations were completed for the existing WWTS.

- Sewage Treatment System Trade-Off Study (including a Condition Assessment).
- Standby Power Study

The board and the residents have approved the upgrades to the wastewater treatment facility and provisions are being made to start the engineering portion of this upgrade in 2020. Regretfully although the upgrades proposed to the standby power supply was accepted by the board members, the residents voted against. As such, this potential upgrade has been cancelled.

Table 11-1: Wastewater Treatment System Proposed Improvement

IDENTIFIED ISSUE	RECOMMENDED WORK	TIME LINE
Wastewater Treatment System Upgrades	A Sewage Treatment System Trade-Off Study was completed in 2018 with the objective of assessing the current conditions of the existing treatment system and its ability to meet the regulatory requirements. The study concluded that the current likelihood of failure (LoF) and consequence of failure (CoF) scored the existing sewage treatment system warrants an upgrade. Two upgrade options were presented. Mini Lakes opted for upgrading the existing treatment system to a new one featuring SBR technology ((Fluidyne ISAM TM -50).	2-3 years
There is a lack of standby power capacity in the event of power failure for three (3) existing well houses, five (5) sewage pumping stations, one recreational centre and one wastewater treatment plant (WWTP).	The Mini Lakes Board was presented with five options (A-E) to choose from in delivering the standby power capabilities for the condominium facilities. The Mini Lakes board reviewed the study and decided the best suited option in their opinion is Option C. Option C is dedicated standby power to be provided at each critical location - 1 generator per critical location (SPS #1, #2, #3, #5, Well Houses #2, #3; Wastewater treatment Plant; Recreational Centre) totaling 8 generators from 10 to 50 kW in ratings. This project has been cancelled as the proposed upgrades were rejected by the residents in a vote after the public presentation in September 2019.	Cancelled

In addition to above, in 2021 the following works have been completed within the Plant.

- Emergency Work RBC 1
- Emergency Work RBC 2
- Replaced Level Transmitter Final Effluent



- SPS 3 Pump and Rail Replacement
- Tile Bed Investigation & Soil Sample
- SPS Spare Pump Purchase
- Chemical Pump Rebuild Kits



APPENDIX A Environmental Compliance Approval Number 8156-AR4J2T



Ministry of the Environment and Climate Change Ministère de l'Environnement et de l'Action en matière de changement climatique

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 8154-AR4J2T

Issue Date: September 18, 2017

Wellington Common Elements Condominium Corporation No.214 c/o MF Property

Management Limited

28 Bett Court Guelph, Ontario

NIC 0A5

Site Location:

7541 Wellington County Road 34

Township of Puslinch, County of Wellington

N0B2J0

Cou have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 Environmental Protection Act) for approval of:

Upgrades to the existing sewage works comprising of a sanitary collection system, pumping stations and forcemains, a sewage treatment and subsurface disposal system re-rated at approx. 158 m³/d average daily flow serving the Mini Lakes Subdivision and Common Elements Condominium comprising of a maximum of 292 units (from the original 400 units) for year round use in the Township of Puslinch as follows:

PROPOSED WORKS

Modifications to the existing wastewater treatment plant as follows:

- · upgrades to primary clarifier as follows:
 - installation of a partition wall separating the chamber in two compartments; an inlet and sludge storage compartment having a working volume of 73m³ and a primary effluent compartment having a working volume of 23m³.
 - an influent baffle plate at the tank inlet.
 - an outlet weir box and baffle plate at the tank outlet.
 - sludge recirculation piping to the inlet chamber and sludge removal piping.

- modifications to the inlet of the denitrification tank to allow for crossover between trains for redundancy and option to operate on one (1) RBC train and two (2) tertiary treatment trains.
- one (1) new effluent pump and discharge piping to be located in the effluent pump chamber to recirculate treated effluent back to the inlet of the primary clarifier.
- a 3.5m x 4.12m chemical storage building housing the following:
 - a 900 L capacity chemical storage tank to provide a carbon source and three (3) chemical metering pumps (one (1) spare), all located within secondary containment facilities.
 - a 2,300 L capacity bulk chemical storage tank for phosphorus removal and three (3) chemical metering pumps (one (1) spare), all located within secondary containment facilities.
 - an eyewash/shower system.

all other controls, electrical equipment, instrumentation, pumps, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

all in accordance with the documents listed in Schedule 'B'.

EXISTING WORKS

Sanitary Collection System

All existing and proposed sewage collection system gravity mains, forcemains, and services as generally indicated on Drawing 1 - Site Servicing Plan dated February 25, 2008 as submitted by Stantec Consulting Ltd.

Pumping Stations and Forcemain

- 1. Sewage Pumping Station PS-1 (UTM NAD83: Zone 17, 569553 mE, 4814393 mN)
 - One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located at the intersection of Ash Avenue, Cross Street and Pine Street servicing approximately 77 units), equipped with two (2) submersible pumps, each pump rated at 1.8 L/s at 28.98 m TDH and having a working volume of 0.405 m³, and a forcemain, approx. 29 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-2 and PS-3, where the common forcemain continues approximately 621 m to discharge directly to the Wastewater Treatment Plant (WWTP) described below.
- 2. Sewage Pumping Station PS-2 (UTM NAD83: Zone 17, 569203 mE, 4814540 mN)
 - One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located on Jasper Heights Drive approximately 110 m northeast of Garden Parkway servicing approximately 132 units), equipped with two (2) submersible pumps, each pump rated at 2.225 L/s at 33.82 m TDH and having a working volume of 0.501 m³, and a forcemain, approx. 224 m long, extending from the pump station before discharging into the common 75

mm forcemain from PS-3, where the common forcemain continues approximately 215 m to the junction with PS-1 and a further 621 m to discharge directly to the Wastewater Treatment Plant (WWTP) described below.

3. Sewage Pumping Station PS-3 (UTM NAD83: Zone 17, 569349 mE, 4814559 mN)

One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located on Lot 62 Hemlock, servicing approximately 42 units), equipped with two (2) submersible pumps, each pump rated at 1.075 L/s at 32.2 m TDH and having a working volume of 0.242 m³, and a forcemain, approx. 229 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-3, where the common forcemain continues approximately 215 m to the junction with PS-1 and a further 621 m to discharge directly to the Wastewater Treatment Plant (WWTP) described below.

4. Sewage Pumping Station PS-4 (UTM NAD83: Zone 17, 569491 mE, 4814533 mN)

One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located adjacent and on the north corner of Lot 227 on Cedarbush Crescent, servicing approximately 53 units and a community centre), equipped with two (2) submersible pumps, each pump rated at 1.35 L/s at 7.27 m TDH and having a working volume of 0.304 m³, and a forcemain, approx. 358 m long, extending from the pump station before discharging directly to the Wastewater Treatment Plant (WWTP) described below.

5. Sewage Pumping Station PS-5 (UTM NAD83: Zone 17, 569720 mE, 4814755 mN)

One (1) 1,200 mm diameter precast concrete duplex sewage pumping station (located at the intersection of Water Street and Basswood to service Phase 2 and 3 development, and will ultimately service approximately 79 units), equipped with two (2) submersible pumps, each pump rated at 2.55 L/s at 14.75 m TDH and having a working volume of 0.469 m³, and a forcemain, approx. 207 m long, discharging into the 75 mm diameter forcemain from PS-4, where the common forcemain continues for approx 29 m before discharging directly to the Wastewater Treatment Plant (WWTP) described below.

Wastewater Treatment Plant

A sewage treatment plant (with dual trains operating in parallel) to be located within a building housing a primary settlement tank, rotating biological contactors, intermediate clarifier, a denitrification tank and final clarifiers and effluent pump chamber as follows:

- a concrete common primary settlement tank with cover, approx. 8.1m wide x 8.5m long x 1.73m liquid depth discharging (via an outlet pipe to each treatment train) to the rotating biological contactors, complete with gear motor and drive mechanism;
- two (2) rotating biological contactors (RBCs) with 2.35m diameter rotor, each equipped with low profile fixed baffles and establish four (4) zones per rotor, and providing approx. 4,179

m² of bio-support media area;

- two (2) hopper bottom 3m x 3.6m intermediate clarifiers per treatment train, complete with inlet and outlet weir, sludge and scum transfer equipment and pumping systems;
- two (2) denitrification tanks, approx. 5.06m x 3.6m, each consisting with 4,704m² of submerged rigid media, complete with an adjustable flow distribution box;
- one (1) 900 L capacity chemical tank and chemical metering pump capable of feeding a carbon source to the denitrification tanks, complete with spill containment facilities;
- chemical feed system comprising of one (1) 2,300 L capacity polyethylene chemical storage tank and metering pump (with standby pump) capable of feeding approx. 1.5 L/hr of alum into the last stage of the rotating biological contactor rotor, complete with spill containment facilities;
- two (2) hopper bottom 3m x 3.6m final clarifiers per treatment train, complete with inlet and outlet weirs and sludge transfer equipment and pumping systems;
- a 50,000 L capacity effluent pump chamber equipped with five (5) submersible pumps (with one additional standby pump), each rated at 2.7 L/s at 11m TDH (max.), to discharge treated effluent via a splitter valve and five (5) 75mm diameter forcemains, one forcemain to each absorption cell of the subsurface disposal system.

Subsurface Disposal System

A subsurface disposal system comprising of five (5) shallow buried trench absorption cells, each cell comprising of six (6) zones with eight (8) laterals (each lateral located within a trench 18m long and 0.6m wide, with a hollow inverted semi-circular chamber housing a 25mm PVC pressurized pipe with 3.2mm holes spaced at 1m c/c) per zone, for a total of approx. 864m of piping per cell (total of approx. 4,320m of piping), and distribution valve assembly and manifold together with a relocation area (alternate subsurface disposal area) and the use of the existing leaching bed areas as contingencies for a period of three (3) years of operation of the sewage works.

all in accordance with the final plans and specifications prepared by P. J. Hannah Equipment Sales Corp. and Stantec Consulting Ltd., Consulting Engineers.

For the purpose of this environmental compliance approval, the following definitions apply:

- 1. "Annual Average Concentration" means the arithmetic mean of the Monthly Average Concentrations of a contaminant in the effluent calculated for any particular calendar year;
- 2. "Approval" means this entire document and any Schedules attached to it, and the application;
- 3. "Average Daily Flow" means the cumulative total sewage flow to the sewage works during a

- calendar year divided by the number of days during which sewage was flowing to the sewage works that year;
- 4. "BOD5" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;
- 5. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 6. "Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;
- 7. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
- 8. "District Manager" means the District Manager of the Guelph District Office:
- 9. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 10. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;
- 11. "Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;
- 12. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
- 13. "Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works";
- 14. "Monthly Average Concentration" means the arithmetic mean of all Daily Concentrations of a contaminant in the effluent sampled or measured, or both, during a calendar month;
- 15. "Owner" means Wellington Common Elements Condominium Corporation No.214 and its successors and assignees;
- "OWRA" means the <u>Ontario Water Resources Act</u>, R.S.O. 1990, c. O.40, as amended; "Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;
- 17. "Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;
- 18. "Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;

- 19. "Rated Capacity" means the Average Daily Flow for which the Works are approved to handle:
- 20. "Regional Director" means the Regional Director of the West Central Region of the Ministry;
- 21. "Substantial Completion" has the same meaning as "substantial performance" in the *Construction Lien Act*; and
- 22. "Works" means the sewage works described in the Owner's application, and this Approval, and includes Proposed Works, Previous Works, and modifications made under Limited Operational Flexibility.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

- 1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 2. Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.
- 3. Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
- 4. Where there is a conflict between the documents listed in the Schedule B submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- 5. The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

EXPIRY OF APPROVAL

This Approval will cease to apply to those parts of the Proposed Works which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

- 1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of Owner;
 - b. change of address of the Owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the <u>Business Names Act</u>, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager;
- 2. In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

4. CONSTRUCTION

- 1. The Owner shall ensure that the construction of the works is supervised by a licensed installer or a Professional Engineer, as defined in the <u>Professional Engineers Act</u>.
- 2. Upon construction of the works, the Owner shall prepare a statement, certified by a licensed installer or a Professional Engineer that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff and staff of the local municipality.

5. MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the Works, carry out the following

monitoring program:

- 1. All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- 2. Samples of **treated effluent** (ahead of subsurface disposal system) shall be collected at the effluent pump chamber and analyzed for at least the parameters at the indicated **minimum** frequencies (**Table 1 Treated Effluent Sampling, Schedule C**).
- 3. Samples of **groundwater** shall be collected from the nine (9) monitoring wells MW-1, MW-2, MW-4 to MW-10 inclusive, located upgradient of the subsurface disposal beds, immediately downgradient of the subsurface disposal beds and at the property boundary in the downgradient flow path from the subsurface disposal beds, and two (2) additional monitoring wells to intercept the plume close to the water's edge, and analyzed for at least the parameters at the indicated **minimum** frequencies (**Table 2 Groundwater Sampling**, **Schedule C**). In addition, groundwater depths for each of the monitoring wells shall also be recorded to assess groundwater elevation and flow paths through the site.
- 4. Samples of surface water shall be collected at the following five (5) locations and analyzed for at least the parameters at the indicated minimum frequencies (Table 3 Surface Water Sampling, Schedule C).

Surface water monitoring locations

- upgradient background (SW1)
- one location within the main pond (SW3)
- outlet from the main pond (SW4)
- outlet from the property (SW6)
- upgradient tributaries (SW5, located at County Road No. 34, approximately 50m upstream of the confluence of Mill Creek with the downstream location of the Mini Lakes outlet).
- 5. The monitoring outlined pursuant to subsections (3) and (4) shall be undertaken for a period of at least three (3) years following the start up of the Proposed Works.
- 6. Prior to the startup of the Works, background groundwater quality must be established by collecting groundwater samples and having them analyzed for the parameters outlined in Table 2.
- 7. The Owner shall measure and record the daily volume of effluent being discharged to subsurface disposal system.
- 8. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- a. the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;
- the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
- c. the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.
- 9. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.
- 10. Following completion of two (2) full years of operation of the sewage system, if the quality of effluent discharged to the subsurface disposal system satisfies the objectives stipulated in Condition 6 as evidenced by the results of the monitoring program required by this condition, the monitoring requirements may be revised by the Director is he/she is of the opinion that such a reduction is appropriate in the circumstances.

6. EFFLUENT LIMITS

- The Owner shall operate and maintain the Works such that the concentrations of the materials named as effluent parameters are not exceeded in the effluent from the Works (Table 4 - Effluent Limits, Schedule D).
- 2. For the purposes of determining compliance with and enforcing subsection (1):
 - a. Non-compliance with respect to the effluent parameters is deemed to have occurred when the annual average concentration of any of the effluent parameters (treated effluent discharge to the subsurface disposal system) named in subsection (1) above, based on all grab samples taken in accordance with Condition 5(2) above, supplemented by spot sampling by Ministry staff as necessary, during any calendar year, exceeds its corresponding stipulated effluent concentration indicated in Table 4.
- 3. Paragraph (a) of subsection shall apply upon the issuance of this Approval.
- 4. The effluent limit set out in subsection (1) shall apply upon the issuance of this Approval.

5. Only those monitoring results collected during the corresponding time period shall be used in calculating the Annual Average Concentration.

7. OPERATIONS AND MAINTENANCE

- 1. The Owner shall prepare an operations manual within six (6) months of the introduction of sewage to the Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for routine operation of the Works; and
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary.
- 2. (2) The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- 3. (3) The Owner shall prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings within one (1) year of Substantial Completion of the Works. The maintenance agreement and drawings must be retained at the site and kept current.
- 4. (4) The Owner shall employ for the overall operation of the Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.

8. REPORTING

- 1. One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date of the Proposed Works.
- 2. The Owner shall prepare, and submit upon request, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - a. a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 6, including an overview of the success and adequacy of the Works;
 - b. a tabulation of the daily volumes of effluent disposed through the subsurface disposal system during the reporting period;

- c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- d. a description of any operating problems encountered and corrective actions taken.
- e. a copy of all Notice of Modifications submitted to the District Manager as a result of Schedule A, Section 1, with a status report on the implementation of each modification;
- f. a report summarizing all modifications completed as a result of Schedule A, Section 3;
- g. any other information the District Manager requires from time to time.

9. LIMITED OPERATIONAL FLEXIBILITY

- The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works", included under Schedule A of this Approval, as amended.
- Sewage works under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.
- 3. The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.
- 4. For greater certainty, the following are **not** permitted as part of Limited Operational Flexibility:
 - a. Modifications to the Works that result in an increase of the approved Rated Capacity of the Works;
 - b. Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
 - Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;
 - d. Modifications to the Works approved under s.9 of the EPA, and
 - e. Modifications to the Works pursuant to an order issued by the Ministry.

- 5. Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
- 6. If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.
- 7. For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the Environmental Protection Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act and Greenbelt Act.
- 8. At least thirty (30) days prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the District Manager.
- 9. The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of thirty (30) days have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

SCHEDULE 'A'

Limited Operational Flexibility Criteria for Modifications to Industrial Sewage Works

1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

1.1 Sewage Pumping Stations

- a. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.
- b. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200mm.

1.2 Sewage Treatment Process

- a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
- b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
- c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.
- d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the approved Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.
- e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that

the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity purposes, the following equipment can be considered under this provision: pumps, screens, grit separators, blowers, aeration equipment, sludge thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

1.3 Sanitary Sewers

a. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200mm.

1.4 Pilot Systems

- a. Installation of pilot systems for new or existing technologies provided that:
 - i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
 - ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
 - iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager three months after completion of the pilot project.
- 2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
- 3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.
- 4. The modifications noted in section (3) above are **not** required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.



Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

MINOR UNCCUCA CARDA CARDA	r and issuence data and retire	(ECA) with i	Limited Operational Flexibility at with '01' and consecutive numbers thereother
ECA Number	Issuance Dale (mm/ddyy)		Notice number (if applicable)
ECA Olimer	I	Municipality	
Part 2: Description	of the modifications as	part of the L	imited Operational Flexibility
type/model, material, process 2. Confirmation that the anticip 3. List of updated versions of, s	s name, etc.) ated environmental effects are negligit or amendments to, all relevant technic	ble. al documents that a	ewage work component, location, size, equipments affected by the modifications as applicable, i.s dealgn brief, drawings, emergency plan, etc.)
Part 3 - Declaration	by Professional Engine		
rait o Decidiatio	i by Professional Engin	eer	
I hereby declare that I have ve 1. Has been prepared or revier 2. Has been designed in accou- 3. Has been designed consists practices, and demonstration	infied the scope and technical aspects wed by a Professional Engineer who is dance with the Limited Operational File and with Ministry's Design Guidelines, and ongoing compliance with a 53 of the	of this modification is licensed to practice scribility as described athering to engineer Ontario Water Rese	e in the Province of Ontario; I in the ECA; ing standards, industry's best management ourses Act; and other expressible recufations
I hereby declare that I have ver 1. Has been prepared or revier 2. Has been designed in accordance 3. Has been designed consiste practices, and demonstration I hereby declare that to the beau	infied the scope and technical aspects wed by a Professional Engineer who is dance with the Limited Operational File and with Ministry's Design Guidelines, and ongoing compliance with a 53 of the	of this modification is licensed to practice scribility as described athering to engineer Ontario Water Rese	e in the Province of Onlario; f in the ECA; ting standards, industry's hest management.
I hereby declare that I have ve 1. Has been prepared or revie 2. Has been designed in accordance 3. Has been designed consistent precises, and demonstration I hereby declare that to the beautiful of the be	infied the scope and technical aspects wed by a Professional Engineer who is dance with the Limited Operational File and with Ministry's Design Guidelines, and ongoing compliance with a 53 of the	of this modification is licensed to practice scribility as described athering to engineer Ontario Water Rese	e in the Province of Ontario; I in the EGA; ting standards, industry's best management ources Ad; and other appropriate regulations. contained in this form is complete and accurate
I hereby declare that I have verified the hear prepared or revier 2. Has been designed in accordance to the been designed consists precises, and demonstration I hereby declare that to the beautiful to the beautiful the properties of the beautiful the bea	infied the scope and technical aspects wed by a Professional Engineer who is dance with the Limited Operational File and with Ministry's Design Guidelines, and ongoing compliance with a 53 of the	of this modification is licensed to practice scribility as described athering to engineer Ontario Water Rese	e in the Province of Ontario; I in the ECA; ting standards, industry's best management ources Act; and other appropriate regulations. contained in this form is complete and accurate PEO License Number
I hereby declare that I have verified the seen prepared or review. I. Has been designed in accordance to the seen designed consists precises, and demonstration. I hereby declare that to the best Name (Print). Signature	infied the scope and technical aspects and by a Professional Engineer who is dance with the Limited Operational File and with Ministry's Design Guidelines, a gongoing compliance with a 53 of the st of my knowledge, information and be	of this modification is licensed to practice scribility as described athering to engineer Ontario Water Rese	e in the Province of Ontario; I in the ECA; ting standards, industry's best management ources Act; and other appropriate regulations. contained in this form is complete and accurate PEO License Number
I hereby declare that I have verified to the best prepared or revier 2. Has been designed in accord 3. Has been designed consists precises, and demonstration I hereby declare that to the best best precises and demonstration I hereby declare that to the best best precises and demonstration I hereby declare that to the best best precise of the consists of the sevent process to the sevent precise of the sevent precise to the sevent precise of the sevent precise	infied the scope and technical aspects and by a Professional Engineer who is dence with the Limited Operational File and with Ministry's Design Guidelines, a gongoing compliance with a 53 of the st of my knowledge, information and be not of the complete this Declaration; modification; and cape works are proposed in accordance opticable requirements of the Engineer.	of this modification I licensed to practic exititity as describe idhering to engineer Ontario Water Reac fiel the information	e in the Province of Ontario; I in the ECA; In the ECA
I hereby declare that I have ver 1. Has been prepared or revier 2. Has been designed in accord 3. Has been designed consists precises, and demonstration I hereby declare that to the beautiful thereby declare that to the beautiful thereby declare that to the beautiful thereby declare that: 1. I am authorized by the Owner 2. The Owner consents to the sevent. The Owner has suffilled all at the owner has suffilled at	infied the scope and technical aspects and by a Professional Engineer who is dance with the Limited Operational File and with Ministry's Design Guidelines, a gongoing compliance with a 53 of the st of my knowledge, information and be notification; and vage works are proposed in accordance opticable requirements of the Emironal tof my knowledge, information and be	of this modification I licensed to practic exititity as describe idhering to engineer Ontario Water Reac fiel the information	on the Province of Ontario; in the ECA; in the ECA; in the ECA; ing standards, industry's best management burcus Act; and other appropriate regulations. contained in this form is complete and accurate PEO License Number Date (mm/dd/yy) Operational Flexibility as described in the ECA. Act. contained in this form is complete and accurate

SCHEDULE 'B'

Environmental Compliance Approval (ECA) supporting documents:

1. Application for Environmental Compliance Approval (ECA) dated June 7, 2012 signed by Tom Boyd, President, Mini Lakes Residents Association, and supporting documents prepared by Stantec Consulting Ltd., Consulting Engineers.

SCHEDULE 'C'

Table 1- Treated Effluent Sampling

Parameter	Type of Sample	Minimum Frequency
CBOD5	grab	monthly
Total Suspended Solids	grab	monthly
Total Phosphorus	grab	monthly
Total Ammonia Nitrogen	grab	monthly
Nitrate Nitrogen	grab	monthly
Nitrite Nitrogen	grab	monthly
Total Kjeldahl Nitrogen	grab	monthly
E. coli	grab	monthly
Dissolved Oxygen	grab	monthly
рН	grab	monthly

Table 2- Groundwater Sampling

Parameter	Type of Sample	Minimum Frequency
CBOD5	grab	quarterly
Total Suspended Solids	grab	quarterly
Total Phosphorus	grab	quarterly
Total Ammonia Nitrogen	grab	quarterly
Nitrate Nitrogen	grab	quarterly
Nitrite Nitrogen	grab	quarterly
Total Kjeldahl Nitrogen	grab	quarterly
E. coli	grab	quarterly
Dissolved Organic Carbon	grab	quarterly

Table 3- Surface Water Sampling

Parameter	Parameter Type of Sample			
Total Phosphorus	grab	quarterly		
Total Ammonia Nitrogen	grab	quarterly		
Nitrate Nitrogen	grab	quarterly		
Nitrite Nitrogen	grab	quarterly		
Total Kjeldahl Nitrogen	grab	quarterly		
E. coli	grab	quarterly		

SCHEDULE 'D'

Table 4- Effluent Limits

Effluent Parameters	Annual Average Concentration
CBOD5	20 mg/L
Total Suspended Solids	20 mg/L
Nitrate Nitrogen	8 mg/L
Total Phosphorus	1 mg/L

The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
- 2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
- 3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 4. Condition 4 is included to ensure that the works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
- 5. Condition 5 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval.
- 6. Condition 6 is imposed to ensure that the effluent discharged from the Works to the subsurface disposal system meets the Ministry's effluent quality requirements thus minimizing environmental impact.
- 7. Condition 7 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such a information is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.
- 8. Condition 8 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

Condition 9 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 2391-9KCJUS issued on June 1, 2016.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment and Climate Change 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 18th day of September, 2017



Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

JA/

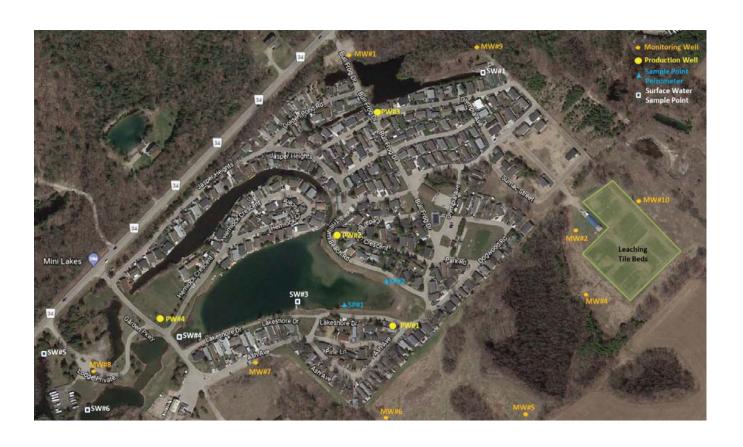
c: District Manager, MOECC Guelph n/a, Wellington Common Elements Condominium Corporation No.214 c/o MF Property Management Limited



APPENDIX B

Groundwater Monitoring Wells and Surface Water Sampling Locations







APPENDIX C

Laboratory Certificates of Analysis for Wastewater Treatment Plant



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

14-January-2021

Date Rec.: 07 January 2021 LR Report: CA13144-JAN21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier Raw Sewage
Sample Date & Time					06-Jan-21 13:30	06-Jan-21 13:45
Temperature Upon Receipt [°C]					3.0	3.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	07-Jan-21	18:23	12-Jan-21	15:46	18	46
Dissolved Oxygen [mg/L]	07-Jan-21	13:38	08-Jan-21	07:47	8.9	
Total Suspended Solids [mg/L]	09-Jan-21	12:35	12-Jan-21	12:41	49	103
Alkalinity [mg/L as CaCO3]	08-Jan-21	08:06	08-Jan-21	14:38		228
pH [No unit]	12-Jan-21	14:49	13-Jan-21	09:56	7.21	7.20
Phosphorus (total) [mg/L]	08-Jan-21	15:10	11-Jan-21	10:43	0.83	2.39
Total Kjeldahl Nitrogen [as N mg/L]	07-Jan-21	15:52	08-Jan-21	15:55	3.6	15.2
Ammonia+Ammonium (N) [as N mg/L]	07-Jan-21	15:01	08-Jan-21	13:14	< 0.1	
Nitrite (as N) [mg/L]	12-Jan-21	07:12	13-Jan-21	20:06	2.75	
Nitrate (as N) [mg/L]	12-Jan-21	07:12	13-Jan-21	20:06	14.4	
Nitrate + Nitrite (as N) [mg/L]	12-Jan-21	07:12	13-Jan-21	20:06	17.2	
E. Coli [cfu/100mL]	07-Jan-21	16:09	11-Jan-21	10:53	10200	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

14-January-2021

Date Rec.: 07 January 2021 LR Report: CA13144-JAN21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier Raw Sewage
Sample Date & Time					06-Jan-21 13:30	06-Jan-21 13:45
Temperature Upon Receipt [°C]					3.0	3.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	07-Jan-21	18:23	12-Jan-21	15:46	18	46
Dissolved Oxygen [mg/L]	07-Jan-21	13:38	08-Jan-21	07:47	8.9	
Total Suspended Solids [mg/L]	09-Jan-21	12:35	12-Jan-21	12:41	49	103
Alkalinity [mg/L as CaCO3]	08-Jan-21	08:06	08-Jan-21	14:38		228
pH [No unit]	12-Jan-21	14:49	13-Jan-21	09:56	7.21	7.20
Phosphorus (total) [mg/L]	08-Jan-21	15:10	11-Jan-21	10:43	0.83	2.39
Total Kjeldahl Nitrogen [as N mg/L]	07-Jan-21	15:52	08-Jan-21	15:55	3.6	15.2
Ammonia+Ammonium (N) [as N mg/L]	07-Jan-21	15:01	08-Jan-21	13:14	< 0.1	
Nitrite (as N) [mg/L]	12-Jan-21	07:12	13-Jan-21	20:06	2.75	
Nitrate (as N) [mg/L]	12-Jan-21	07:12	13-Jan-21	20:06	14.4	
Nitrate + Nitrite (as N) [mg/L]	12-Jan-21	07:12	13-Jan-21	20:06	17.2	
E. Coli [cfu/100mL]	07-Jan-21	16:09	11-Jan-21	10:53	10200	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

26-January-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 21 January 2021 LR Report: CA13480-JAN21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					20-Jan-21 12:45	20-Jan-21 12:30
Temperature Upon Receipt [°C]					4.0	4.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	21-Jan-21	16:41	26-Jan-21	12:13	34	121
Dissolved Oxygen [mg/L]	21-Jan-21	13:18	22-Jan-21	09:28	8.7	
Total Suspended Solids [mg/L]	22-Jan-21	11:34	25-Jan-21	15:12	42	109
Alkalinity [mg/L as CaCO3]	21-Jan-21	15:00	22-Jan-21	10:23		313
pH [No unit]	21-Jan-21	15:37	22-Jan-21	10:23	7.37	7.38
Phosphorus (total) [mg/L]	21-Jan-21	16:45	22-Jan-21	11:40	1.20	3.18
Total Kjeldahl Nitrogen [as N mg/L]	21-Jan-21	18:22	25-Jan-21	11:19	5.5	26.8
Ammonia+Ammonium (N) [as N mg/L]	21-Jan-21	17:00	22-Jan-21	13:35	3.8	
Nitrite (as N) [mg/L]	23-Jan-21	00:19	25-Jan-21	18:57	2.38	
Nitrate (as N) [mg/L]	23-Jan-21	00:19	25-Jan-21	18:57	11.0	
Nitrate + Nitrite (as N) [mg/L]	23-Jan-21	00:19	25-Jan-21	18:57	13.4	
E. Coli [cfu/100mL]	21-Jan-21	15:55	24-Jan-21	11:22	80000	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

12-February-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 04 February 2021 LR Report: CA12691-FEB21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					03-Feb-21 14:20	03-Feb-21 14:40
Temperature Upon Receipt [°C]					7.0	7.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	04-Feb-21	17:23	09-Feb-21	15:54	22	72
Dissolved Oxygen [mg/L]	04-Feb-21	14:17	05-Feb-21	10:11	8.9	
Total Suspended Solids [mg/L]	08-Feb-21	13:38	11-Feb-21	16:18	38	112
Alkalinity [mg/L as CaCO3]	04-Feb-21	15:13	09-Feb-21	08:11		274
pH [No unit]	04-Feb-21	15:13	09-Feb-21	08:11	7.74	7.66
Phosphorus (total) [mg/L]	04-Feb-21	17:06	08-Feb-21	11:18	0.69	3.21
Total Kjeldahl Nitrogen [as N mg/L]	04-Feb-21	17:33	08-Feb-21	11:48	4.7	23.6
Ammonia+Ammonium (N) [as N mg/L]	04-Feb-21	16:43	05-Feb-21	14:09	1.2	
Nitrite (as N) [mg/L]	09-Feb-21	13:54	11-Feb-21	19:11	3.49	
Nitrate (as N) [mg/L]	09-Feb-21	13:54	11-Feb-21	19:11	9.98	
Nitrate + Nitrite (as N) [mg/L]	09-Feb-21	13:54	11-Feb-21	19:11	13.5	
E. Coli [cfu/100mL]	04-Feb-21	16:29	08-Feb-21	11:01	17500	

Patti Stark

Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

24-February-2021

Date Rec.: 18 February 2021 LR Report: CA13558-FEB21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier Raw Sewage
Sample Date & Time					17-Feb-21 14:10	17-Feb-21 13:50
Temperature Upon Receipt [°C]					7.0	7.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	18-Feb-21	17:56	23-Feb-21	16:32	15	86
Dissolved Oxygen [mg/L]	18-Feb-21	12:48	19-Feb-21	08:07	9.6	
Total Suspended Solids [mg/L]	22-Feb-21	07:43	23-Feb-21	22:02	29	65
Alkalinity [mg/L as CaCO3]	19-Feb-21	08:27	23-Feb-21	11:01		297
pH [No unit]	19-Feb-21	10:41	23-Feb-21	10:30	7.40	7.60
Phosphorus (total) [mg/L]	18-Feb-21	16:54	19-Feb-21	13:03	0.43	2.37
Total Kjeldahl Nitrogen [as N mg/L]	19-Feb-21	09:01	23-Feb-21	08:29	2.2	18.4
Ammonia+Ammonium (N) [as N mg/L]	18-Feb-21	16:00	19-Feb-21	10:28	1.3	
Nitrite (as N) [mg/L]	23-Feb-21	00:05	24-Feb-21	15:27	1.42	
Nitrate (as N) [mg/L]	23-Feb-21	00:05	24-Feb-21	15:27	11.7	
Nitrate + Nitrite (as N) [mg/L]	23-Feb-21	00:05	24-Feb-21	15:27	13.1	
E. Coli [cfu/100mL]	18-Feb-21	16:37	22-Feb-21	11:47	72000	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

11-March-2021

Date Rec.: 03 March 2021 LR Report: CA14105-MAR21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier Raw Sewage (Grab)
Sample Date & Time					03-Mar-21 13:25	03-Mar-21 13:50
Temperature Upon Receipt [°C]					7.0	7.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	04-Mar-21	17:57	09-Mar-21	15:23	26	86
Dissolved Oxygen [mg/L]	04-Mar-21	09:58	04-Mar-21	12:29	8.5	
Total Suspended Solids [mg/L]	05-Mar-21	09:41	09-Mar-21	10:56	29	367
Alkalinity [mg/L as CaCO3]	05-Mar-21	07:58	08-Mar-21	18:15		257
pH [No unit]	05-Mar-21	12:57	09-Mar-21	11:22	7.26	7.20
Phosphorus (total) [mg/L]	04-Mar-21	15:41	05-Mar-21	10:11	0.31	2.46
Total Kjeldahl Nitrogen [as N mg/L]	04-Mar-21	16:00	05-Mar-21	09:52	2.2	22.4
Total Inorganic Nitrogen [mg/L]	04-Mar-21	16:00	10-Mar-21	15:55	10.4	15.7
Ammonia+Ammonium (N) [as N mg/L]	04-Mar-21	16:22	05-Mar-21	10:40	8.0	15.3
Nitrite (as N) [mg/L]	09-Mar-21	12:31	10-Mar-21	15:53	1.06	0.32
Nitrate (as N) [mg/L]	09-Mar-21	12:31	10-Mar-21	15:53	8.54	< 0.06
Nitrate + Nitrite (as N) [mg/L]	09-Mar-21	12:31	10-Mar-21	15:53	9.60	0.32
E. Coli [cfu/100mL]	04-Mar-21	09:50	05-Mar-21	13:26	100000	

Carrie Greenlaw Project Specialist,

** Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (QUARTERLY - Page 1 of 3)

Waterworks/Project # 1418S | C of C L

CSO - Combir	* Station Acro. digestion, Bsd	Sampler Name:	11-	Well	Well	Well	Well	Well	Well	Well	Well	VVGII	Station Acro	nym		Email:	Fax:	Talant	Address							
ed Sewer O	nym: Cell - C - Blosolids s	ame:	11	Wello	Wel9	Wel8	Wel7	Wel6	Wel5	Wel4	Wel2	Wei1	Number (Short Name)				one:		S:							-
PTNA	ell Contents, Dis - Disi		A Guironnoise	-	- Monitoring V	- Monitoring V	- Monitoring \	- Monitoring				dirvine@ocwa.com	519-321-9474	L9V 3K5	136 Main St. E	Data Transfer	Requested	Identification o	Attached Parameter List	Org. #	Facility Name					
SSO-Sanitary Server Overflow 1 TWI # 606843 722384	nfection, Down - Downstream, solids pri super, Bss - Blosoik	SALLY S	WO (WW-10)		Monitoring Well #9 (MW-9)	Monitoring Well #8 (MW-8)	Monitoring Well #7(MW-7)	Monitoring Well #6 (MW-6)	Monitoring Well #5 (MW-5)	Monitoring Well #4 (MW-4)	Monitoring Well #2 (MW-2)	Monitoring Well #1 (MW-1)	Sample Location Name	Sample	Complete				136 Main St. E		Requested Turnaround Time:	f Regulation under which	meter List	1418	ne Mini Lakes WWTP	14100
CSO - Combined Sewer Overflow, SSO - Sanitary Server Overflow The Color State Activated Studge, VMs - Waste Activated Studge, Indiv. Industrial Wastewater, PSm - Pump Stn, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Activater, PSs - Return Activated Studge, SSR - Secondary Treatment Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Lcht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Sept - Septage, Scht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Scht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Presiment, Add - Activated Studge, SSR - Secondary Treatment/SSRs, Scht - Leschate, PTr - Primary Treatment, Rev - Re-aerabon, Tert - Tartlag Pr	Eff - Final Effluent, PrBy - Primary is sec super, Bala - Blassilide students	ASSAN	1059	1 - 6	0	13/00	307	1	1129	020	1040	1315	Date & Time Collected		Woorewoodsenand	519-925-0322	519-321-9	Shelburne, ON	Data Transfer Contact: Don Irvine			Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Require I lador Associated in the sample (s) fall: No Requirement to Report Sample Require I lador Associated in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement to Report Sample Requirement in the sample (s) fall: No Requirement in the sample (s) fall	No		ALMM S	0
Wastewater	Bypass, Raw		w	V	دن د	1	1	V	3	,3 1	u	w	# of Bottles	+	W557	322	474	NON	sfer Conta			uirement	Yes			
, PStn - Pum	Sampler Signature: w - Raw Sewage, ScBy-												Field Total (mg/L)	1			-		act: Don In	Req'd		to Report	on.	•		
soil quality Stn, Sept	gnature: ge, ScBy-S				-	-	_						Field Free (mg/l	CI Residua					ine			ample Re				
Septage, L	econdarys	+	_	_	-	-	-	_	1				Combined (mg/L)							24-48 h						
cht - Lea	Bypass, U	1	×	×	×	×	×	×	-	+	×	×	CBOD5	П	apwest	(519) 925-0322	L9V 3K5	136 M	Invoice To:		Jan Sul			Labo	0	2
Floatation chate, PT	- Upstre		×	×	×	×	×	×	+	+	+	×	Fotal Suspender Solids Total	11	apwesthighlands	25-193	G	136 Main St. E Shelburne, ON	e To: Ont		Vegue			Laboratory Section MAR	C of C LIMS No:	
r-Primar	am Well		×	×	×	×	×	×	+	+	_	7	Phosphorous Total Ammonia		ds@oc	0		26/13/2005	1311		uon for	Tem	,	Section	SNO	
imery Tre y Treatm	Months		×	×	×	×	×	×	×	>	<		Nitrogen (TAN) Nitrate-Nitrogen		фосма.сот				lean W	J	Waste	peratur	ı	MAR	3	
ent, ReA	No. Well	11	×	×	×	×	×	×	×	×	()	×	Nitrite-Nitrogen						ario Clean Water Agency	×	water T	Temperature Upon Receipt			177	1
Aer-Au 311, PrEf r-Re-ae		\parallel	×	×	×	×	×	×	×	×	;	×	TKN	Paramaters	-				Jency	5-7d	reatme	Recei		2021	1	
eration, E Primary ration, Te Revis		╟	×	×	×	×	×	×	×	×	;	< 0	Dissolved Organic Carbon								1	_	- I -	21	5	-
on, Brs - Blosomary Efficient, In, Tert - Tertian, Revision # 6		╟	+	×	×	×	×	×	×	×	>	<	E.Coli			Ш		1				X	_		52	
pilds-raw shu RAS - Retu ap Treatmen			1				-	XH		-	+	+						1		7		1	Time Rec'd:	S		The second second
idge, Bh - B im Activated nt, Alig - Acti			W	V.	8	8	>	<	<	-				rames.	705-65	705-652-	Lakefi	185 C		7-10d		റ്	c'd:	ample cor		
Biosolids thickening, Epd - Biosolid Studge, SBR - Secondary Treat of Studge, SBR - Secondary Treat title, Teby-Tertiary Bypags, Hate			2.83	Well Depth = 0.83 m	Well Depth = 1.73 m	Well Depth = 1.13m	Well Depth = 1.99 m	Well Depth = 2.0 m	Well Depth = 2° 18 m	Well Depth = 2:38 m	Well Depth = 2.10m	,	Gimnella	Commontation of the control of the c	705-652-6365	52-2000	Lakefield, ON	185 Concession St.		Other Specify:			Initials	Sample condition upon receipt		
solids primary reatment/SBRs, SCEI syd - Hojding Tenk Revised: 2017.11.2		1	es s					Ze Yes	š š	Z ž	\$ 8 0	-	pload to MOE					earch Lt					als N			ס
S. See		Š	Yes V	Yes [✓]			The second name is not	-	√es V	₹ § □<	No S		pload to OCWA										3		90.00	Page 1 of 3

*Station Acronym: Cell Contents, Dis - Distribution, Down - Downstream, Eff - Final Efficient, PBy - Primary Bypass, Raw - Rew Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Era - Biosolids-raw studge, Bin - Biosolids studge and Biosolids studge quality Bsoq - Biosolids soid quality, DAF - Dissolved Air Floatedon, Cell - Primary Treatment/Crit, PrEft - Primary Efficient, CAS - Return Activated Studge, Sun - Secondary From - Primary Treatment/Crit, PrEft - Primary Efficient, CAS - Return Activated Studge, Sun - Secondary Treatment/Crit, Preft - Primary Treatment/Crit, Preft - Primary Efficient, CAS - Return Activated Studge, Sun - Secondary Treatment/Sun, Sept - Septage, Lott - Leschate, PTr - Primary Treatment, Rev - Re-earation, Ten - Tertlary Treatment, Afto - Action, Teby - Tertlary Bypass, Hold - Holding Yank Sampler Name: W_e∥ Telephone: Address: Well Station Acronym We12 We11 Number (Short Name) 519-321-9474 519-925-0322 L9V 3K5 Shelburne, ON 136 Main St. E Data Transfer Contact: Don invine Org. # Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under AnyRegulation for Wastewater Treatment ttached Parameter List Quote # Facility Name Waterworks/Project # Monitoring Well #12 (MW-12) Monitoring Well #11 (MW-11) Requested Turnaround Time: Sample Location Name 1418 Mini Lakes WWTP Sample きまどろ 1418S 2/03/10 Aus Gen 125 23 Date & Time Collected L9V 3K5 519-321-9474 519-925-0322 136 Main St. E Shelburne, ON Data Transfer Contact: Don Irvine CONTRACTOR M # of Bottles Sampler Signature: Field Total App. Reg'd (mg/L) ield Free (mg/L) Combined 24-48 h (mg/L) (519) 925-1938 (519) 925-0322 apwesthighlands@ocwa.com Shelburne, ON Invoice To: Ontario Clean Water Agency 136 Main St. E × × CBOD5 C of C LIMS No: Laboratory Section Total Suspended × × Solids Xavia Total × × Phosphorous Temperature Upon Receipt Total Ammonia × × Nitrogen (TAN) MAR 1 1 2021 × × Nitrate-Nitrogen × × Nitrite-Nitrogen 5-7d × × TKN Dissolved × × Organic Carbon × × E.Coli Time Rec'd: 7-10d Sample condition upon receipt carrie.greenlaw@sgs.com 705-652-6365 705-652-2000 KOL 2HO 185 Concession St. Laboratory: SGS Lakefield Research Ltd akefield, ON റ് Well Depth = 1,06 Well Depth = Other Comments Specify: 1-11 m 3 Inflials Yes ₹ á 20 Upload to MOE Page 1 of 3 ¥ Yes V ¥ és □⊠ Upload to OCWA

Contain Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (QUARTERLY - Page 1 of 3)

PINA 62843722376 Revision # 6

25 Bin Revised: 2017.11.21

*Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstram, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids set subge, Bth - Biosolids set subge, Bth - Biosolids set subge, Bth - Biosolids studge quality, Bsq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEft - Primary Effluent, RAS - Return Activated Studge, Bth - Biosolids primary digestion, Bsd - Overflow, SSO - Sanitary Sewer Overflow, WAS - Wasta Activated Studge, IndW - Industrial Wastewater, PStn - Pump Stn, Sept - Septage, Loht - Leachate, Prff - Primary Treatment, ReAr - Re-gration, Tet - Terriary Treatment, Afto - Actifito, TeBy - Terriary Bypass, Hold - Holding Tank, CSO - Combined Sewer Sampler Name: Hold Hold Address: Hold Hold Hed Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (QUARTERLY - Page 2 of 3) Station Acronym elephone: HI_d6 HIG4 Station Number (Short Name) HId3 Hd1 519-321-9474 519-925-0322 Shelburne, ON L9V 3K5 Data Transfer Contact: Don irvine 136 Main St. E Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment Facility Name Waterworks/Project # Attached Parameter List SW6 - Outlet from property SW4 - Outlet from main pond SW3 - Within main pond SW5 - Upgradient tributaries at County Rd No. 34 Requested Turnaround Time SW1 - Upgradient background Sample Location Name Mini Lakes WWTP Sample とかてこ 1418S No 101/23/10 440 224 100 410 Date & Time this der 1400 Shelburne, ON L9V 3K5 Data Transfer Contact: Don Irvine 136 Main St. E N 2 # of Bottles N Sampler Signature: App. Req'd Field Total (mg/L Field Free (mg/L) 24-48 h Combined (mg/L) × Total Shelburne, ON L9V 3K5 × × (519) 925-1938 (519) 925-0322 × × Invoice To: Ontario Clean Water Agency
136 Main St. E C of C LIMS No: Phosphorous Laboratory Section Total Ammonia × × × × × Date Rec'd: Nitrogen × × × \times Nitrate-Nitrogen × × × × × Nitrite-Nitrogen Temperature Upon Receipt × × × × × TKN MAR 1 1 202 × 7/4/8/ × × × × × E.Coli 4 Paramaters 54 9 5-7d N pH 1,0 00 2.01 1.1 i Temperature 7-10d Sample condition upon receipt Laboratory: SGS Lakefield Research Ltd 185 Concession St. Lakefield, ON KOL 2H0 705-652-2000 705-652-385 Other Comments Initials Yes Yes No Yes N Sex No Yes No No No Upload to MOE Page 3 of 3 Z és Yes □ Z és Z és Upload to OCWA

NO 08:10 NO

Revision # 10

Revised: 2019.09.16



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

18-March-2021

Date Rec. : 11 March 2021 LR Report: CA15159-MAR21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Carbonaceous Biochemical Oxygen Demand (CBOD5) mg/L	Total Suspended Solids mg/L	Dissolved Organic Carbon mg/L	Phosphorus (total) mg/L	Total Kjeldahl Nitrogen as N mg/L	Ammonia+Amm onium (N) as N mg/L	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L	E. Coli cfu/100mL
1: Analysis Start Date			12-Mar-21	12-Mar-21	12-Mar-21	11-Mar-21	11-Mar-21	11-Mar-21	16-Mar-21	16-Mar-21	16-Mar-21	11-Mar-21
2: Analysis Start Time			16:07	09:20	19:40	17:50	17:00	18:47	00:13	00:13	00:13	11:42
3: Analysis Completed Date			17-Mar-21	16-Mar-21	15-Mar-21	16-Mar-21	16-Mar-21	15-Mar-21	18-Mar-21	18-Mar-21	18-Mar-21	12-Mar-21
4: Analysis Completed Time			15:06	07:51	10:30	15:39	14:52	14:13	15:06	15:06	15:06	14:41
5: Well Wel1-Monitoring Well #1 (MW-1)	10-Mar-21 13:15	14.0	< 4	1890	20	0.22	4.2	3.9	0.28	0.07	0.35	0
6: Well Wel2-Monitoring Well #2 (MW-2)	10-Mar-21 10:40	14.0	< 4	38	2	< 0.03	< 0.5	< 0.1	< 0.03	6.11	6.11	0
7: Well Wel4-Monitoring Well #4 (MW-4)	10-Mar-21 10:20	14.0	< 4	8	2	< 0.03	< 0.5	< 0.1	< 0.03	4.80	4.80	0
8: Well Wel5-Monitoring Well #5 (MW-5)	10-Mar-21 11:39	14.0	< 4	7	2	< 0.03	< 0.5	< 0.1	< 0.03	0.29	0.29	0
9: Well Wel6-Monitoring Well #6 (MW-6)	10-Mar-21 11:51	14.0	< 4	5	2	< 0.03	< 0.5	< 0.1	< 0.03	0.63	0.63	0
10: Well Wel7-Monitoring Well #7 (MW-7)	10-Mar-21 12:05	14.0	< 4	11	2	< 0.03	< 0.5	0.1	< 0.03	< 0.06	< 0.06	0
11: Well Wel8-Monitoring Well #8 (MW-8)	10-Mar-21 12:18	14.0	< 4	31	7	0.04	2.8	2.9	< 0.03	< 0.06	< 0.06	< 2
12: Well Wel9-Monitoring Well #9 (MW-9)	10-Mar-21 11:20	14.0	< 4	30	6	< 0.03	0.8	0.8	< 0.03	< 0.06	< 0.06	0
13: Well We10-Monitoring Well #10 (MW-10	10-Mar-21 10:59	14.0	< 4	112	2	0.04	< 0.5	< 0.1	< 0.03	0.08	0.08	0
14: Well We11-Monitoring Well #11 (MW-11	10-Mar-21 12:31	14.0	< 4	112	6	< 0.03	4.5	4.8	< 0.03	0.16	0.16	0
15: Well We12-Monitoring Well #12 (MW-12)	10-Mar-21 12:57	14.0	6	23	2	< 0.03	< 0.5	< 0.1	< 0.03	0.58	0.58	0



Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

Works #:

1418S

Project : LR Report :

PO#017844 CA15159-MAR21

Carrie Greenlaw

Project Specialist, Environment, Health & Safety



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

18-March-2021

Date Rec. : 11 March 2021 LR Report: CA15160-MAR21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Hold Hld1-SW1-Upgradi ent background	6: Hold Hld3-SW3-Within main pond	7: Hold Hid4-SW4-Outlet from main pond	8: Hold Hld5-SW5-Upgradi ent tributaries at County Rd No 34	9: Hold Hid6-SW6-Outlet from property
Sample Date & Time					10-Mar-21 14:00	10-Mar-21 14:22	10-Mar-21 14:10	10-Mar-21 14:50	10-Mar-21 14:40
Temperature Upon Receipt [°C]					12.0	12.0	12.0	12.0	12.0
Field pH [no unit]					8.5	7.5	7.7	7.6	7.5
Field Temperature [celcius]					12.7	10.7	10.5	9.2	8.5
Phosphorus (total) [mg/L]	11-Mar-21	17:50	15-Mar-21	13:32	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Total Kjeldahl Nitrogen [as N mg/L]	11-Mar-21	17:00	12-Mar-21	10:52	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonia+Ammonium (N) [as N mg/L]	12-Mar-21	17:44	17-Mar-21	10:10	< 0.1	< 0.1	0.2	< 0.1	0.2
Nitrite (as N) [mg/L]	16-Mar-21	07:46	17-Mar-21	21:12	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Nitrate (as N) [mg/L]	16-Mar-21	07:46	17-Mar-21	21:12	0.08	0.30	0.08	0.60	0.12
Nitrate + Nitrite (as N) [mg/L]	16-Mar-21	07:46	17-Mar-21	21:12	0.08	0.30	0.08	0.60	0.12
E. Coli [cfu/100mL]	11-Mar-21	11:42	12-Mar-21	14:42	93	0	0	27	0



Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

Works #:

1418S

Project : LR Report :

PO#017844 CA15160-MAR21

Carrie Greenlaw

Project Specialist, Environment, Health & Safety



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

24-March-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 18 March 2021 LR Report: CA12663-MAR21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier Raw Sewage
Sample Date & Time					17-Mar-21 14:30	17-Mar-21 14:15
Temperature Upon Receipt [°C]					3.0	3.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	18-Mar-21	17:56	23-Mar-21	13:47	22	104
Dissolved Oxygen [mg/L]	18-Mar-21	14:02	19-Mar-21	08:00	8.7	
Total Suspended Solids [mg/L]	19-Mar-21	14:47	24-Mar-21	10:05	17	66
Alkalinity [mg/L as CaCO3]	18-Mar-21	16:08	23-Mar-21	08:02		245
pH [No unit]	18-Mar-21	16:08	23-Mar-21	08:02	7.87	7.67
Phosphorus (total) [mg/L]	19-Mar-21	17:35	23-Mar-21	10:58	0.41	2.58
Total Kjeldahl Nitrogen [as N mg/L]	18-Mar-21	17:41	19-Mar-21	15:21	5.4	21.8
Ammonia+Ammonium (N) [as N mg/L]	22-Mar-21	16:39	23-Mar-21	13:55	4.6	
Nitrite (as N) [mg/L]	22-Mar-21	13:28	23-Mar-21	13:17	1.44	
Nitrate (as N) [mg/L]	22-Mar-21	13:28	23-Mar-21	13:17	8.15	
Nitrate + Nitrite (as N) [mg/L]	22-Mar-21	13:28	23-Mar-21	13:17	9.59	
E. Coli [cfu/100mL]	18-Mar-21	17:24	19-Mar-21	16:16	58000	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

13-April-2021

Date Rec.: 01 April 2021 LR Report: CA12017-APR21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					31-Mar-21 14:19	31-Mar-21 14:33
Temperature Upon Receipt [°C]					3.0	3.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	01-Apr-21	18:43	12-Apr-21	16:44	43	85
Dissolved Oxygen [mg/L]	01-Apr-21	15:58	05-Apr-21	14:15	8.7	
Total Suspended Solids [mg/L]	07-Apr-21	09:45	08-Apr-21	15:32	24	128
Alkalinity [mg/L as CaCO3]	05-Apr-21	08:51	08-Apr-21	08:44		286
pH [No unit]	05-Apr-21	11:31	09-Apr-21	11:11	7.34	7.23
Phosphorus (total) [mg/L]	05-Apr-21	16:02	06-Apr-21	12:44	0.26	2.56
Total Kjeldahl Nitrogen [as N mg/L]	05-Apr-21	16:47	06-Apr-21	15:26	3.4	20.7
Ammonia+Ammonium (N) [as N mg/L]	05-Apr-21	16:14	07-Apr-21	13:31	2.4	
Nitrite (as N) [mg/L]	07-Apr-21	08:11	08-Apr-21	15:53	1.44	
Nitrate (as N) [mg/L]	07-Apr-21	08:11	08-Apr-21	15:53	4.32	
Nitrate + Nitrite (as N) [mg/L]	07-Apr-21	08:11	08-Apr-21	15:53	5.76	
E. Coli [cfu/100mL]	01-Apr-21	15:59	05-Apr-21	10:54	24000	

Carrie Greenlaw Project Specialist,

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

Color Facility Name Mini Lakes WWTP A18 Color Colo	* Station Acronym: (Camples No.						Raw	單	F	Station Acro	nym		Email:	Fax:	Telephone:		Address:						(
Facility Name Minin I akes WWTP Org. # 1418 No	n: Cell-Ce		-						畢	Ħ	Number (Short Name)	2												,
S WWTP Coff C LIMS No: Sample Section Sample Sam	SI Contents Dis-Distriction Court						(a) (b) (c) (c)	2	7-2		Sample Location Name	sample	Some I	divine@ecva.com	519-925-0322	519-321-9474	Shelburne, ON	136 Main St. E	Requested Turnaround Time:	The substitution of the su	Attached Parameter List		Name	rojec
C of C LIMS No: Caboratory Section Sample Results Under Any Regulation for Wastewater Treatment Sample Results Under Any Regulation for Wastewater Treatment Shelburne, ON Shelbur	il Anzon	·									Date & Time Collected		**************************************	519-925-0322	519-321-9474	L9V 3K5	Shelburne ON	Data Transfer Co		the sample(s) fall: No Requireme	No		s WWTP	S
C of C LIMS No: Laboratory Section Sample Results Under Any Regulation for Wastewater Treatment Temperature Upon Receipt	Sampl		+					ω	_	ω	Field Total							ntact: Dor	₹ Þ	nt to Repo	es			
Combined (mg/L) Combined (mg/L) X X CBODs X X Total Suspended Solids X X Phosphorous X Nitrate-Nitrogen X Nitrate-Nitrogen X X PH X D.O. X Alkalinity Alkalinity	er Signatı			+		+	+	+	+			CI Res						Irvine	pg'd	rt Sample				
Cof CLIMS No: Laboratory Section Date Recid: Temperature Upon Receipt Temperature Upon Recei	re:										Combined	idual							24-4	Results				
Total Suspended Solids X X Total Ammonia Nitrogen (TAN) X Nitrate-Nitrogen X X D.O. X D.O. X PH X D.O. X Alkalinity X Alkalinity							,	<			CBOD ₅	П	apwes	(519)	(519)	Shelb	136 N	Invoid	, in	Under An			Lab (0
Phosphorous X Total Ammonia Nitrogen (TAN) X Nitrate-Nitrogen X Nitrite-Nitrogen X D.O. X PH X PH X E.Coli X Alkalinity	D	-		+	+	+	+	-	+	+	Solids		thighland	925-0322	925-1936	urne, ON	ain St. E	ë To: Or		y Regulat		Date R	ratorus	f C LIM
APR 1 5 2021 Samp Apr 1 5 2021 Samp Apr 1	2								+		Total Ammonia	1	S(0)0							ion for V	Tempe	ecilon	ortion of	S NO.
X Nitrite-Nitrogen X Nitrite-Nitrogen X TKN X D.O. X PH X E.Coli X Alkalinity	The state of the s	-	-	+	-					× N	litrate-Nitrogen	1 11	,com				JIDAA IID	יייין מבי		/astewar	erature L	API	8	>
X D.O. X PH X Alkalinity Samm	4	-	+			+	 	+	_	-		Parama					al Agend		cn C	ter Treat	bon Re	2 1 5	2	
× × pH X × E.Coli X Alkalinity	1							+	+	+		ers					×		-7d	ment	n i	2021	1	3
X E.Coli X Alkalinity Samp					>		×		;	×	рН		1						\neg	A	j		2	+
X Alkalinity Samp			-	1	0			(>	()	I	E.Coli							'	_	17	ζ,	Time	1	
		-	-	K	1		×		1	4	Alkalinity		1		L			.	7-10d	14	,	Samp Rec'd:		
												Comments	-6365	2-2000	KOL 2HO	d, ON	Laboratory: SGS Lakefield Research Ltd		Other Specify:			Sample condition upon receipt		
ple condition upon receipt i: Initials °C Concession St. Lakefield, ON KOL 2H0 705-552-5365 Carrie-greenlaw@sqs.com Comments Comments Yes No Yes No Yes No Yes		Yes Yes	Yes Yes	No Yes	No Yes	No X Yes	No X Yes X	No No No		Up	pload to MOE						earch Ltd				ass			Page 1 of 1

PIN# 6075/0600440 PTP 9:30~K

Revised: 2021.01.15

*Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw - Raw Savage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids set Super, Bss - Biosolids sludge guality, Bsoq - Biosolids set Super, Bss - Bio Sampler Name Address: Raw 平 elephone: 里 Station Acronym 12x4 6075447643861 Station Number (Short Name) Raw 里 显 . . 519-925-0322 519-321-9474 L9V 3K5 Shelburne, ON Data Transfer Contact: Don irvine 136 Main St. E Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment Quote # Facility Name Attached Parameter List Requested Turnaround Time Primary Clairfier (Grab) Sample Location Name Final Effluent (Grab) Final Effluent (Grab) Mini Lakes WWTP Sample グラグライ No 2021/04/28 Date & Time Collected いっと 347 Sh Shelburne, ON L9V 3K5 Data Transfer Contact: Don Irvine 136 Main St. E Theiry # of Bottles Sampler Signature: Field Total App. Req'd (mg/L) CI Residual Field Free (mg/L) Combined 24-48 h (mg/L) × × Shelburne, ON CBOD₅ 519) 925-0322 Invoice To: Ontario Clean Water Agency
136 Main St. E 519) 925-1938 Laboratory Section C of C LIMS No: Total Suspended × × Date Rec'd: Solids Total × × Phosphorous Total Ammonia × Nitrogen (TAN) Aor × Nitrate-Nitrogen APR 7 9 2021 × Nitrite-Nitrogen × × 5-7d TKN 10 × D.O. Revision # 10 × × pH × E.Coli Time Rec'd: 7-10d × Alkalinity Sample condition upon receipt KOL 2H0 705-652-2000 705-652-6365 Laboratory: SGS Lakefield Research Ltd 185 Concession St. Lakefield, ON Other Comments Initials Revised: 2021.01.15 Yes No Yes X Yes No No No Yes S S. No Yes Yes S No Yes Upload to MOE The N es Yes Zes □□ No Se C

Upload to OCWA

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

Waterworks/Project #

1418S

Page 1 of 1



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

06-May-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 29 April 2021

LR Report: CA15570-APR21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					28-Apr-21 14:20	28-Apr-21 14:33
Temperature Upon Receipt [°C]					4.0	4.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	29-Apr-21	17:30	05-May-21	16:28	62	80
Dissolved Oxygen [mg/L]	29-Apr-21	17:09	03-May-21	12:23	4.4	
Total Suspended Solids [mg/L]	03-May-21	08:09	04-May-21	12:53	141	76
Alkalinity [mg/L as CaCO3]	30-Apr-21	08:11	02-May-21	09:34		291
pH [No unit]	03-May-21	16:43	04-May-21	13:28	7.09	7.08
Phosphorus (total) [mg/L]	30-Apr-21	18:20	03-May-21	13:06	1.17	2.48
Total Kjeldahl Nitrogen [as N mg/L]	30-Apr-21	15:51	03-May-21	11:37	15.0	27.5
Ammonia+Ammonium (N) [as N mg/L]	01-May-21	11:12	05-May-21	14:06	10.2	
Nitrite (as N) [mg/L]	01-May-21	09:04	04-May-21	15:10	1.16	
Nitrate (as N) [mg/L]	01-May-21	09:04	04-May-21	15:10	0.50	
Nitrate + Nitrite (as N) [mg/L]	01-May-21	09:04	04-May-21	15:10	1.66	
E. Coli [cfu/100mL]	29-Apr-21	16:52	03-May-21	08:25	78000	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

..

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

27-April-2021

Date Rec.: 15 April 2021 **LR Report: CA13484-APR21**

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					14-Apr-21 11:30	14-Apr-21 11:45
Temperature Upon Receipt [°C]					8.0	8.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	16-Apr-21	17:56	26-Apr-21	15:58	37	111
Dissolved Oxygen [mg/L]	15-Apr-21	17:43	16-Apr-21	09:25	9.0	
Total Suspended Solids [mg/L]	17-Apr-21	10:59	20-Apr-21	08:37	13	100
Alkalinity [mg/L as CaCO3]	16-Apr-21	08:18	16-Apr-21	14:58		291
pH [No unit]	16-Apr-21	08:18	18-Apr-21	14:07	7.71	7.36
Phosphorus (total) [mg/L]	15-Apr-21	19:00	16-Apr-21	14:28	0.17	3.02
Total Kjeldahl Nitrogen [as N mg/L]	21-Apr-21	08:10	22-Apr-21	10:24	2.5	23.4
Ammonia+Ammonium (N) [as N mg/L]	15-Apr-21	20:30	16-Apr-21	08:43	1.7	
Nitrite (as N) [mg/L]	17-Apr-21	15:20	19-Apr-21	15:28	0.87	
Nitrate (as N) [mg/L]	17-Apr-21	15:20	19-Apr-21	15:28	4.71	
Nitrate + Nitrite (as N) [mg/L]	17-Apr-21	15:20	19-Apr-21	15:28	5.58	
E. Coli [cfu/100mL]	15-Apr-21	17:34	19-Apr-21	12:12	6100	

Carrie Greenlaw Project Specialist,

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

1	-1	14/24	ı			SEVENCE (MONINERY)	TINOW)	(4)												2000
))	l.	vvalerworks/Project #	S/Project # 1418S	SS					CofcL	C of C LIMS No:	2	£	L	K	-	L			Pag	Page 1 of 1
		Facility Name	ne Mini Lakes WWTP	S WWTP				ľ						1		H				
		Org. #	1418						aborato	Laboratory Section		MAV 1	12 200	7		Sar	Sample condition upon receipt	pon receipt		
		Quote #							Dat	Date Rec'd:	Ε		707 6	.	F	Time Rec'd:	;p		Initials	1
		Attached Parameter List	meter List	2	7									31						
		Identification o	f Regulation under which	Identification of Regulation under which the secure (2) 2 11 21 22	90			1		Ten	Temperature Upon Receipt	Upon	Receipt	01	=	_	့			
				or are sample(s) fall. No Requ	lirement to	Report Sa	mple Res	ults Unde	r Any Reg	Report Sample Results Under Any Regulation for Wastewater Treatment	r Wastev	rater Tru	eatmen	44						
		Requested	Requested Turnaround Time:			App. Reg'd		24-48 h					5-7d			7-10d	Other	O Section Control		
		Data Transfer	Data Transfer Contact: Don ivine					1	1			7		_	7			Specily.		
Address:		136 Main St. E		136 Main St, E	t. E	t: Don Irvine	e	= 4	Invoice To: Or	Invoice To: Ontario Clean Water Agency	Clean W	ater Agu	ancy				Laboratory: St	Laboratory: SGS Lakefield Research Ltd	esearch Ltd	
		L9V 3K5		Shelburne, ON	NO			- 0	Shelburne, ON	ON E							185 Concession St.	on St.		
Fax:		519-321-9474		519-321-94	74			L	L9V 3K5								KOL 2HO			
Email:		divine@orwaram		519-925-0322	22			(5)	(519) 925-1938	1938							705-652-2000			
				dirvine@ocwa.com	C0.m			ac	westhigh	apwesthighlands@ocwa.com	:Wa.com						705-652-6365	6		
-			Sample			-	Of Boridia					11					carrie, greenlaw (2) sgs.com	w@sgs.com		
шЛu	i						L) L	1	р		-	Parar	Paramaters		1			Comments	L	,
Station Acro	Station Number (Short Name)		Sample Location Name	Date & Time Collected	# of Bottlee	Field Total (J\gm)	eld Free (mg/	Combined (mg/L)	Solids Solids CBOD ₅	IstoT euonordeoric sinommA Isto	(NAT) nəgorli nəgorliM-əfsrt	nəgotliN-əfitl	ТКИ	.o.a	PH E.Coli	Alkalinity			BOM of beolo	osd to OCWA
Ħ	Eff	- Final	Final Effluent (Grab)	9	"		13	1	1	-	N	IN		+	+				In	lqU
#	27			2040	,				< <	×	×	×	×	×	×				Yes	
ō	5	- Final	Final Effluent (Grab)	0830	-										×	_	4		Ves Y	ON Yes
Raw	Raw	- Primar	Primary Clairfier (Grab)	3	,		1	-	+	+	+		+	+	+		Ī)	2 2	3 □ 2°
		NAS	SEWINSE	03/0	,		+	×	×	×			×	- \	×	×			Yes	X Se S
							1												×es ×	Yes N
																	3/1	\(\)	Yes	, kes
													+	+	1	1		3	e e	e 2
						+	+	+	\perp	+	1		\dashv	\dashv			100	Ç	No ox	No S
																		N. A. A.	, se s	Se Se
																				Ne
Sampler Name:	me:		Lucas.	100		o reference		-	(0										
Station Acron	m: Cell - C	Station Acronym: Cell - Cell Contents Die Die	manal	Cas 1 00		sampler Signature:	gnature:	V	(1)	A	1	W.	1							

* Staton Acronym. Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy. - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Blosolids prise besoulds prise by a sec super, Balq - Blosolids studge quality, Bscq - Blosolids sol quality, DAF - Dissolved Air Floatston, Grit - Primary Treatment/Grit, PrEi - Primary Effluent, RAS - Return Activated Studge, Studge studge quality, Bscq - Blosolids sol quality, DAF - Dissolved Air Floatston, Grit - Primary Treatment/Grit, PrEi - Primary Effluent, RAS - Return Activated Studge, Indiv - Indistrial Wastewater, PSin - Pump Stn, Sept - Septage, Lcht - Leachate, Primary Treatment, ReAr - Re-seration, Test - Tertiary Treatment, Allo - Actific, TeBy - Tertary Bypass, Hold - Holding Tank, Revision # 10

Revised: 2021.01.15

PIN: 607573859933 RTN 10:00 &



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

21-May-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 13 May 2021 **LR Report**: **CA12407-MAY21**

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier Raw Sewage
Sample Date & Time					12-May-21 08:20	12-May-21 08:10
Temperature Upon Receipt [°C]					11.0	11.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	13-May-21	17:13	18-May-21	16:49	40	60
Dissolved Oxygen [mg/L]	13-May-21	14:35	14-May-21	12:51	5.2	
Total Suspended Solids [mg/L]	14-May-21	10:50	18-May-21	13:17	38	73
Alkalinity [mg/L as CaCO3]	14-May-21	07:33	17-May-21	19:49		265
pH [No unit]	13-May-21	16:43	16-May-21	14:16	7.42	7.21
Phosphorus (total) [mg/L]	13-May-21	15:29	14-May-21	14:02	0.40	1.38
Total Kjeldahl Nitrogen [as N mg/L]	15-May-21	14:28	17-May-21	11:51	9.6	11.8
Ammonia+Ammonium (N) [as N mg/L]	14-May-21	10:39	17-May-21	08:07	7.0	
Nitrite (as N) [mg/L]	18-May-21	12:02	20-May-21	16:32	< 0.03	
Nitrate (as N) [mg/L]	18-May-21	12:02	20-May-21	16:32	< 0.06	
Nitrate + Nitrite (as N) [mg/L]	18-May-21	12:02	20-May-21	16:32	< 0.06	
E. Coli [cfu/100mL]	13-May-21	18:04	16-May-21	12:32	38000	

Carrie Greenlaw Project Specialist,

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

Waterworks/Project # 1418S

Station Acro ligestion, Bad lecondary Eff ISO - Combin	Sampler Name					7,044	Raw	E#	單	Station Acron	ym		Email:	Telephone	Address						(
nym: Cell - C I - Blosolids i Iuent, TWAS	ame.					Zak	0 !	E#	Ę	Station Number (Short Name)				ne:							,
Coll Contents, Dis - Disinfection, sec, digestion, Bps - Blocolids present and waste Activated Sections, SSO - Sanitary Sewer College						S ST. Jungry	+	T .	- Final E	Sample			519-925-0322	L9V 3K5 519-321-9474	136 Main St. E Shelburne, ON	Data Transfer Contact: Don irvine	Requested To	Identification of R	Attached Parameter List	Org. #	1
Tection, Down - Downstream colids pri super, Bss - Bloso vated Sludge, WAS - Wast Sawer Overflow						Primary Claimer (Grab)	inal cilident (Grap)	files (Car)	Final Effluent (Grah)	Sample Location Name	Sample					ntact: Don irvine	Requested Turnaround Time:	egulation under which	ter List	Mini Lakes WWTP	Min 1 -1 -1
Sation Acronym. Cell Contents. Dis - Disinfection, Down - Downstream, Eff - Final Effluent, Prily - Primary Bypass, Raw - Raw Sewage, Script, Bas - Blosolds sec, digestion, Bps - Blosolds in super, Ess - Blosolds she subject. Sec - Special sec - Lagor, Bsk - Blosolds sludge quality, Boog - Blosolds sol quality, Boog - Blosolds sol quality, DAF - Dissolved Ali Figure Tellment, TWAS - Thickeard Sludge, WAS - Waste Activated Sludge, Indiv - Industrial Wastewater, PSin - Pump Stn, Sept - Septage, Lott - Leachate, Pff - Primary Teatmant/Ont, Pef - Primary Effluent, RAS - Refuser Activated Sludge, BBR - Becorded primary Teatmant Ref - Re-action, Tert - Tertiary Treatment, Afto - Action, TeBy - Tertiary Spass, Hold - Holding Tank, Ray - Revised 2021.01.15	·					W	1103	2011	-	Date & Time Collected		- FW30@enville	519-925-0322	L9V 3K5	136 Main St. E	Det Toes		Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment	No	s WWTP	0
Bypass, Raw le quality, Bao Wastewater,				5			_	c	,	# of Bottles		com	222	2 2	t. E			irement to	Yes		
Sampler Signature: W-Raw Sewage, ScBy. W-Raw Sewage, ScBy. Roq. Blosolids soil quality, r, PStn - Pump Stn, Sept.				CO						Field Total (mg/L)	0				Don Irvir	, , ,	App. Reg'd	Report Sa			
gnature: ge, ScBy - S soil quality, Stn, Sept -	1	+	-	3	_		_		Fi	eld Free (mg/L	CI Residual				ā			mple Res			
Septage, Lt	+	-	-	1					1	Combined (mg/L)	Ц	100		F (0		_	24-48 h	ults Unde	-		
Sacondary Bypass, Up - Upsi DAF - Dissolved Air Floratut - Seplage, Lcht - Leachate, P			*	2		×		×	_	CBOD ₅ Ital Suspended Solids	$\ $	apwesthigh	(519) 925-1938 (519) 925-0322	Shelburne, ON L9V 3K5	Invoice To: Ontario Clean Water Agency 136 Main St, E		ᆀ	r Any Re		Laborato	C of C LIMS No:
Upstream, Orit auton, Grit Ia, Prir - Pr	-	-	(DM	2000	0,6	\otimes		×	_	Total Phosphorous otal Ammonia		nlands@c	1938	ON	: Ontario			gulation fo	5	Laboratory Section Date Rec'd:	LIMS N
Well - Monitor - Primary Treats imary Treats			PE	5	'			×	Ni	itrogen (TAN)		cwa.com			Clean W	l	$- \parallel$	n for Wastey			0:
oring Well,			21	E	_			×	Ni	trite-Nitrogen	Paramaters				ater Age	L	ᅦ	stewater Treatment		MAY 2 7 2021	MAKE
Aer - Aeral nt., PrEf - P - Re-aerati	-	+	5,	=	9	(×)		×	-	TKN D.O.	aters				ncy	3	5-7d	atment		7 202	<
ion, Brs - Bioso imary Effluent, nr, Tert - Tertie Revision # 10			Mos L	2		×		×	\vdash	pH						l	$\neg \parallel$	3		- 6	7
iosolids-ra ent, RAS - ertiary Tree	-		Se	B		- (×)		E.Coli								Ĉ	A Paca	! 8	\$
w sludge, E Return Act Iment, Aflo			THE	5	- 1	×	5			Alkalinity	1	car	700	La o	La	1			l ec a:	Sample	
rth - Biosoli vated Sludy - Actrlo, T.			7	2	21	D	(1					705-652-6365	705-652-2000	Lakefield, ON	boratory:	Umer		ငိ	1	condition	
s thickening, Bpd - Bio ye, SBR - Secondary Ti BBy - Tertlary Bypass, h				3	300	び					Comment	9	00	Sion St.	Laboratory: SGS Lakefield Research Ltd	Specify:			=	Sample condition upon receipt	
solids primary readment/SBRs, ScEf- Hold - Holding Tank, Revised: 2021.01.15	No Yes	No Yes	No Yes	S Yes	Sa Ša	% % 8 	* * * * * * * * * * * * * * * * * * *	S og S	Up	pload to MOE	$\ $				search Lt				Initials	1	
ry Rs, 8cEr - g Tank, 121.01.15	No Yes	No Yes	Z es	8 % 9 [Z es				Upk	oad to OCWA					۵				J		age i of i



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

03-June-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 27 May 2021 LR Report: CA12981-MAY21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Raw Sewage Primary Clarifier (Grab)
Sample Date & Time					26-May-21 11:05	26-May-21 11:20
Temperature Upon Receipt [°C]					15.0	15.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	27-May-21	17:41	02-Jun-21	14:48	36	245
Dissolved Oxygen [mg/L]	27-May-21	16:34	28-May-21	10:12	3.7	
Total Suspended Solids [mg/L]	29-May-21	09:38	31-May-21	16:23	62	485
Alkalinity [mg/L as CaCO3]	28-May-21	09:14	28-May-21	15:43		348
pH [No unit]	28-May-21	09:14	28-May-21	15:43	7.39	7.42
Phosphorus (total) [mg/L]	28-May-21	16:45	31-May-21	13:05	1.48	
Phosphorus (total) [mg/L]	31-May-21	10:40	02-Jun-21	16:06		14.8
Total Kjeldahl Nitrogen [as N mg/L]	28-May-21	17:40	31-May-21	11:40	16.5	
Total Kjeldahl Nitrogen [as N mg/L]	31-May-21	10:40	03-Jun-21	13:15		58.6
Ammonia+Ammonium (N) [as N mg/L]	31-May-21	17:20	01-Jun-21	14:56	14.0	
Nitrite (as N) [mg/L]	29-May-21	14:09	01-Jun-21	15:21	0.14	
Nitrate (as N) [mg/L]	29-May-21	14:09	01-Jun-21	15:21	< 0.06	
Nitrate + Nitrite (as N) [mg/L]	29-May-21	14:09	01-Jun-21	15:21	0.14	
E. Coli [cfu/100mL]	27-May-21	15:52	28-May-21	15:23	90000	

Carrie Greenlaw Project Specialist,

-			W	Agency - Request for Laborato aterworks/Project # 14	185		-1001	- SEWAG	E (QUARTE	RLY-P	age 1 o	f 3)											
			Fa		es WWTP						Cof	CLIM	S No:			Ti	1/10	17	340			F	Page 1
			1800	g.# 1418	100 AAAA 11						Labora	tory 8	ection			-14	111	14	090				
				ote # ached Parameter List							100	Date R			06/6	19/2	2021	MY	Time	Samp Rec'd	ple condition upon receipt		loso
					No		Yes						Tem					274			- Mun	nitials	n
			-	ntification of Regulation under wh	ich the sample(s)	all: No Requir	ement to	Report S	Sample Resu	ts Unde	er Any F	Regula	ion for	Waste	water	Treatm	elpt ·	-14	5		°C		
				Requested Turnaround Time:				App. Regio		1-48 h					×	5-7		_	7				
ddres	38;	-	Data 136 I	Transfer Contact: Don irvine Main St. E		Data Transfe	r Contac	et: Don In	ine								u			7-10d	Other Specify:_		
		- 1	Shell L9V	burne, ON		136 Main St. Shelburne, C	E	a. Don iiv	1110	1	nvoice 36 Mai	To: Or	ntario C	lean V	Vater A	gency					Laboratory: SGS Lakefield R		
eleph	one:	1	519-3	321-9474		L9V 3K5				S	helburr 9V 3K5	ne, ON								- 1	100 Concession St.	esearch Lt	d
mail:				925-0322 @oswa.com		519-321-947 519-925-032	4			(3	19) 92	5-1938			_						Lakefield, ON KOL 2H0		
_		10	23.7 1114	PROS WILCOM		dirvine@ocwa.co				(5	19) 92 pwesth	5-0322	n@							17	705-652-2000 705-652-6365		_
E	T	Т	\top	Sample			,	1	CI Residual	120	- HGBUI	Millanc	BIMOCA	/a.con	1		A Comme			0	carrie.greenlaw@sgs.com		
rony	Station					,	1				P		-			mater		_			Comments		_
Station Acronym	Numbe (Short Name)			Sample Location Name	Date &	cted	# of Bottles	Field Total (mg/L)	Teld Free (mg/L)	(mg/L)	Suspended	Solids	Total Ammonia	Nitrate-Nitrogen	Nitrite-Nitrogen	TKN	Dissolved Organic Carbon	E.Coli			Sommerica	Upload to MOE	lade de
Vell	Wel1	-	N	Monitoring Well #1 (MW-1)		06 (0°) 00	3	-	Fleed	+	Tota	t		Nitrat	Nitrite		Organ	ш				Upload	Inford
Vell	Wel2	-	N	Monitoring Well #2 (MW-2)	,	50	3			1	X	+	-	X	X	X	х	х			Well Depth = 2 · 15	m Yes X	Yes
/ell	Wel4	-	М	fonitoring Well #4 (MW-4)	1	0	3			X	-	X	X	X	X	Х	Х	Х			Well Depth = Z · C C		
/ell	Wel5	-	М	onitoring Well #5 (MW-5)	123		3			x	-	X	X	X	X	Х	Х	Х			Well Depth = 2-3	n Yes X	_
ell	Wel6	-	М	onitoring Well #6 (MW-6)	124	5	3			X		×	X	X	X	X	Х	Х	_		Well Depth = 2 16	Yes X	Yes [No
II	Wel7	-	Мс	onitoring Well #7(MW-7)	125	5	3			X	X	X	X	X	X	X	X	X	-	+	Well Depth = 2-18 m	No	Yes[No
ell	Wel8	-	Мо	onitoring Well #8 (MW-8)	1309	,	3			X	X	X	X	X	x	X	X	X		-	Well Depth = 1-98 m	No	No
+	Wel9	-	Мо	nitoring Well #9 (MW-9)	120	5	3			X	X	X	X	x	-	X	-	X	1	1	Well Depth = 1-84m	Yes X	Yes No
"	We10	-	Moi	nitoring Well #10 (MW-10)	105	5	3			X	Х	X	X	x			+	X	1/	-	Well Depth = 1.14 m	No	Yes No
er Na	me:			SUHAR	<u> </u>	_	_	ampler Sig		-			^	^	^_	^	Х	×			Well Depth = 2-97 _m	Yes X Y	Yes V

Station Actorym: Cell - Cell Contents, Dis - Disinfection, Bown - Downstream, Eff - Final Effluent, Pigy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Op - Upstream, Well - American, Brs - Biosolids sec, digestion, Bps - Biosolids sec, super, Bsk - Biosolids sprimary Biosolids sprimary

-		- 9	water Agency - Request for Laborate Waterworks/Project # 14	185		701001	- SEWA	3E (QUAF	RTERLY	- Pag	e 1 of	3)											
				es WWTP									S No:	_			_	_					Page
			Org.# 1418							L	aborat	ory Se	ection										
			Quote #									te Re			061	.01				Samp	ple condition upon receipt	Qe	and a
		ŀ	Attached Parameter List	No		Yes		STEET ST							001	071	2021		Time	Rec'd:	1710L	Initials	Ot.
		Ľ	Identification of Regulation under wh	ich the sample(s)	fall: No Requi	rement t	o Report	Sample D	la audi - 11	_			Temp	eratur	e Upor	Rece	ipt -	27	: 43		°c	miniats <	4C
			Requested Turnaround Time:				Арр		esuits U	nder /	Any Re	gulati	on for V	Vaste	water 1	Freatm	ent						
		F	Data Transf				Req'		24-48	h				5		5-70			7	-			
ddres	s:	1	Data Transfer Contact: Don irvine 36 Main St. E		Data Transf	er Conta	ct: Dan I-			_							,	L		7-10d	Other Specify:		
		S	Shelburne, ON		130 Main St	E	CL. DON IN	rine		Inve	oice To	: Ont	tario Cle	an W	ater A	dency							
leph	one:	51	9V 3K5 19-321-9474		Shelburne, (L9V 3K5	N				100	Main Iburne	St. E								1	Laboratory: SGS Lakefield 185 Concession St.	Research Li	td
x: nail:		51	19-925-0322		519-321-947					L9V	3K5									L	akefield, ON		
iidil.		din	rvine@ocwa.com		519-925-032					(518	9) 925- 9) 925-	1938								K	(OL 2H0		
			Sample		dirvine@ocwa.co	om				apw	esthiah	lands	@ocwa	com						70	05-652-2000 05-652-6365		
m/r		Т	Cample					CI Residu	al	T			40.5.0.110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						Ca	arrie,greenlaw@sgs.com		
Cro	Station Number				1			_			T	_		_	Para	maters					Comments		
Station Acronym	(Short		Sample Location Name	Date 8	k Time	ttes	Field Total (mg/L)	E)	pe (In	nde	sno	AN)	gen	le le		6				Comments		
tatic	Name)			Colle	cted	18	T Pl	99	ubin 19/L)	CBODS	Ids	Total	E E	litro	Itrog	2	ved	=				MO	1
()	-			17021/	06/07	# of Bottles	F -	Field Free (mg/L)	Combined (mg/L)	CB	Total Suspended Solids	Total Phosphorous	Total Ammonia Nitrogen (TAN)	Nitrate-Nitrogen	Nitrite-Nitrogen	TKN	Dissolved Organic Carbon	E.Coli				Upload to MOE	
/ell	We11	-	Monitoring Well #11 (MW-11)	100		-		Fie			Tota	윤	Nitro Par	litra	in the second		rgar gar	"				load	
			Monitoring vveii #11 (MVV-11)	134	0'	3								100.00	-	-	ō					್ದಿ	
ell	We12	-	Monitoring Well #12 (MW-12)	1221	_					X	X	X	X	X	X	X	X	x			Well Depth = 1 - 10	Van FW	-
		-	172 (IVIVV-12)	100	>	3				х	х					-					Well Depth = 1 · 10	m Yes X	No.
	- 1									^	^	X	X	Х	X	X	X	X			Well Depth = 109	m Yes X	-
-		+				1 1			- 0							-	-	-	_		vveii Depth = 0 1	m No	No
							-	_						- 1				- 1					
+		+					- 1	- 1								-	-	-		_			
	- 1					-	-	_						- 1			- 1	- 1			5		
+	-	+														+	+	-	-	-			
								-		-													
1		+						- 1						1			-	-	-	+			
							-	-		-													
		1															+	+	-	-]
		1						_	-	-	-												
		1												T			+	-	-				
							_	_	-	-	-												Г
		-															-	-	-	-			
r Nar	ne:		Cillian																				Г
974			ntents, Dis - Disinfection, Down - Downstream, pestion, Bps - Biosolids pri super, Bss - Biosolid kened Waste Activated Sludge, WAS - Waste, SSO - Santiary Sower Overflow	FA	12Am	100	mpler Sig		i i i		-	_						_					F

			waterworks/Project # 141				_									- 1	UN	173	17					
			Facility Name Mini Lake	es WWTP	176					_	C of (C LIM	S No	:			UIU	160	16				- 1	Page 3 o
			Org. # 1418							L	abora	atory S	ection	1		,		_				trent in		
			Quote #							10		Date R			06	/mah	or Ky	7	Sa	mple co	ndition upon rec	eipt	C	rody
			Attached Parameter List	No		Yes								-	0	1071	051 /		Time Rec	'd: 17	10hs	Init		Coy
			Identification of Regulation under which	the sample(s) fall: No	Requirem	ent to R	enort (-				Tempe	rature	Upon Rec	eipt 27	cx :	ζ,	°C		1100	colto	77
			Requested Turnaround Time:				opon	ample H	esults U	nder A	Any Re	gulatio	n for V	Vastev	vater 1	Freatment				U				
		Į					App	o. 'd	24-4	вы				Г	77	712.070				_				
dres	s:	-	Data Transfer Contact: Don irvine 136 Main St, E	Data	Transfer C	2									X	5-7d			7-10)d	Other Sn	pecify:		
		1	Shelburne, ON	136	Main St. E	ontact:	Don Ir	vine		Inv	voice 7	o: Or	tario C	lean V	Vater	Agency				_	0,			
epho	ne:	_ [[L9V 3K5	Shell	burne, ON							St. E				gency				Labora	atory: SGS Lake	efield Reso	earch I t	d
C		5	519-321-9474 519-925-0322	L9V :	3K5 321-9474					L9	V 3K5	e, ON								10000	oncession St		aich Lic	u
ail:			irvine@ocwa.com	519-9	925-0322					(51	9) 925	-1938								KOL 21	eld, ON			
				dirvine	@ocwa.com					(51 any	9) 925 weethir	-0322	-	va,com			_			705-65	2-2000			
E	-	T	Sample		1			CI Resid		1000	TO BUTTO	mand	Planocr	va,com	1					1705-65	2-6365 reenlaw@sgs.c			
5	Station	1					7	T =		+	_	_				Paramater	6			Tantie 4	reenjaw@sgs.c	om		
Š	Number (Short		Sample Location Name	Date & Tim	.	les	gE.	1/6u	J/Gu	1 3	S E	le le	5						1		Comme	nts		
oracon Acronym	Name)	1	and Escation Name	Collected		Bott	TE .	90	5	E 5	OIL S	ig og	rog	1_	1 =		2 2						1 8	OCWA
5					Δ.	# of Bottles	ield Total (mg/L	Field Free (mg/L)	Combined (mg/L)	Total	Total Ammonia	Nitrate-Nitrogen	Nitrite-Nitrogen	TKN	E.Coli	표	Femperature						W o	8
ld	Hld1		614.4	2021/06/	0")	*	Field	100	E O	4	ota	fra	I ti	1	1	-	dua	- 1	1 1				ad	5
		1	SW1 - Upgradient background	1430		2			-	-	-	2	12	-	_		F		1 1				Upload to MOE	Upload
ld	HId3	-	CIMP West			2			1	X	X	X	X	X	X	8.2	29.0			-				5
			SW3 - Within main pond	1445		2				1	-	-	-	-	-	0 -	21.0		1 1					Yes
d	Hld4		SIMM OUTLAND			-	-			×	X	X	X	X	X	8-1	28-6			-			No	No
-			SW4 - Outlet from main pond	1455		2								-		01	10 N		1 1				Yes	
d	HId5	-	SW5 - Upgradient tributaries at			_				X	X	X	X	X	X	7.94	28-3						No	No 🗆
+			County Rd No. 34	1215		2							-			1 1	200		1 1				Yes	
	HId6	-	SW6 - Outlet from property			_				X	X	X	X	X	X	1-1-98	28.0					-	No	No
+		4	Sauct Holli property	1500		2				V						1 1	/							
				1-00	-	-				X	X	X	X	X	X	7.90	19-11						No	No
+	-	+			- 1									-	-	110	1						Yes X	Yes X
		1			-	-	-																	No 🗌
+	-	+											-	-	-							11.0	No I	Yes
1						-	-																	No
_														1		-								Yes No
														5/2	-				1					
Nar	ne:		mbents, Dis – Disinfection, Down – Downstream, Er osolids pri super, Bas – Biosolids sec super, Baty dad Sludge, WAS – Waste Activated Sludge, Indiv Overflow	TI A	riZAM	T	_	gnature:		4				^	_									Yes No

* Station Actorym: Cell - Cell Contants, Dis - Disinfection, Down - Downstream, Eff - Final Etfluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids - raw studge, Bth - Biosolids thickening, Bpd - Biosolids studge quality, Beog - Biosolids solid quality, DAF - Dissolved Air Floatation, Grit - Primary TreatmentCirt, PrEI - Primary Effluent, RAS - Return Activated Studge, Bth - Biosolids thickening, Bpd - Biosolids primary digrestion. Bpd - Biosolids solid quality, DAF - Dissolved Air Floatation, Grit - Primary TreatmentCirt, PrEI - Primary Effluent, RAS - Return Activated Studge, Bth - Biosolids thickening, Bpd - Biosolids primary digrestion. Bpd - Biosolids solid quality, DAF - Dissolved Air Floatation, Grit - Primary TreatmentCirt, PrEI - Primary Effluent, RAS - Return Activated Studge, SBR - Secondary TreatmentSBRs, ScEf - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary TreatmentSBRs, ScEf - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary TreatmentSBRs, ScEf - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary TreatmentSBRs, ScEf - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR - Secondary Effluent, RAS - Return Activated Studge, SBR

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (QUARTERLY - Page 1 of 3)

1chol Page 1 of 3 S S Yes V 9 8 Yes V Nes des __ ≥ Sara Ses № Yes Upload to OCWA Yes V Yes 🗸 No No Yes No o_N Laboratory: SGS Lakefield Research Ltd **3** 2 Yes **8** € Yes % Yes \$ 2 S 2 Yes 2 Yes % Yes No Upload to MOE 2 ٤ 1-98 m S my E 2.16m ٤ Well Depth =) ·) 4 m Well Depth = 2-97 m Well Depth = 2 · 15 Well Depth = 2.55 Specify: Well Depth = 2-3 Well Depth = 2-18 Sample condition upon receipt Comments 185 Concession St. Lakefield, ON Well Depth = Well Depth = Well Depth = 06/09/2021 (A) Time Rec'd: 17/12 KOL 2H0 705-652-2000 705-652-6365 Other ၀ 7-10d 3 2743 E.Coli × × × × × × × × Organic Carbon × × × Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment Dissolved × × × × × P-2-× Paramaters Invoice To: Ontario Clean Water Agency IKM × × × × × × × × × Nitrite-Nitrogen × × × × × × × × × × Nitrate-Nitrogen × × × × × × × × (NAT) negotiN C of C LIMS No: Laboratory Section Fotal Ammonia × × × Date Rec'd: × × × × × Рһоѕрһогоия (519) 925-1938 (519) 925-0322 136 Main St. E Shelburne, ON × × × [ofa] × × × × × × Solids Debneqsu2 IstoT × **L9V 3K5** × × × × × × × × CBOD2 × × × × × 24-48 h × × × × (mg/r) Combined CI Residual Sampler Signature: Field Free (mg/L) Data Transfer Contact: Don Irvine App. Reg'd (7/6w) Field Total # of Bottles 3 3 3 3 3 3 3 3 136 Main St. E Shelburne, ON 519-321-9474 60 L9V 3K5 Date & Time Collected 1901 004 130 13 205 130 727 77 120 309 Mini Lakes WWTP 0 1600 2 1418S Sample Location Name Requested Turnaround Time: Data Transfer Contact: Don irvine Monitoring Well #10 (MW-10) Sample Monitoring Well #1 (MW-1) Monitoring Well #2 (MW-2) 1418 Monitoring Well #4 (MW-4) Monitoring Well #5 (MW-5) Monitoring Well #6 (MW-6) Monitoring Well #8 (MW-8) Monitoring Well #9 (MW-9) Monitoring Well #7(MW-7) Waterworks/Project # Attached Parameter List Facility Name 136 Main St. E Shelburne, ON 519-321-9474 Org. # Quote # -9V 3K5 Station Number (Short Name) Wel2 Wel1 Wel4 Wel5 Wel6 We10 Wel7 Wel8 Wel9 Sampler Name: Telephone Address Station Acronym Well Well Well Well Well Well Well Well Well

* Station Acronym. Cell Contents, Dis - Disinfaction, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, 70° - Upstream, Well - Mortforing Well, Air - Aenation, Brs - Biosolids, and sec super, Bids - Biosolids blickening Bpd - Biosolids successed Super, Bids - Biosolids blickening Bpd - Biosolids solid quality, DAF - Dissolved Alf Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effluent, RAS - Return Activated Sludge, Bnd - Biosolids blickening Bpd - Biosolids primary Saver Overflow, SSO - Sanitary Saver Overflow, SSO - Sanitary Saver Overflow.

CSO - Combined Saver Overflow, SSO - Sanitary Saver Overflow.

Revision # 10

Revised: 2019.09,16

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (QUARTERLY - Page 1 of 3)

1418 Date Review Date & Time Review Date & Time Review Date							-	hannels		The state of the s						
Report Sample Results Under Any Regulation for Waselwater Treatment Regide Regide Results Under Any Regulation for Waselwater Treatment Regide			450]	Doratory a	Section		,	,		Sample condition		
Comments		Attached Parameter List	No				T	Date R	(ec'd:	06	601	ارير	-	40		200
Comments		Identification of Regulation under whic	the sample(s) fall: No Requir	ement to Re	aport Sam	ple Results	Under A	ny Regula	Tempe	Prature U	pon Rec		700			
Circe idea 24-48 h		Requested Turnaround Time:			App			,		asiewal	er Ireatr	nent				
Comments		Data Transfer Contact: Dec.			Req'd	24-	48 h			×	5-7	P,				
Telefular Commonts	Address:	136 Main St. E	Data Transfe	Sonta	on Irvine		Im							Other	ily:	
Comments		Shelburne, ON L9V 3K5	136 Main St.				136	Main St F	ntario Cle	an Wate	r Agency			ahoratonic Coc.		
Clearing Comments	Telephone:	519-321-9474	L9V 3K5	2			Shel	burne, ON						185 Concession St.	Id Researc	Ltd .
Comments	mail:	519-925-0322 div/ine@ocwa.com	519-925-0327			$\ $	(519)	925-1938						Lakefield, ON K0L 2H0		
CI Residual Comments Com			divine@acwa.co	El			(519)	925-0322						705-652-2000		
Field Free (mg/L) Fiel	w	Sample					apwa	strigniano	1s@ocwa	.com				705-652-6365		
Field Free (mg/l)			-		5	esidual	+			-	aramater	, so		oo:sassingw@sas.co	cl	П
The Continuence of the Signature: Property Propert			e & Time		(7/ճա	pəuiqu		lids	sinomn		Иәболі	yed	110	Comments		
The control of the	+		0/00/		1)	Con		DT So	A lst	_) oini	E.C.			-
Note			5	"	+			+	oT	-	nin.	g sgnO				0.0505
Well Depth = Of m Vos X		,	1325	2 "	+		×		-	-			×		E	
mpler Signature: Tav Sewape. ScreySecondary Bypass/Cp - Upstream, Welf. Monitoring Well. Aer - Aemtion. Brs - Biosolids-raw sludge. Bh - Biosolids thickening. Bod - Biosolids primary. Biosolids soil quality, Disf - Disabled. Girt. Primary Treatment/Grit. Primary Treatment, Ref Re-servation, Test- Testing Treatments Ref Re-servation. Testing Treatments Ref Re-servation. Testing Treatments Ref Re-servation. Testing Treatments Ref Re-servation. Testing Treatments Allo - Actific. Tells - Biosolids Sprass, Hold - Holding 1909. Revision # 10				,	+	+	×	-	×				_	+"	E	ž ș
mpler Signature: Tav Sawape, ScBy - Secondary Bypase, Up - Upstream, Werf Monitoring Well, Per - Aeration, Brs - Biscolids-raw sludge, Bh - Biscolids thickening, Bpd - Biscolids primary Treatment, Ref Primary Treatment, Ref Primary Treatment, Ref Review Editor, 1989 - Secondary Treatmenty Bpd - Biscolids primary Treatment, Ref Review Editor, 1989 - Secondary Treatmenty Bypase, Loht - Lanchate, PrTr - Primary Treatment, Ref Tertiary Treatment, Allo - Actiflo, TeBy - Tertiary Bypase, Holding Tank, Barrier By Bypase, Holding Tank, Bypase, Holding Tank, Barrier Bypase, Holding Tank, Bypase, By													-			2
The Signature: The Signature: The Secondary Bypass / De - Destream Welf - Monitoring Well, Aar - Aeration, Bis - Biosolids-raw sludge, Bith - Biosolids thickening, Bod - Biosolids primary and quality. DAF - Dissolved Air Floatinany Treatment Cirit, PEE - Primary Treatment, ReAr - Re-erration, Test - Tertiary Treatment, ReAr - Re-erration, Test - Tertiary Treatment, Allo - Actific, Telly - Tertiary Bypass, Hold - Holding Tank, Revision # 10								-		+	1		-			
mpler Signature: The Sawage Seby - Secondary Bypass/Up - Upstream, West Monitoring Well, Arer - Aeration, Brs - Biosolids-raw sludge, Bth - Biosolids thickaning, Bod - Biosolids primary Sin, Sept - Septage, Lith - Leachate, PrTr - Primary Treatment, ReAr - Re-enation, Test - Tertary Treatment, Afto - Actflo, TaBy - Tertary Bypass, Hold - Holding Tank, Revision # 10				-	-	+				+		-				
mpler Signature: The Sawage. Secondary Bypass Lender Annibring Well. Aer Aeration. Brs. Biosolids-raw sludge. Bth Biosolids thickening. Bed - Biosolids primary allocation. Grit Primary Treatment, Refer Re-eeration. Tert Tertiary Treatment, Refer. Re-eeration. Tert Tertiary Treatment, Refer. Revision # 10				+	+			-		+						
mpler Signature; The Secondary Bypass of the Condary Bypass of the Condary Bypass of the Condary Treatment, Ref Aention, Brs Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Treatment, Ref Primary Treatment, Ref Primary Treatment, Ref Re-genation, Tert Terlary Treatment, Afto - Actifo, TeBy - Tertary Bypass, Hold - Holding Tank, Revision # 10					+					-						
mpler Signature: Taw Sawage, ScBy - Secondary Bypass-, Up - Upstream, Wedf - Monitoring Well, Aer - Aeration, Brs - Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Biosolids soil quality, DAF - Disabled Alf Floatistion, Grif - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Afto - Actifo, TeBy - Tertiary Bypass, Hold - Holding Tank, Revision # 10				-	_					-		-				
mpler Signature: Taw Sawage, ScBy - Secondary Bypass-Up - Upstream, Werlf. Monitoring Well, Aer - Aemton, Brs - Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Blosolids soil quality, DAF - Disabled Alf Floatistion, Grit - Primary Treatment, ReAr - Re-seration, Text - Tertings Efficient, Afto - Actific, TeBy - Tertings Primary Treatment, ReAr - Re-seration, Text - Tertings Treatment, Afto - Actific, TeBy - Terting Bypass, Hold - Holding TReatment, Afto - Actific, TeBy - Terting Bypass, Hold - Holding TReatment, Afto - Actific, TeBy - Terting Bypass, Hold - Holding TReatment, Afto - Actific, TeBy - Terting Bypass, Hold - Holding TReatment, Afto - Actific, TeBy - Terting Bypass, Hold - Holding TReatment, Afto - Actific, TeBy - Terting Bypass, Hold - Actific, Teby - Texting Bypass, Hold - Actific, Teby - Texting Bypass, Hold - Actific, Textin				-	+			1	+	1						
mpler Signature: The service of the	ler Name:	11 -		- -	\parallel											
Taw Sawage, ScBy - Secondary Bypass-Up - Upstream, Werf - Montoring Well, Aer - Aeration, Brs. Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Blosolids soil quality, DAF - Disabled Alf Floatistion, Grit. Primary Treatment/Grit, Prim y Efficient RAS - Return Activated Sludge, 8BR - Secondary Treatment/SBRs, Sept. Septage, Lcht - Leachate, Primary Treatment, ReAr - Re-seration, Tert - Tertiary Treatment, Afto - Actific, TeBy - Tertiary Bypass, Hold - Holding T Revision # 10	n Acronym: Cell - C n, Bsd - Biosolids s	ec. digestion. Brs. Biocetics, Down - Downstream, E	H-Final Emban Prev. Primer C	Sampl	er Signatu	re:		X	Ser	1						
Revision # 10	ary Effluent, TWAS ombined Sewer O.	- Thickened Waste Activated Sludge, WAS - Waste Al verflow, SSO - Sanitary Sewer Overflow	sec super, Bskf - Blosolids sludge que citvated Sludge, IndW - Industrial Wassi	s, Raw - Raw Ilty, Bsoq - Bio swater, PStn -	Sewage, Sc solids soil qu Pump Stn, S	By - Seconda ality, DAF - D ept - Septage	y Bypass, C issolved Air Lcht - Lead	Jp - Upstrean Floatation, G	n, Wetf - Mo Srit - Primary Primary Tre:	nitoring We	all, Aer - Ar VGrit, PrEr. Ar - Re-aer	Primary Ett ation, Tert	Biosolids- luent, RAS Tertiary Tr	'aw sludge, Bth - Biosolids thickening, Bpd. - Return Activated Sludge, SBR - Secondar satment, Aflo - Actiflo, TeBy - Tertlary Bipas	Biosolids prim 7 Treatment/S 5, Hold - Hold	ary 3Rs, SoEf
												Revision	# 10		Revised	

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

digestion, Bod - Blosolids sea, Glegestion, Boy - Bernstebbn, Down - Downstream, Eff - Final Effluent, PBy - Primary Bypass, Raw - Raw Savage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Blosolids sea, Glegestion, Bod - Blosolids sea, Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Blosolids sea, Secondary Bod - Blosolids sea, Secondary Broad - Blosolids - Reverse - Blosolids - Blosolids - Reverse - Blosolids - Reverse - Blosolids - Reverse - Blosolids - Bloso
Sampler Signature:
× × ×
× × × ×
Field Free (mg Combined (mg/L) CBOD ₅ Total Suspende Solids Total Phosphorous Total Ammonia Nitrogen (TAN)
idual
apwesthighlands@ocwa.com
(519) 925-0322
(519) 925-1938
e, ON
App. 24-48 h
regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment
Temperature Upon Receipt
Date Reco.
Laboratory Section
C of C LIMS No:

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (QUARTERLY - Page 2 of 3)

Saraflica Page 3 of 3 Se Se Yes O Yes Yes X Yes X Nes % No Upload to OCWA Nes S Nes o √es % Laboratory: SGS Lakefield Research Ltd Yes Yes No Ses Yes Ves No Yes Upload to MOE Initials Specify: Sample condition upon receipt Comments 185 Concession St.
Lakefield, ON
KOL 2H0
705-652-2000
705-652-6365 Time Rec'd: 17/06-5 Other ပ 7-10d 1231 NV 27cx AN 120/ 60/90 18-6 0.828,0 1.94 28-3 29 1. Klob. Temperature Temperature Upon Receipt Paramaters Ÿ dentification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment P-5 Hd 3 Invoice To: Ontario Clean Water Agency 8 7 E,Coll × × × × × × TKN × × × × × C of C LIMS No: Laboratory Section Nitrite-Nitrogen × Date Rec'd: × × × × (519) 925-1938 (519) 925-0322 Nitrate-Nitrogen Shelburne, ON × × × × × 136 Main St. Nitrogen **L9V 3K5** × sinommA lsto I × × × × Phosphorous × × × 24-48 h **Total** × × Combined (mg/L) Cl Residua Field Free (mg/L) Data Transfer Contact: Don Irvine App. Reg'd (J\gm) lstoT blai-# of Bottles 2 2 N N N Shelburne, ON 519-321-9474 136 Main St. E 106/09 L9V 3K5 Date & Time 3 Collected Soo 777 5 Mini Lakes WWTP 2021 SW1 - Upgradient background SW5 - Upgradient tributaries at Sample Location Name Requested Turnaround Time: SW4 - Outlet from main pond Sample Data Transfer Contact: Don Irvine 1418 SW6 - Outlet from property SW3 - Within main pond County Rd No. 34 Waterworks/Project # Attached Parameter List Facility Name 136 Main St, E Shelburne, ON 519-321-9474 Org. # Quote # **L9V 3K5** 1 Station Number (Short Name) HIGH 무명 HIG4 Hes Hes HI46 Telephone Address: Sampler Name: Email: Station Acronym Hold Hold 무역 무 Hold

* Station Acromy: Cell - Cell Contants, Dis-Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw Raw Sawage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids-new sludge, Bih - Biosolids biologis, Brook - Biosolids sludge, Status - Biosolids sludge, Status - Biosolids sludge, Status - Biosolids sludge, Britary Board - Biosolids sludge, Britary Bypass, Lott - Leachata, PrTr - Primary Treatment, ReAr - Re-aeration, Test - Tertiary Treatment, Allo - Actific, TeBy - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer

Sate

Revision # 10

Revised: 2019.09.16



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

22-June-2021

Date Rec. : 09 June 2021 LR Report: CA12340-JUN21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Carbonaceous Biochemical Oxygen Demand (CBOD5) mg/L	Total Suspended Solids mg/L	Dissolved Organic Carbon mg/L	Phosphorus (total) mg/L	Total Kjeldahl Nitrogen as N mg/L	Ammonia+Amm onium (N) as N mg/L	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L	E. Coli cfu/100mL
1: Analysis Start Date			10-Jun-21	14-Jun-21	10-Jun-21	10-Jun-21	16-Jun-21	11-Jun-21	11-Jun-21	11-Jun-21	11-Jun-21	10-Jun-21
2: Analysis Start Time			17:06	12:17	21:52	16:32	16:02	19:05	15:07	15:07	15:07	11:40
3: Analysis Completed Date			15-Jun-21	15-Jun-21	18-Jun-21	13-Jun-21	21-Jun-21	13-Jun-21	16-Jun-21	16-Jun-21	16-Jun-21	14-Jun-21
4: Analysis Completed Time			13:42	14:34	07:55	22:28	21:39	21:49	14:35	14:35	14:35	08:28
5: Well Wel1-Monitoring Well #1 (MW-1)	09-Jun-21 14:00	27.0	< 4	4250	15	0.79	3.8	2.7	0.25	< 0.06	0.25	< 5
6: Well Wel2-Monitoring Well #2 (MW-2)	09-Jun-21 11:50	27.0	< 4	7	2	< 0.03	< 0.5	< 0.1	< 0.03	4.52	4.52	< 2
7: Well Wel4-Monitoring Well #4 (MW-4)	09-Jun-21 11:30	27.0	< 4	3	2	< 0.03	< 0.5	< 0.1	< 0.03	4.74	4.74	< 2
8: Well Wel5-Monitoring Well #5 (MW-5)	09-Jun-21 12:30	27.0	< 4	5	2	< 0.03	< 0.5	< 0.1	< 0.03	0.29	0.29	< 2
9: Well Wel6-Monitoring Well #6 (MW-6)	09-Jun-21 12:45	27.0	< 4	2	1	0.03	< 0.5	< 0.1	< 0.03	0.40	0.40	< 2
10: Well Wel7-Monitoring Well #7 (MW-7)	09-Jun-21 12:55	27.0	< 4	4	3	< 0.03	< 0.5	< 0.1	< 0.03	< 0.06	< 0.06	< 2
11: Well Wel8-Monitoring Well #8 (MW-8)	09-Jun-21 13:09	27.0	< 4	35	8	0.09	3.4	3.5	< 0.3	< 0.06	< 0.3	< 2
12: Well Wel9-Monitoring Well #9 (MW-9)	09-Jun-21 12:05	27.0	< 4	14	19	0.25	6.5	5.4	< 0.03	< 0.06	< 0.06	< 2
13: Well We10-Monitoring Well #10 (MW-10	09-Jun-21 10:55	27.0	< 4	24	2	< 0.03	< 0.5	< 0.1	< 0.03	< 0.06	< 0.06	< 2
14: Well We11-Monitoring Well #11 (MW-11	09-Jun-21 13:40	27.0	< 4	28	7	0.06	6.5	5.9	< 0.03	< 0.06	< 0.06	< 2
15: Well We12-Monitoring Well #12 (MW-12)	09-Jun-21 13:25	27.0	< 4	16	1	< 0.03	< 0.5	< 0.1	< 0.03	0.89	0.89	< 2



Works #:

1418S

Project : LR Report :

PO#017844 CA12340-JUN21

Carrie Greenlaw

Project Specialist, Environment, Health & Safety



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

21-June-2021

Date Rec.: 09 June 2021 **LR Report: CA12341-JUN21**

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					09-Jun-21 15:40	09-Jun-21 16:00
Temperature Upon Receipt [°C]					20.0	20.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	10-Jun-21	17:06	15-Jun-21	13:43	16	99
Dissolved Oxygen [mg/L]	10-Jun-21	10:24	11-Jun-21	08:49	5.7	
Total Suspended Solids [mg/L]	14-Jun-21	12:17	15-Jun-21	15:07	22	132
Alkalinity [mg/L as CaCO3]	11-Jun-21	08:04	15-Jun-21	10:02		305
pH [No unit]	10-Jun-21	11:55	15-Jun-21	10:02	7.44	7.60
Phosphorus (total) [mg/L]	10-Jun-21	16:32	13-Jun-21	22:28	0.50	2.77
Total Kjeldahl Nitrogen [as N mg/L]	16-Jun-21	16:02	18-Jun-21	15:29	11.3	25.2
Ammonia+Ammonium (N) [as N mg/L]	11-Jun-21	19:05	13-Jun-21	21:49	9.2	
Nitrite (as N) [mg/L]	16-Jun-21	09:23	16-Jun-21	15:40	0.95	
Nitrate (as N) [mg/L]	16-Jun-21	09:23	16-Jun-21	15:40	1.78	
Nitrate + Nitrite (as N) [mg/L]	16-Jun-21	09:23	16-Jun-21	15:40	2.73	
E. Coli [cfu/100mL]	10-Jun-21	11:40	14-Jun-21	08:29	2000	

Carrie Greenlaw Project Specialist,



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

21-June-2021

Date Rec. : 09 June 2021 LR Report: CA12342-JUN21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Hold Hld1-SW1-Upgradi ent background	6: Hold Hld3-SW3-Within main pond	7: Hold Hld4-SW4-Outlet from main pond	8: Hold Hld5-SW5-Upgradi ent tributaries at County Rd No 34	9: Hold Hid6-SW6-Outlet from property
Sample Date & Time					09-Jun-21 14:30	09-Jun-21 14:45	09-Jun-21 14:55	09-Jun-21 15:15	09-Jun-21 15:00
Temperature Upon Receipt [°C]					27.0	27.0	27.0	27.0	27.0
Field pH [no unit]					8.2	8.1	7.94	7.98	7.99
Field Temperature [celcius]					29.0	28.6	28.3	28.0	29.1
Phosphorus (total) [mg/L]	10-Jun-21	16:32	13-Jun-21	22:28	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Total Kjeldahl Nitrogen [as N mg/L]	16-Jun-21	16:02	18-Jun-21	15:30	< 0.5	< 0.5	0.8	< 0.5	< 0.5
Ammonia+Ammonium (N) [as N mg/L]	11-Jun-21	19:05	13-Jun-21	21:49	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrite (as N) [mg/L]	11-Jun-21	15:07	16-Jun-21	14:35	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Nitrate (as N) [mg/L]	11-Jun-21	15:07	16-Jun-21	14:35	< 0.06	< 0.06	< 0.06	0.41	< 0.06
Nitrate + Nitrite (as N) [mg/L]	11-Jun-21	15:07	16-Jun-21	14:35	< 0.06	< 0.06	< 0.06	0.41	< 0.06
E. Coli [cfu/100mL]	10-Jun-21	11:40	14-Jun-21	08:29	62	22	28	600	24



Works #:

1418S

Project : LR Report :

PO#017844 CA12342-JUN21

Carrie Greenlaw Project Specialist,

*Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PfBy - Primary Bypass, Raw Sevage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids sold generally, Bsoq - Biosolids sold quality, DAF - Dissolved All Floatation, Grit - Primary Treatment/Grit, PrE1 - Primary Effluent, RAS - Return Activated Sludge, WAS - Weste Activated Sludge, IndW - Industrial Wastewater, PSth - Pump Sth, Sept - Septage, Loht - Leschate, PTT - Primary Treatment, ReAr - Re-seration, Tert - Tertiary Treatment, Afto - Actifio, Tetty - Tertiary Bypass, Hold - Holding Tank, Sampler Name: Telephone: Address: Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY) 型 罪 Station Acronym Raw Station Number (Short Name) E# 里 519-925-0322 Data Transfer Contact: Don irvine 519-321-9474 9V 3K5 Shelburne, ON Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment Org. # 136 Main St. E Quote # Waterworks/Project # Attached Parameter List Facility Name Requested Turnaround Time Primary Clairfier (Grab) Sample Location Name Final Effluent (Grab) Final Effluent (Grab) 1418 Mini Lakes WWTP Sample できたと 1418S No 22/06/23 BN Date & Time São そころ 519-321-9474 519-925-0322 Shelburne, ON Data Transfer Contact: Don Irvine _9V 3K5 136 Main St. E ω # of Bottles Sampler Signature: Field Total App. Reg'd (mg/L) CI Residual Field Free (mg/L) 24-48 h Combined (mg/L) × Shelburne, ON Invoice To: Ontario Clean Water Agency
136 Main St. E × CBOD₅ (519) 925-0322 519) 925-1938 **Laboratory Section** C of C LIMS No: Total Suspended × × Date Rec'd: Solids and Total × × Phosphorous Temperature Upon Receipt Total Ammonia × Nitrogen (TAN) JUN 2 4 2021 × Nitrate-Nitrogen × Nitrite-Nitrogen Paramaters 5-7d × × TKN × D.O. × × pH × E.Coli Time Rec'd: × 7-10d Alkalinity Sample condition upon receipt K0L 2H0 705-652-2000 705-652-6365 Laboratory: SGS Lakefield Research Ltd
185 Concession St. Lakefield, ON ငိ Comments Specify: Initials Yes No. No O No Yes X No No No No No No S Yes No Yes Z_o Yes Upload to MOE Page 1 of 1 Z és ĕ éş No U S se Upload to OCWA

PANH 607633040649

607633040649 12tm

9.305.8

Revised: 2021.01.15



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

02-July-2021

72-001y-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 24 June 2021 **LR Report: CA13992-JUN21**

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier Raw Sewage (Grab)
Sample Date & Time					23-Jun-21 15:00	23-Jun-21 15:15
Temperature Upon Receipt [°C]					15.0	15.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	24-Jun-21	16:46	29-Jun-21	14:35	7	81
Dissolved Oxygen [mg/L]	24-Jun-21	15:58	25-Jun-21	14:22	7.1	
Total Suspended Solids [mg/L]	26-Jun-21	13:28	02-Jul-21	10:48	18	109
Alkalinity [mg/L as CaCO3]	25-Jun-21	08:21	02-Jul-21	09:55		320
pH [No unit]	24-Jun-21	16:52	02-Jul-21	09:55	7.60	7.48
Phosphorus (total) [mg/L]	25-Jun-21	17:53	29-Jun-21	21:03	0.38	2.28
Total Kjeldahl Nitrogen [as N mg/L]	29-Jun-21	15:11	30-Jun-21	10:31	5.4	23.4
Ammonia+Ammonium (N) [as N mg/L]	29-Jun-21	18:21	30-Jun-21	14:10	4.1	
Nitrite (as N) [mg/L]	26-Jun-21	08:21	28-Jun-21	16:51	0.64	
Nitrate (as N) [mg/L]	26-Jun-21	08:21	28-Jun-21	16:51	3.45	
Nitrate + Nitrite (as N) [mg/L]	26-Jun-21	08:21	28-Jun-21	16:51	4.09	
E. Coli [cfu/100mL]	24-Jun-21	16:58	27-Jun-21	12:35	3700	

Kimberley Didsbury,

Project Specialist,



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

22-June-2021

Date Rec. : 09 June 2021 LR Report: CA12340-JUN21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Carbonaceous Biochemical Oxygen Demand (CBOD5) mg/L	Total Suspended Solids mg/L	Dissolved Organic Carbon mg/L	Phosphorus (total) mg/L	Total Kjeldahl Nitrogen as N mg/L	Ammonia+Amm onium (N) as N mg/L	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L	E. Coli cfu/100mL
1: Analysis Start Date			10-Jun-21	14-Jun-21	10-Jun-21	10-Jun-21	16-Jun-21	11-Jun-21	11-Jun-21	11-Jun-21	11-Jun-21	10-Jun-21
2: Analysis Start Time			17:06	12:17	21:52	16:32	16:02	19:05	15:07	15:07	15:07	11:40
3: Analysis Completed Date			15-Jun-21	15-Jun-21	18-Jun-21	13-Jun-21	21-Jun-21	13-Jun-21	16-Jun-21	16-Jun-21	16-Jun-21	14-Jun-21
4: Analysis Completed Time			13:42	14:34	07:55	22:28	21:39	21:49	14:35	14:35	14:35	08:28
5: Well Wel1-Monitoring Well #1 (MW-1)	09-Jun-21 14:00	27.0	< 4	4250	15	0.79	3.8	2.7	0.25	< 0.06	0.25	< 5
6: Well Wel2-Monitoring Well #2 (MW-2)	09-Jun-21 11:50	27.0	< 4	7	2	< 0.03	< 0.5	< 0.1	< 0.03	4.52	4.52	< 2
7: Well Wel4-Monitoring Well #4 (MW-4)	09-Jun-21 11:30	27.0	< 4	3	2	< 0.03	< 0.5	< 0.1	< 0.03	4.74	4.74	< 2
8: Well Wel5-Monitoring Well #5 (MW-5)	09-Jun-21 12:30	27.0	< 4	5	2	< 0.03	< 0.5	< 0.1	< 0.03	0.29	0.29	< 2
9: Well Wel6-Monitoring Well #6 (MW-6)	09-Jun-21 12:45	27.0	< 4	2	1	0.03	< 0.5	< 0.1	< 0.03	0.40	0.40	< 2
10: Well Wel7-Monitoring Well #7 (MW-7)	09-Jun-21 12:55	27.0	< 4	4	3	< 0.03	< 0.5	< 0.1	< 0.03	< 0.06	< 0.06	< 2
11: Well Wel8-Monitoring Well #8 (MW-8)	09-Jun-21 13:09	27.0	< 4	35	8	0.09	3.4	3.5	< 0.3	< 0.06	< 0.3	< 2
12: Well Wel9-Monitoring Well #9 (MW-9)	09-Jun-21 12:05	27.0	< 4	14	19	0.25	6.5	5.4	< 0.03	< 0.06	< 0.06	< 2
13: Well We10-Monitoring Well #10 (MW-10	09-Jun-21 10:55	27.0	< 4	24	2	< 0.03	< 0.5	< 0.1	< 0.03	< 0.06	< 0.06	< 2
14: Well We11-Monitoring Well #11 (MW-11	09-Jun-21 13:40	27.0	< 4	28	7	0.06	6.5	5.9	< 0.03	< 0.06	< 0.06	< 2
15: Well We12-Monitoring Well #12 (MW-12)	09-Jun-21 13:25	27.0	< 4	16	1	< 0.03	< 0.5	< 0.1	< 0.03	0.89	0.89	< 2



Works #:

1418S

Project : LR Report :

PO#017844 CA12340-JUN21

Carrie Greenlaw

Project Specialist, Environment, Health & Safety



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

21-June-2021

Date Rec. : 09 June 2021 LR Report: CA12342-JUN21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Hold Hld1-SW1-Upgradi ent background	6: Hold Hld3-SW3-Within main pond	7: Hold Hld4-SW4-Outlet from main pond	8: Hold Hld5-SW5-Upgradi ent tributaries at County Rd No 34	9: Hold Hid6-SW6-Outlet from property
Sample Date & Time					09-Jun-21 14:30	09-Jun-21 14:45	09-Jun-21 14:55	09-Jun-21 15:15	09-Jun-21 15:00
Temperature Upon Receipt [°C]					27.0	27.0	27.0	27.0	27.0
Field pH [no unit]					8.2	8.1	7.94	7.98	7.99
Field Temperature [celcius]					29.0	28.6	28.3	28.0	29.1
Phosphorus (total) [mg/L]	10-Jun-21	16:32	13-Jun-21	22:28	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Total Kjeldahl Nitrogen [as N mg/L]	16-Jun-21	16:02	18-Jun-21	15:30	< 0.5	< 0.5	0.8	< 0.5	< 0.5
Ammonia+Ammonium (N) [as N mg/L]	11-Jun-21	19:05	13-Jun-21	21:49	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrite (as N) [mg/L]	11-Jun-21	15:07	16-Jun-21	14:35	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Nitrate (as N) [mg/L]	11-Jun-21	15:07	16-Jun-21	14:35	< 0.06	< 0.06	< 0.06	0.41	< 0.06
Nitrate + Nitrite (as N) [mg/L]	11-Jun-21	15:07	16-Jun-21	14:35	< 0.06	< 0.06	< 0.06	0.41	< 0.06
E. Coli [cfu/100mL]	10-Jun-21	11:40	14-Jun-21	08:29	62	22	28	600	24



Works #:

1418S

Project : LR Report :

PO#017844 CA12342-JUN21

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

15-July-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 07 July 2021 **LR Report: CA14983-JUL21**

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					07-Jul-21 09:55	07-Jul-21 09:50
Temperature Upon Receipt [°C]					18.0	18.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	08-Jul-21	17:59	13-Jul-21	15:19	13	65
Dissolved Oxygen [mg/L]	08-Jul-21	10:13	09-Jul-21	15:42	6.2	
Total Suspended Solids [mg/L]	11-Jul-21	09:55	13-Jul-21	15:57	26	60
Alkalinity [mg/L as CaCO3]	08-Jul-21	15:09	13-Jul-21	08:22		261
pH [No unit]	14-Jul-21	14:09	15-Jul-21	13:47	7.30	7.09
Phosphorus (total) [mg/L]	09-Jul-21	15:58	14-Jul-21	13:06	0.32	1.08
Total Kjeldahl Nitrogen [as N mg/L]	08-Jul-21	16:47	09-Jul-21	09:06	4.1	15.7
Ammonia+Ammonium (N) [as N mg/L]	09-Jul-21	20:40	12-Jul-21	11:46	2.0	
Nitrite (as N) [mg/L]	10-Jul-21	14:40	14-Jul-21	16:24	2.00	
Nitrate (as N) [mg/L]	10-Jul-21	14:40	14-Jul-21	16:24	1.54	
Nitrate + Nitrite (as N) [mg/L]	10-Jul-21	14:40	14-Jul-21	16:24	3.54	
E. Coli [cfu/100mL]	08-Jul-21	10:38	09-Jul-21	15:20	22400	

Carrie Greehlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Works #: 1418S

Project: PO#017844

27-July-2021

Date Rec.: 21 July 2021 LR Report: CA12905-JUL21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier Raw Sewage
Sample Date & Time					21-Jul-21 11:15	21-Jul-21 11:20
Temperature Upon Receipt [°C]					9.0	9.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	22-Jul-21	17:06	27-Jul-21	12:46	9	91
Dissolved Oxygen [mg/L]	22-Jul-21	09:53	27-Jul-21	09:07	7.9	
Total Suspended Solids [mg/L]	24-Jul-21	08:58	27-Jul-21	11:31	20	141
Alkalinity [mg/L as CaCO3]	22-Jul-21	09:11	27-Jul-21	08:26		311
pH [No unit]	22-Jul-21	09:11	27-Jul-21	08:26	7.58	7.56
Phosphorus (total) [mg/L]	22-Jul-21	15:27	23-Jul-21	12:58	0.38	11.8
Total Kjeldahl Nitrogen [as N mg/L]	22-Jul-21	15:54	27-Jul-21	12:00	2.1	23.1
Ammonia+Ammonium (N) [as N mg/L]	22-Jul-21	13:30	23-Jul-21	10:46	1.1	
Nitrite (as N) [mg/L]	23-Jul-21	08:00	26-Jul-21	14:50	1.28	
Nitrate (as N) [mg/L]	23-Jul-21	08:00	26-Jul-21	14:50	3.26	
Nitrate + Nitrite (as N) [mg/L]	23-Jul-21	08:00	26-Jul-21	14:50	4.53	
E. Coli [cfu/100mL]	22-Jul-21	09:05	23-Jul-21	10:24	2980	

Hawley Anderson, Hon.B.Sc Project Specialist Assistant, Environment, Health & Safety



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

18-August-2021

Works #: 1418S

5

Project: PO#017844

Date Rec.: 05 August 2021 LR Report: CA13280-AUG21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					05-Aug-21 08:45	05-Aug-21 08:50
Temperature Upon Receipt [°C]					14.0	14.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	06-Aug-21	13:52	11-Aug-21	17:43	9	78
Dissolved Oxygen [mg/L]	06-Aug-21	12:47	09-Aug-21	09:40	6.9	
Total Suspended Solids [mg/L]	11-Aug-21	11:16	12-Aug-21	13:19	26	313
Alkalinity [mg/L as CaCO3]	09-Aug-21	08:18	11-Aug-21	09:57		287
pH [No unit]	06-Aug-21	10:49	11-Aug-21	09:57	7.51	7.52
Phosphorus (total) [mg/L]	09-Aug-21	16:57	10-Aug-21	13:07	0.53	2.83
Total Kjeldahl Nitrogen [as N mg/L]	10-Aug-21	10:13	11-Aug-21	11:28	1.9	18.5
Ammonia+Ammonium (N) [as N mg/L]	06-Aug-21	21:42	09-Aug-21	14:04	0.6	
Nitrite (as N) [mg/L]	10-Aug-21	20:09	13-Aug-21	11:50	1.47	
Nitrate (as N) [mg/L]	10-Aug-21	20:09	13-Aug-21	11:50	4.45	
Nitrate + Nitrite (as N) [mg/L]	10-Aug-21	20:09	13-Aug-21	11:50	5.92	
E. Coli [cfu/100mL]	06-Aug-21	09:27	09-Aug-21	10:44	2900	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

26-August-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 18 August 2021 LR Report: CA14231-AUG21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					18-Aug-21 07:50	18-Aug-21 07:55
Temperature Upon Receipt [°C]					19.0	19.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	19-Aug-21	17:54	24-Aug-21	13:35	5	41
Dissolved Oxygen [mg/L]	19-Aug-21	10:02	20-Aug-21	15:49	7.8	
Total Suspended Solids [mg/L]	20-Aug-21	07:14	25-Aug-21	17:46	20	197
Alkalinity [mg/L as CaCO3]	19-Aug-21	13:12	24-Aug-21	19:34		288
pH [No unit]	19-Aug-21	13:12	24-Aug-21	19:34	7.63	7.80
Phosphorus (total) [mg/L]	19-Aug-21	17:39	20-Aug-21	15:17	0.46	1.45
Total Kjeldahl Nitrogen [as N mg/L]	19-Aug-21	21:35	20-Aug-21	15:56	2.5	13.1
Ammonia+Ammonium (N) [as N mg/L]	19-Aug-21	19:07	20-Aug-21	15:17	1.2	
Nitrite (as N) [mg/L]	20-Aug-21	11:08	23-Aug-21	14:34	0.25	
Nitrate (as N) [mg/L]	20-Aug-21	11:08	23-Aug-21	14:34	7.02	
Nitrate + Nitrite (as N) [mg/L]	20-Aug-21	11:08	23-Aug-21	14:34	7.27	
E. Coli [cfu/100mL]	19-Aug-21	10:41	23-Aug-21	08:12	5700	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

10-September-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 01 September 2021 LR Report: CA13061-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					01-Sep-21 09:25	01-Sep-21 09:30
Temperature Upon Receipt [°C]					16.0	16.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	02-Sep-21	17:05	07-Sep-21	19:26	18	61
Dissolved Oxygen [mg/L]	02-Sep-21	09:59	03-Sep-21	16:23	6.7	
Total Suspended Solids [mg/L]	03-Sep-21	11:50	07-Sep-21	20:01	41	108
Alkalinity [mg/L as CaCO3]	02-Sep-21	08:40	02-Sep-21	16:02		310
pH [No unit]	02-Sep-21	11:19	02-Sep-21	16:02	7.38	7.43
Phosphorus (total) [mg/L]	02-Sep-21	16:03	05-Sep-21	19:26	0.70	1.88
Total Kjeldahl Nitrogen [as N mg/L]	03-Sep-21	15:24	09-Sep-21	15:10	6.0	19.9
Ammonia+Ammonium (N) [as N mg/L]	02-Sep-21	17:45	03-Sep-21	14:17	3.5	
Nitrite (as N) [mg/L]	02-Sep-21	20:15	05-Sep-21	08:24	3.17	
Nitrate (as N) [mg/L]	02-Sep-21	20:15	05-Sep-21	08:24	2.51	
Nitrate + Nitrite (as N) [mg/L]	02-Sep-21	20:15	05-Sep-21	08:24	5.68	
E. Coli [cfu/100mL]	02-Sep-21	10:00	03-Sep-21	11:21	76000	

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Works #: NR-1418S **Project**: PO#017844

20-September-2021

Date Rec.: 10 September 2021 LR Report: CA13444-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Carbonaceous Biochemical Oxygen Demand (CBOD5) mg/L	Total Suspended Solids mg/L	Ammonia+Am monium (N) as N mg/L
1: Analysis Start Date			13-Sep-21	14-Sep-21	13-Sep-21
2: Analysis Start Time			17:25	13:23	17:56
3: Analysis Completed Date			20-Sep-21	15-Sep-21	15-Sep-21
4: Analysis Completed Time			11:01	09:27	11:52
5: Raw Raw-Raw (Grab Sample Point 7)	10-Sep-21 10:45	12.0	322	1570	0.2
6: Raw Raw-Raw (Grab Sample Point 15)	10-Sep-21 10:50	12.0	397	4370	0.5

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Works #: NR-1418S

Project: PO#017844

20-September-2021

Date Rec.: 10 September 2021 LR Report: CA13443-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C		(total)	Ammonia+Am monium (N) as N mg/L	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L
1: Analysis Start Date			13-Sep-21	14-Sep-21	13-Sep-21	15-Sep-21	15-Sep-21	15-Sep-21
2: Analysis Start Time			17:25	16:47	17:56	11:02	11:02	11:02
3: Analysis Completed Date			20-Sep-21	16-Sep-21	15-Sep-21	17-Sep-21	17-Sep-21	17-Sep-21
4: Analysis Completed Time			11:01	15:13	11:52	10:02	10:02	10:02
5: Raw Raw-Raw (Grab Sample Point 8)	10-Sep-21 10:58	12.0	26	1.35	< 0.1	< 0.03	9.47	9.47
6: Raw Raw-Raw (Grab Sample Point 10)	10-Sep-21 11:10	12.0	< 12		0.5	0.20	7.85	8.05
7: Raw Raw-Raw (Grab Sample Point 16)	10-Sep-21 10:59	12.0	< 12	1.20	< 0.1	< 0.03	6.34	6.34
8: Raw Raw-Raw (Grab Sample Point 18)	10-Sep-21 11:16	12.0	12		0.3	0.10	5.82	5.92

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Project: PO#017844

Works #: NR-1418S

21-September-2021

Date Rec.: 10 September 2021 LR Report: CA13445-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab Sample Point 19)	6: Eff Eff-Final Effluent (Grab Sample Point 20)
Sample Date & Time					10-Sep-21 10:32	10-Sep-21 10:33
Temperature Upon Receipt [°C]					12.0	12.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	13-Sep-21	17:25	20-Sep-21	11:01	5	8
Total Suspended Solids [mg/L]	14-Sep-21	15:28	20-Sep-21	15:56	13	37
Alkalinity [mg/L as CaCO3]	14-Sep-21	08:40	16-Sep-21	13:33	190	191
pH [No unit]	13-Sep-21	12:28	16-Sep-21	08:44	7.41	7.98
Phosphorus (total) [mg/L]	14-Sep-21	16:47	16-Sep-21	15:13	0.16	0.77
Total Kjeldahl Nitrogen [as N mg/L]	15-Sep-21	05:09	17-Sep-21	14:52	1.7	0.8

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Works #: NR-1418S

Project: PO#017844

24-September-2021

Date Rec.: 15 September 2021 LR Report: CA13557-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Raw Raw-Raw (Grab Sample Point 7)	6: Raw Raw-Raw (Grab Sample Point 15)
Sample Date & Time					15-Sep-21 10:55	15-Sep-21 10:57
Temperature Upon Receipt [°C]					20.0	20.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	16-Sep-21	16:32	21-Sep-21	18:55	305	471
Total Suspended Solids [mg/L]	17-Sep-21	11:41	20-Sep-21	14:09	2380	4220
Ammonia+Ammonium (N) [as N mg/L]	16-Sep-21	18:23	24-Sep-21	11:33	0.9	0.1

Carrie Greenlaw Project Specialist,



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: NR-1418S Project: PO#017844

24-September-2021

Date Rec. : 15 September 2021 LR Report: CA13558-SEP21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Raw Raw-Raw (Grab Sample Point 8)	6: Raw Raw-Raw (Grab Sample Point 10)	7: Raw Raw-Raw (Grab Sample Point 16)	8: Raw Raw-Raw (Grab Sample Point 18)
Sample Date & Time					15-Sep-21 11:00	15-Sep-21 10:05	15-Sep-21 11:00	15-Sep-21 11:07
Temperature Upon Receipt [°C]					20.0	20.0	20.0	20.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	16-Sep-21	16:32	21-Sep-21	18:55	< 12	< 12	15	15
Phosphorus (total) [mg/L]	18-Sep-21	09:33	20-Sep-21	11:05	1.20		1.42	
Ammonia+Ammonium (N) [as N mg/L]	16-Sep-21	18:23	23-Sep-21	15:37	< 0.1	0.3	0.2	0.1
Nitrite (as N) [mg/L]	17-Sep-21	10:01	22-Sep-21	15:24	< 0.03	0.51	0.14	0.11
Nitrate (as N) [mg/L]	17-Sep-21	10:01	22-Sep-21	15:24	7.22	6.73	4.49	2.48
Nitrate + Nitrite (as N) [mg/L]	17-Sep-21	10:01	22-Sep-21	15:24	7.22	7.24	4.63	2.59



Works #: Project : LR Report :

NR-1418S PO#017844 CA13558-SEP21

Carrie Greenlaw Project Specialist,



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

22-September-2021

Works #: NR-1418S

Project: PO#017844

Date Rec.: 16 September 2021 LR Report: CA13559-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab Sample Point 19)	6: Eff Eff-Final Effluent (Grab Sample Point 20)
Sample Date & Time					15-Sep-21 11:15	15-Sep-21 11:17
Temperature Upon Receipt [°C]					8.0	8.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	16-Sep-21	16:32	21-Sep-21	18:56	14	15
Total Suspended Solids [mg/L]	17-Sep-21	14:30	20-Sep-21	11:48	15	75
Alkalinity [mg/L as CaCO3]	17-Sep-21	08:18	21-Sep-21	14:33	188	167
pH [No unit]	16-Sep-21	15:44	17-Sep-21	15:44	7.37	7.60
Phosphorus (total) [mg/L]	18-Sep-21	09:33	20-Sep-21	11:05	0.47	0.18
Total Kjeldahl Nitrogen [as N mg/L]	17-Sep-21	17:00	22-Sep-21	12:15	1.1	1.3

Hawley Anderson, Hon.B.Sc Project Specialist Assistant, Environment, Health & Safety



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S

Project: PO#017844

22-September-2021

Date Rec.: 15 September 2021 LR Report: CA13556-SEP21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					15-Sep-21 11:21	15-Sep-21 10:50
Temperature Upon Receipt [°C]					20.0	20.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	16-Sep-21	16:32	21-Sep-21	18:55	10	43
Dissolved Oxygen [mg/L]	16-Sep-21	10:43	17-Sep-21	14:28	5.9	
Total Suspended Solids [mg/L]	17-Sep-21	14:30	20-Sep-21	11:46	32	74
Alkalinity [mg/L as CaCO3]	17-Sep-21	08:18	17-Sep-21	15:44		256
pH [No unit]	16-Sep-21	15:44	17-Sep-21	15:44	7.43	7.61
Phosphorus (total) [mg/L]	18-Sep-21	09:33	20-Sep-21	11:05	0.58	3.36
Total Kjeldahl Nitrogen [as N mg/L]	17-Sep-21	17:00	20-Sep-21	12:57	1.6	14.8
Ammonia+Ammonium (N) [as N mg/L]	16-Sep-21	18:23	17-Sep-21	12:17	0.9	14.0
Nitrite (as N) [mg/L]	17-Sep-21	21:12	22-Sep-21	15:23	0.71	
Nitrate (as N) [mg/L]	17-Sep-21	21:12	22-Sep-21	15:23	5.27	
Nitrate + Nitrite (as N) [mg/L]	17-Sep-21	21:12	22-Sep-21	15:23	5.98	
E. Coli [cfu/100mL]	16-Sep-21	11:15	20-Sep-21	08:55	3300	

Carrie Greenlaw Project Specialist,

Ontario
Clean
Water
Agency -
Request fo
r Laboratory
Services
and CHAIN
OF CUSTODY
- SEWAGE (
QUARTERLY .
Page 1
of 3)

C of C LIMS No: Sep 1500
Laboratory Section Sample condition upon receipt
29 Justice Time
9 .

Sampler Name	Well	Well	Well	Well	Well	Well	Well	Well	Well	Station Acronym		Eman.	Fax:	Telephone		Address		
dame:	We10	Wel9	Wel8	Wel7	Wel6	Wel5	Wel4	Wel2	Wel1	Station Number (Short Name)				e:				
			i.	9	1						1	divii	519	519	L9V	136	Data	
0	Monitoring Well #10 (MW-10)	Monitoring Well #9 (MW-9	Monitoring Well #8 (MW-8)	Monitoring Well #7(MW-7)	Monitoring Well #6 (MW-6	Monitoring Well #5 (MW-5)	Monitoring Well #4 (MW-4)	Monitoring Well #2 (MW-2)	Monitoring Well #1 (MW-1)	Sample Lo		dirvine@ocwa.com	519-925-0322	519-321-9474	L9V 3K5	136 Main St. E	Data Transfer Contact: Don irvine	Requested Turnaround Time
GEORDIE	1#10 (MW-10)	1#9 (MW-9)	#8 (MW-8)	II #7(MW-7)	II #6 (MW-6)	II #5 (MW-5)	II #4 (MW-4)	II #2 (MW-2)	II #1 (MW-1)	Sample Location Name	Sample						t: Don irvine	round Time:
CHECTCE	09/29/21-0510	2101-12/22/60	4560-12/62/60	09/29/21-0937	09/29/21-0855	01100-12/121/120	09/29/21-0825	09/20/10-0835	09/29/21-1003	Date & Time Collected		dirvine@ocwa.com	519-925-0322	519-321-9474	L9V 3K5	136 Main St. E	Data Transfer Contact: Don Irvine	
	ω	ω	ω	ω	ω	ω	ω	ω	ω	# of Bottles						- 1	Contact:	
Sample										Field Total (mg/L)							Don In	App. Req'd
Sampler Signature										Field Free (mg/L)	CI Residual						ine	
ire:										Combined (mg/L)	ual							24-48 h
	×	×	×	×	×	×	×	×	×	CBOD5	П	apw	(519	(518	L9V	136	Invo	
	×	×	×	×	×	×	×	×	×	Total Suspended Solids		esthigi	(519) 925-0322	(519) 925-1938	L9V 3K5	136 Main St. E	ісе То	
	×	×	×	×	×	×	×	×	×	Total Phosphorous		nlands	0322	1938	S	St. E	Onta	
	×	×	×	×	×	×	×	×	×	Total Ammonia Nitrogen (TAN)		apwesthighlands@ocwa					Invoice To: Ontario Clear	
	×	×	×	×	×	×	×	×	×	Nitrate-Nitrogen		a.com				- 1	21	×
	×	×	×	×	×	×	×	×	×	Nitrite-Nitrogen	Para						Water Agency	_
2	×	×	×	×	×	×	×	×	×	TKN	Paramaters						ency	5-7d
071	×	×	×	×	×	×	×	×	×	Dissolved Organic Carbon	u l							
\	×	×	×	×	×	×	×	×	×	E.Coli								
- 1																		
) (7-10d
												carrie	705-6	705-6	Lakefield K0L 2H0	185 C	Labor	
	Well	Well	Well	Well	Well	Well	Well	Well	Well			carrie.greenlaw	705-652-6365	705-652-2000	Lakefield, ON K0L 2H0	185 Concession St	atory:	Other
	Well Depth =	Well Depth =	Well Depth =	Well Depth =	Well Depth =	Well Depth =	Well Depth =	Well Depth =	Well Depth =		Com	(0)	55	0	Z	sion S	SGSL	
	= 1.86m	= 0.90 m	=1.81 m	=1.94 m	= 1,90 m	=1.95 m	= 2.40 m	= 1.35 m	= 2.22 m		Comments	sgs.com					Laboratory: SGS Lakefield Research Ltd	Specify:
	No Yes	No Yes	No Yes	No Yes	No No	Nes C	No Yes	No Yes	n Yes	Upload to MOE							earch Lto	
	No Yes	Ves Ves	Ves V	band band	N Yes	Ves V	U⊠ Nes □⊠	∠ Ves □ V	□⊠ Ses □⊠	Upload to OCWA	Α .						-	
								니의				Ш						Ī

Station Acronym: Cell - Cell Contents. Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass. Raw - Raw Sewage, ScBy - Secondary Bypass. Up - Upstream, Well - Monitoring Well, - Mark - Primary Bussel, Blosolids raw studge, Bth - Biosolids thickening, Bpd - Biosolids primary digestion, Bad - Biosolids sec. digestion, Bad - Biosolids sec. digestion, Bpd - Biosolids sec. super, Bsiq - Biosolids sec super, Bsiq - Biosolids sec super, Bsiq - Biosolids soil quality, Bsoq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEr - Primary Effluent, RAS - Return Activated Sludge, Bth - Biosolids sinding sec. super, Bsiq - Biosolids soil quality, Bsoq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Srit, PrEr - Primary Effluent, RAS - Return Activated Sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Secondary Figure Bad - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment, RAS - Return Activated Sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Secondary Figure Bad - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment, RAS - Return Activated Sludge, Bth - Biosolids primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Activated Sludge, Bth - Biosolids thickening, Bpd - Biosolids primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Activated Sludge, Bth - Biosolids primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Activated Sludge, Bth - Biosolids primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Activated Sludge, Bth - Biosolids primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Raw - Raw Sewage, ScBy - Second

Revision # 10

([vvater works/Froject #	777						00.0	-	0															
	Fa	Facility Name	Mini Lakes WWTP	WWTP					Laboratory Section	atory S	ectio	=	5	1	5				Samp	ole co	Sample condition upon receipt	npon	eceipt		Q	1
	9	Org.#	1418						_	Date Rec'd:	ec'd:		3	6	7	1302		Time Rec'd:	Rec'd	14	45	1		Initials	B	1
	Atta	Quote # Attached Parameter List		No	Yes						Ter	Temperature	ture U	Upon Receipt	ceipt	1	5	K.	W	റ്						
	lde	ntification of Regula	ation under which th	Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment	ent to F	Report Sa	ample Res	sults Und	ler Any	Regula	tion fo	or Wa	stewati	er Trea	atment	283.7										
		Requested Turnaround Time	ound Time:			App		24-48 h				_	×		5-7d				7-10d		Other		Specify			
	Г					Keqa													1000		-					1
	Dat	Data Transfer Contact: Don irvine	: Don irvine	Data Transfer Contact: Don Irvine	Contact	Don Irvi	ne		Invoice To: Ontario Clean Water Agency	To: C)ntario	Clea	n Wate	r Age	ncy					Labo	ratory:	SGS	Laboratory: SGS Lakefield Research Ltd	Researc	h Ltd	- 1
Address:	136	136 Main St. E		136 Main St. E					136 Main St. E	ain St.	m									185	185 Concession St.	Sion S	ď			- 1
	She	L9V 3K5		L9V 3K5					L9V 3K5	ime, O	Z									Lakefield	Lakefield, ON KOL 2HO	ž				
Telephone:	519	9-321-9474		519-321-9474					(519) 9	(519) 925-1938	38									705-	52-20	8				- 1
Fax:	519	519-925-0322		519-925-0322					(519) 925-0322	25-032	22									705-	705-652-6365	65				
Email:	divi	ine@ocwa.com		dirvinei@ocwa.com					apwesthighlands	thighla	10	ocwa.com	com							cam	e, greer	(9)	sgs.com			1
			Sample				Cl Residual	a						Paramaters	aters							Cor	Comments			- 1
-1					les)	mg/L)	ed		5	rous	nonia TAN)		ogen			i.								о МОЕ	
Station Acro Number (Short Name)		Sample Loc	Sample Location Name	Date & Time Collected	# of Bottle	Field Tot (mg/L)	Field Free (r	Combine (mg/L)	CBOD5	Total Suspe Solids	Total Phosphore	Total Amm Nitrogen (T	Nitrate-Nitro	Nitrite-Nitro	TKN	Dissolve Organic Ca	E.Coli								Upload to	
Well We11	•	Monitoring Well #11 (MW-11)		82120-12/12/100	ω				×	×	×	×	×	×	×	×	×				Wel	Well Depth =	n = 1.02	3	Nes Yes	N Yes N N N N N N N N N N N N N N N N N N N
Well We12	2 -	Monitoring Well #12 (MW-12)		09/29/21-1030	ω				×	×	×	×	×	×	×	×	×				Wel	Well Depth	n=1.0	2m 1	No Yes	No Yes
																										- 1
Sampler Name:			GEORDIE	WHEELEN		Sample	Sampler Signature:	Ğ.						2	191											



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

12-October-2021

Works #: 1418S

Project: PO#017844

Date Rec.: 29 September 2021 LR Report: CA15666-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					29-Sep-21 12:52	29-Sep-21 13:25
Temperature Upon Receipt [°C]					19.0	19.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	30-Sep-21	16:48	11-Oct-21	08:34	6	49
Dissolved Oxygen [mg/L]	30-Sep-21	13:20	01-Oct-21	10:23	7.1	
Total Suspended Solids [mg/L]	05-Oct-21	12:18	07-Oct-21	15:14	18	88
Alkalinity [mg/L as CaCO3]	30-Sep-21	15:46	04-Oct-21	09:49		305
pH [No unit]	30-Sep-21	12:48	04-Oct-21	09:49	7.50	7.84
Phosphorus (total) [mg/L]	02-Oct-21	10:32	04-Oct-21	11:17	0.38	2.49
Total Kjeldahl Nitrogen [as N mg/L]	02-Oct-21	14:02	05-Oct-21	08:43	1.7	18.0
Ammonia+Ammonium (N) [as N mg/L]	01-Oct-21	17:58	04-Oct-21	11:57	0.8	
Nitrite (as N) [mg/L]	01-Oct-21	19:00	04-Oct-21	14:46	0.57	
Nitrate (as N) [mg/L]	01-Oct-21	19:00	04-Oct-21	14:46	7.94	
Nitrate + Nitrite (as N) [mg/L]	01-Oct-21	19:00	04-Oct-21	14:46	8.51	
E. Coli [cfu/100mL]	30-Sep-21	14:29	01-Oct-21	15:13	5900	

Carrie Greenlaw Project Specialist,



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

08-October-2021

Date Rec. : 29 September 2021 LR Report: CA15669-SEP21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Carbonaceous Biochemical Oxygen Demand (CBOD5) mg/L	Total Suspended Solids mg/L	Dissolved Organic Carbon mg/L	Phosphorus (total) mg/L	Total Kjeldahl Nitrogen as N mg/L	Ammonia+Am monium (N) as N mg/L	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L	E. Coli cfu/100mL
1: Analysis Start Date			30-Sep-21	06-Oct-21	30-Sep-21	02-Oct-21	01-Oct-21	30-Sep-21	02-Oct-21	02-Oct-21	02-Oct-21	30-Sep-21
2: Analysis Start Time			16:48	14:46	16:04	10:32	17:00	17:20	07:28	07:28	07:28	14:29
3: Analysis Completed Date			05-Oct-21	07-Oct-21	01-Oct-21	06-Oct-21	03-Oct-21	01-Oct-21	05-Oct-21	05-Oct-21	05-Oct-21	01-Oct-21
4: Analysis Completed Time			17:56	16:15	08:42	10:33	11:24	12:15	06:22	06:22	06:22	15:14
5: Well Wel1-Monitoring Well #1 (MW-1)	29-Sep-21 10:03	15.0	< 4	495	18	0.39	3.8	3.2	0.04	< 0.06	< 0.06	< 2
6: Well Wel2-Monitoring Well #2 (MW-2)	29-Sep-21 08:35	15.0	12	11	1	< 0.03	< 0.5	< 0.1	< 0.03	1.67	1.67	< 2
7: Well Wel4-Monitoring Well #4 (MW-4)	29-Sep-21 08:25	15.0	10	< 2	< 1	< 0.03	< 0.5	< 0.1	< 0.03	3.27	3.27	< 2
8: Well Wel5-Monitoring Well #5 (MW-5)	29-Sep-21 09:10	15.0	5	6	< 1	< 0.03	< 0.5	< 0.1	< 0.03	0.47	0.47	< 2
9: Well Wel6-Monitoring Well #6 (MW-6)	29-Sep-21 08:55	15.0	< 4	< 2	< 1	< 0.03	< 0.5	< 0.1	< 0.03	0.61	0.61	< 2
10: Well Wel7-Monitoring Well #7 (MW-7)	29-Sep-21 09:37	15.0	< 4	< 2	2	< 0.03	< 0.5	< 0.1	< 0.03	< 0.06	< 0.06	< 2
11: Well Wel8-Monitoring Well #8 (MW-8)	29-Sep-21 09:54	15.0	< 4	3	11	0.03	3.2	2.7	< 0.03	< 0.06	< 0.06	10
12: Well Wel9-Monitoring Well #9 (MW-9)	29-Sep-21 10:15	15.0	< 4	19	9	< 0.03	1.4	8.0	< 0.03	0.55	0.55	4
13: Well Wel10-Monitoring Well #10 (MW-10)	29-Sep-21 08:10	15.0	24	< 2	< 1	< 0.03	< 0.5	< 0.1	< 0.03	0.09	0.09	< 2
14: Well Wel11-Monitoring Well #11 (MW-11)	29-Sep-21 09:28	15.0	10	5	6	< 0.03	6.0	6.2	< 0.03	< 0.06	< 0.06	< 2
15: Well Wel12-Monitoring Well #12 (MW-12)	29-Sep-21 10:30	15.0	< 4	2	1	< 0.03	< 0.5	< 0.1	< 0.03	1.35	1.35	< 2

Works #: 1418S

Project : LR Report : PO#017844 CA15669-SEP21

Hawley Anderson, Hon.B.Sc Project Specialist Assistant, Environment, Health & Safety



OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

05-October-2021

Date Rec. : 29 September 2021 LR Report: CA15671-SEP21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Hold Hld1-SW1 - Upgradient Background	6: Hold Hld3-SW3 - Within Main Pond	7: Hold HId4-SW4 - Outlet from Main Pond	8: Hold Hld5-SW5 - Upgradient Tributaries at County Rd No. 34	9: Hold Hld6-SW6 - Outlet from Property
Sample Date & Time					29-Sep-21 10:47	29-Sep-21 11:00	29-Sep-21 11:07	29-Sep-21 11:22	29-Sep-21 11:17
Temperature Upon Receipt [°C]					15.0	15.0	15.0	15.0	15.0
Phosphorus (total) [mg/L]	02-Oct-21	10:32	04-Oct-21	11:17	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Total Kjeldahl Nitrogen [as N mg/L]	01-Oct-21	17:00	04-Oct-21	11:17	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonia+Ammonium (N) [as N mg/L]	30-Sep-21	17:20	01-Oct-21	12:16	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrite (as N) [mg/L]	02-Oct-21	07:28	05-Oct-21	06:22	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Nitrate (as N) [mg/L]	02-Oct-21	07:28	05-Oct-21	06:22	< 0.06	< 0.06	< 0.06	0.48	< 0.06
Nitrate + Nitrite (as N) [mg/L]	02-Oct-21	07:28	05-Oct-21	06:22	< 0.06	< 0.06	< 0.06	0.48	< 0.06
E. Coli [cfu/100mL]	30-Sep-21	14:29	01-Oct-21	15:14	< 2	16	48	36	34



Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

Works #: 1418S

Project : LR Report : PO#017844 CA15671-SEP21

Hawley Anderson, Hon.B.Sc Project Specialist Assistant, Environment, Health & Safety



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

10-September-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 01 September 2021 LR Report: CA13061-SEP21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					01-Sep-21 09:25	01-Sep-21 09:30
Temperature Upon Receipt [°C]					16.0	16.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	02-Sep-21	17:05	07-Sep-21	19:26	18	61
Dissolved Oxygen [mg/L]	02-Sep-21	09:59	03-Sep-21	16:23	6.7	
Total Suspended Solids [mg/L]	03-Sep-21	11:50	07-Sep-21	20:01	41	108
Alkalinity [mg/L as CaCO3]	02-Sep-21	08:40	02-Sep-21	16:02		310
pH [No unit]	02-Sep-21	11:19	02-Sep-21	16:02	7.38	7.43
Phosphorus (total) [mg/L]	02-Sep-21	16:03	05-Sep-21	19:26	0.70	1.88
Total Kjeldahl Nitrogen [as N mg/L]	03-Sep-21	15:24	09-Sep-21	15:10	6.0	19.9
Ammonia+Ammonium (N) [as N mg/L]	02-Sep-21	17:45	03-Sep-21	14:17	3.5	
Nitrite (as N) [mg/L]	02-Sep-21	20:15	05-Sep-21	08:24	3.17	
Nitrate (as N) [mg/L]	02-Sep-21	20:15	05-Sep-21	08:24	2.51	
Nitrate + Nitrite (as N) [mg/L]	02-Sep-21	20:15	05-Sep-21	08:24	5.68	
E. Coli [cfu/100mL]	02-Sep-21	10:00	03-Sep-21	11:21	76000	

Carrie Greenlaw Project Specialist,

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

Waterworks/Project # 1418S

Data Transfer Contect Melissa Cortes	Requested Tumatound Time: Requested Tumatound Time:	Station Number (Short Name) Raw	County # Variety County # Variety County County
Data Transfer Contact: Melissa Cortes Data Contact: Melissa C	Station umber Short lame)	Station umber Short lame)	Station umber Short
Data Transfer Contact: Melissa Cortes Data Centennial Road Shelburne, ON Lly 324 Styl-338-6909 Sty	Station Station (Number (Number (Number (Name)))	Ss: Done: Station Number (Short Name) Eff Eff Raw -	Station Number (Short) Raw - Raw -
Data Transfer Contact: Melissa Cortes Data Cor	Station Number (Short Name) Eff Eff Eff	Ss: Station Number (Short Name) Raw -	Ss.: Station Number (Short Name) Raw Raw
Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To: Ontario Clean Shelburne, ON Shelburne,	Station Number (Short Name) Eff Eff Raw	Ss: Ione: Station Number (Short Name) Eff Eff	ss: Ione: Station Number (Short Name) Eff Eff
Pala Transfer Contact: Melissa Cortes Dala Cortes Dala Transfer Contact: Melissa Cortes Dala Transfer Contact: Melissa Cortes Dala Cortes Dala Transfer Contact: Melissa Cortes Dala Cortes Dala Transfer Contact: Melissa Cortes Dala Transfer Contact: Melissa Cortes Dala Cortes Dala Cortes Dala Transfer Contact: Melissa Cortes Dala Cortes Dala Transfer Contact: Melissa Cortes Dala Cortes Dala Cortes Dala Transfer Contact: Melissa Cortes Dala Cortes	Station Number (Shoot Name) Eff Eff Raw -	Station Number (Short Name) Eff Eff Raw -	SS: Station Number (Short Name) Eff Eff
Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To. Omtario Clean	Sation Number (Short Name)	ss: tone: Station Number (Short Name) Eff	ss: lone: Station Number (Short Name) Eff
Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To. Omlario Clean Shelburne, ON L9V 3Z4 L9V	Station Number (Short Name)	ss: Station Number (Stort Name)	ss: Station Number (Stort Name)
Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To. Ontario Clean Shelburne, ON Ley 3Z4 Ley 3Z2 Stelburne, ON Ley 3Z2 Stelburne, ON Ley 3Z4 Stelburne, ON Ley 3Z4 St	Ione:	ss:	tone:
Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To. Ontario Clean Shelburne, ON	ss:	ss:	ss:
Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To. Ontario Clean Shelburne, ON L9V 3Z4 S19-938-6909 519-925-0322 Incortes@boxws.com Invoice To. Ontario Clean Shelburne, ON L9V 3Z4 Invoice To. Ontario Clean Shelburne, ON L9V 3Z4 Invoice To. Ontario Clean Shelburne, ON L9V 3Z4 Invoice To. Ontario Clean 300 Centennial Road Shelburne, ON L9V 3Z4 Invoice To. Ontario Clean Invoice To. Ontario Clean	ss:	ss:	tone:
Requested Turnaround Time: App. Req'd	ss:	ss:	one:
Requested Turnaround Time: App. Req'd Red'd	ess:	ess:	ress:
Requested Turnaround Time: App. Req'd Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes OC Centennial Road Shelburne, ON Ley 324 Ley 324 Ley 324 Ley 324 Req'd 24-48 h Invoice To. Ontario Clean Shelburne, ON Shelburne, ON Shelburne, ON			
Requested Turnaround Time: App. Req'd 24-48 h Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Data Transfer Contact: Melissa Cortes Invoice To: Ontario Clean			
App. Req'd	Requested Turnaround Time:	Itemperature Ves Ves Temperature Ves Ves Ves Ves Ves Ves Ves Ves Ves Ve	Org. # 1418 Quote # Attached Parameter List No Pequirement to Report Sample Results Under Any Regulation for Wastev Requested Turnaround Time: App. App. Requested Turnaround Time: App. App. Requested Turnaround Time: App. App. Requested Turnaround Time:
	nater which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastew	Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastew	Org. # 1418 Quote # Attached Parameter List Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastew
Quote # Date Recd: 10 Attached Parameter List No Yes Temperature	Date Recd. 10/		
Indiministration of regulation under w	Attached Parameter List		Facility Name Mini Lakes



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

21-October-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 13 October 2021 LR Report: CA12529-OCT21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier
Sample Date & Time					13-Oct-21 10:38	13-Oct-21 10:44
Temperature Upon Receipt [°C]					11.0	11.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	14-Oct-21	16:38	19-Oct-21	14:08	3	69
Dissolved Oxygen [mg/L]	14-Oct-21	10:38	15-Oct-21	15:48	6.8	
Total Suspended Solids [mg/L]	19-Oct-21	18:16	20-Oct-21	15:18	27	250
Alkalinity [mg/L as CaCO3]	14-Oct-21	15:17	19-Oct-21	13:36		293
pH [No unit]	14-Oct-21	15:17	19-Oct-21	13:36	7.55	7.38
Phosphorus (total) [mg/L]	14-Oct-21	17:04	15-Oct-21	15:58	0.30	3.22
Total Kjeldahl Nitrogen [as N mg/L]	15-Oct-21	23:34	18-Oct-21	10:04	1.8	15.0
Ammonia+Ammonium (N) [as N mg/L]	14-Oct-21	22:09	19-Oct-21	15:02	1.0	15.0
Nitrite (as N) [mg/L]	19-Oct-21	07:36	21-Oct-21	12:56	0.59	
Nitrate (as N) [mg/L]	19-Oct-21	07:36	21-Oct-21	12:56	9.23	
Nitrate + Nitrite (as N) [mg/L]	19-Oct-21	07:36	21-Oct-21	12:56	9.83	
E. Coli [cfu/100mL]	14-Oct-21	10:50	15-Oct-21	16:00	4100	

Carrie Greenlaw Project Specialist,

Sampler Name:							Raw	E	Eff	Station Acronym		Email:	Fax:	Telephone:		Address:						(
lame:							Raw	Eff	Eff	Station Number (Short Name)													
									1			тсоп	519-9	519-9	Shelburn L9V 3Z4	300 (Data	71	Ident	Quote # Attached	Org. #	Fac	Wat
GEORA16							Primary Clairfier (Grab)	Final Effluent (Grab)	Final Effluent (Grab)	Sample Location Name	Sample	mcortes@ocwa.com	519-925-0322	938-6909	Shelburne, ON L9V 3Z4	300 Centennial Road	Data Transfer Contact: Melissa Cortes	Requested Turnaround Time:	Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment	Quote # Attached Parameter List		⊒.	Waterworks/Project # 1418S
DHEELCA							1128	1124	1124	Date & Time Collected		<u>теоде</u> я@осwа сот	519-925-0322	519-938-6909	Shelburne, ON L9V 3Z4	300 Centennial Road	Data Transfer Contact: Melissa Cortes		he sample(s) fall: No Requireme	No		WWTP	
							ω	_	ω	# of Bottles						Road	ontact		ent to R	Yes			
Sample										Field Total (mg/L)	222						Melissa	App. Req'd	eport Sa				
Sampler Signature:										Field Free (mg/L)	CI Residual					001100	Cortes		ample R				
ITE:										Combined (mg/L)	ual							24-48 h	esults Ur				
							×		×	CBOD₅		apw	(519	(519	She	300	lnvc		ider A		ŗ	2	C
							×		×	Total Suspended Solids		apwesthighlands@ocwa.cc	(519) 925-0322	9) 925-1	Shelburne, ON L9V 3Z4	300 Centennial Road	Invoice To: Ontario Clean		ny Regu		Date Rec'd:	poraton	C of C LIMS No:
							×		×	Total Phosphorous		lands	322	938	8	nial R	Onta		Jation	_	Date Rec'd:	Sact	NSN
									×	Total Ammonia Nitrogen (TAN)		@ocw				oad	nio Cle		for W	Temperatu	- 3		0:
_									×	Nitrate-Nitrogen		a.com				- 1	52	\Box	/astew		/5		3
J.									×	Nitrite-Nitrogen	Para					ardici nguluy	ater An		ater Tr	re Upon Receipt	10(2	f	1
/	1						×		×	TKN	Paramaters	П				city	voue	5-7d	eatme	Receip	7	. [5
									×	D.O.	S								nt.	1/5	y row		7
							×		×	рН		П								4.			
								×		E.Coli		П								7,	Time		
							×			Alkalinity		Н						7-10d		W	Time Rec'd: 63	0	
							×			NH3		carrie	705-6	705-6	Lakefield Kol 2Ho	185	aho			റ്	00		
											Comments	carrie.greenlaw@sgs.com	705-652-6365	705-652-2000	Lakefield, ON	185 Concession St	ratory COC Labafald Dasas	Other Specify:		K	Rec'd: 1830 Initials		
		No Yes	Yes No	No No	No Yes	No No	No Yes	No Yes	No Yes	Upload to MOE						arch Fid	1 to 1 to 1				2	S	
		No Yes	Z Yes	Z Yes	Z és	No Yes	No Yes ☐	v _{es} ⊠	No Yes	Upload to OCWA	4										1 7	7	

^{*} Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff. - Final Effluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Algorithman Man, Well - Algorithman Man, Service - Secondary Biosolids sec. digestion, Brs - Biosolids in super, Bss - Biosolids sec super, Bsiq - Biosolids sludge quality, Bsoq - Biosolids soil quality, DAF: - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effluent, RAS - Return Activated Sludge, SBR - Secondary Treatment/SRS, SCEf - Secondary Effluent, TV/AS - Thickened Waste Activated Sludge, IndW - Industrial Wastewater, PSm - Pump Sm, Sept - Septage, Lcht - Leachate, PrTr - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Aftio - Actifio, Teby - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

04-November-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 27 October 2021 LR Report: CA14851-OCT21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clarifier (Grab)
Sample Date & Time					27-Oct-21 11:24	27-Oct-21 11:28
Temperature Upon Receipt [°C]					14.0	14.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	28-Oct-21	16:57	02-Nov-21	13:43	6	39
Dissolved Oxygen [mg/L]	28-Oct-21	09:53	29-Oct-21	09:14	7.2	
Total Suspended Solids [mg/L]	30-Oct-21	12:24	02-Nov-21	11:02	22	104
Alkalinity [mg/L as CaCO3]	28-Oct-21	15:17	29-Oct-21	14:12		319
pH [No unit]	28-Oct-21	11:33	29-Oct-21	14:12	7.50	7.72
Phosphorus (total) [mg/L]	28 Oct 21	18:17	29-Oct-21	15:20	0.48	2.99
Total Kjeldahl Nitrogen [as N mg/L]	29-Oct-21	16:26	01-Nov-21	11:00	1.5	20.6
Ammonia+Ammonium (N) [as N mg/L]	28-Oct-21	17:45	04-Nov-21	08:52	0.7	17.6
Nitrite (as N) [mg/L]	28-Oct-21	16:31	01-Nov-21	06:09	0.47	
Nitrate (as N) [mg/L]	28-Oct-21	16:31	01-Nov-21	06:09	9.81	
Nitrate + Nitrite (as N) [mg/L]	28-Oct-21	16:31	01-Nov-21	06:09	10.3	
E. Coli [cfu/100mL]	28-Oct-21	10:23	29-Oct-21	10:34	13400	

Carrie Greehlaw Project Specialist,

Ontario Clean	Water	ter Agency - Request for L Waterworks/Project #	1418S	Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY) Waterworks/Project # 1418S Enclists Name Mini Lakes W/WTD	DY - SE	WAGE (MONTH	ובא	0	C of C LIMS No:	NS N	la]	14	8		EL.	20			(E)			(4)	
	0 5	Facility Name Mini Org. # 1418	Mini Lakes WWTP 1418	VID					Labo	Laboratory Section Date Rec'd:	atory Section Date Rec'd:	s	\leq	_	J	_	1,	Time /	Samp Time Rec'd:	pleo	ondi		tion upon rece	Sample condition upon receipt Rec'd: Initials
	۾ ڇ	Quote #						26			1		}	,]	: /	-				- 1	- 1			
	ide A	Identification of Regulation	under which the sa	Attached Parameter List INO INO Pequirement to Report Sample Results Under Any Regulation for Wastewater Treatment	ent to Re	eport Sa	mple Re	sults Un	der An	y Regu	lation f	I emperature Upon Receipt n for Wastewater Treatmen	stewat	er Trea	atment					റ്	0			
		Requested Turnaround Time	Time:			App. Req'd		24-48 h							5-7d				7-10d			Other		r Specify:
		Data Transfer Contact: Melissa Cortes	issa Cortes	Data Transfer Contact: Melissa Cortes	ontact: N	Velissa	Cortes		Invoi	Invoice To: Ontario Clean	Ontari	o Clea		Water Agency	lcy					Lab	orato	200	SGS Lake	Laboratory: SGS Lakefield Research Ltd
Address:	30 Sh	300 Centennial Road Shelburne, ON		300 Centennial Road Shelburne, ON	₹oad				300 Cent	300 Centennial Road Shelburne, ON	nial Ro	ad			ŀ					185 Lak	185 Concessi Lakefield, ON	nces:	185 Concession St. Lakefield, ON	sion St.
Telephone:	51	519-938-6909		519-938-6909					(519)	(519) 925-1938	938									705	-652	705-652-2000	٥	0
Fax:	51	519-925-0322		519-925-0322					(519)	(519) 925-0322	322			П	П	Ш		П	П	705	-652	2-636	55	55
Elliali.	me	mconesig/gcwa.com		mcones(wocwa,com					apwe	apwestnigniands(@ocwa.c	ands(a	ocwa.	com					l		can	ne.gr	reen	aw@sqs	carrie.greenlaw@sgs.com
	1		Sample			0	Cl Residual	ual						Paramaters	aters						-		Comm	Comments
Station Acronym Station Number (Short Name)	e)	Sample Location Name	n Name	Date & Time Collected	# of Bottles	Field Total (mg/L)	Field Free (mg/L)	Combined (mg/L)	CBOD ₅	Total Suspended Solids	Total Phosphorous	Total Ammonia Nitrogen (TAN)	Nitrate-Nitrogen	Nitrite-Nitrogen	TKN	D.O.	pН	E:Coti	Alkalinity	NH3				
Eff Eff	-	Final Effluent (Grab)	Grab)	Lehl	ω				×	×	×	×	×	×	×	×	×	3						Yes No
Eff Eff	-	Final Effluent (Grab)	Grab)	1427	_													\times						
Raw Raw	2	Primary Clairfier (Grab)	(Grab)	1427	ω				×	×	×				×		×		×	×				No No
																		(00						Yes
																								Yes
																								Yes
								1																Yes
																								Yes
Sampler Name	1,85	0	Emarne/	Castro	(0)	Sampler Signature	Signatu	re:		Canno	1	1	X	10	A									
			Section of the sectio						ľ				-	1										

* Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effuent, PrBy - Primary Bypass, Raw. - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids thickening, Bpd - Biosolids primary digestion, Brs - Biosolids see digestion, Bps - Biosolids see super, Bsq - Biosolids sludge quality, Bsq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effuent, RAS - Return Activated Sludge, Bgb - Secondary Treatment, Bgb, Sept - Secondary Effuent, TWAS - Thickened Waste Activated Sludge, IndW - Industrial Wastewater, PSm - Pump Sm, Sept - Septage, Lcht - Leachate, PTr - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Afto - Actifio, TeBy - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer Overflow. SSO - Sanitary Sewer Overflow.

Revision #11

Revised: 2021.09.08

W 10:00



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Works #: 1418S

Project: PO#017844

17-November-2021

Date Rec.: 11 November 2021 LR Report: CA13489-NOV21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					10-Nov-21 14:27	10-Nov-21 14:27
Temperature Upon Receipt [°C]					11.0	11.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	12-Nov-21	13:51	17-Nov-21	13:58	26	92
Dissolved Oxygen [mg/L]	11-Nov-21	16:57	12-Nov-21	13:39	3.6	
Total Suspended Solids [mg/L]	15-Nov-21	19:30	17-Nov-21	08:15	37	120
Alkalinity [mg/L as CaCO3]	12-Nov-21	08:21	15-Nov-21	13:57		319
pH [No unit]	12-Nov-21	08:21	15-Nov-21	13:57	7.36	7.55
Phosphorus (total) [mg/L]	12-Nov-21	18:25	15-Nov-21	10:48	0.71	2.93
Total Kjeldahl Nitrogen [as N mg/L]	15-Nov-21	16:18	16-Nov-21	12:09	2.4	19.7
Ammonia+Ammonium (N) [as N mg/L]	12-Nov-21	22:05	15-Nov-21	10:06	< 0.1	17.0
Nitrite (as N) [mg/L]	13-Nov-21	09:33	16-Nov-21	13:41	2.49	
Nitrate (as N) [mg/L]	13-Nov-21	09:33	16-Nov-21	13:41	5.98	
Nitrate + Nitrite (as N) [mg/L]	13-Nov-21	09:33	16-Nov-21	13:41	8.47	
E. Coli [cfu/100mL]	11-Nov-21	15:11	12-Nov-21	16:14	32000	

Hawley Anderson, Hon.B.Sc Project Specialist Assistant, Environment, Health & Safety

Raw Raw												Email:	Fax:	Telephone:	Address)
				+			,			2.483		теол	519-	519-	She L9V	Data		lden	Quote # Attached	Org. #	Fac	Wa	1 2
							Primary Clairfier (Grab)	Final Effluent (Grab)	Final Effluent (Grab)	Sample Location Name	Sample	tes@ocwa.com	519-925-0322	519-938-6909	300 Centennial Road Shelburne, ON L9V 3Z4	Data Transfer Contact: Melissa Cortes	Requested Turnaround Time:	identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment	Quote # Attached Parameter List	j. # 1418	Facility Name Mini Lakes WWTP	Waterworks/Project # 1418S	a Agency - Medaeserior Faboratory of
							1115	0111	1110	Date & Time Collected		mcortes@ocwa.com	519-925-0322	519-938-6909	300 Centennial Road Shelburne, ON L9V 3Z4	Data Transfer Contact: Melissa Cortes		he sample(s) fall: No Requiren	No		WWTP		
				T			ω	_	ω	# of Bottles		III			Road	Contact		nent to I	Yes				001-0
										Field Total (mg/L)						Melissa	App. Req'd	Report S					1
										Field Free (mg/L)	Cl Residual					Cortes		ample F					111011
			T	1						Combined (mg/L)	dual						24-48 h	Results L					11211
\exists	-			+			×		×	CBOD ₅	Н	apw	(518	(519	She	lnvo	3	Jnder A			Lab	Co	
			\vdash	+			×		×	Total Suspended Solids		apwesthighlands@ocwa.com	(519) 925-0322	(519) 925-1938	300 Centennial Road Shelburne, ON L9V 3Z4	Invoice To: Ontario Clean Wa		ny Reg		Date	Laboratory Section	C of C LIMS No:	
				1			×		×	Total Phosphorous		llands(322	1938	ON ON	Onta		ulation	_	Date Rec'd:	Sect	MS N	
				T					×	Total Ammonia Nitrogen (TAN)		@ocwa			oad	rio Cle		for W	Temperature	**	ion	lo:	
									×	Nitrate-Nitrogen		com				an Wa		astewa	ature !			90	
				T					×	Nitrite-Nitrogen	Para					ter Agency		ater Tre	Jpon F			2	
1							×		×	TKN	Paramaters		П			ency	5-7d	eatmer	Jpon Receipt				
									×	D.O.								=	a Landard	å		3	
					4		×		×	рН									2×h			i	Ì
				T	1	10	(×		E.Coli									لار	Time		U	5
				1	1	6	×			Alkalinity							7-10d			Time Rec'd:	Sam		
				T		1	×			NH3		carne	705-6	705-6	Lakefield	Labo			റ്		ple cor		
											Comments	carrie greenlaw@sgs.com	705-652-6365	705-652-2000	185 Concession St. Lakefield, ON K0L 2H0	Laboratory: SGS Lakefield Research Ltd	Other Specify			•	Sample condition upon receipt		
	Yes No	Yes No	No lea	Yac	Yes	No No	Yes X	Yes No	No No	Upload to MOE						Research Ltd	٥			Initials			Lage
	Z Yes	Z Yes			z és	Zes □⊠	No Yes □ ■	Z és D	Z és D	Upload to OCW	Ą												-

digestion, Bsd - Biosolids sec, digestion, Bps - Biosolids pri super, Bss - Biosolids sec super, Bsiq - Biosolids studge quality, Bsoq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effluent, RAS - Return Activated Studge, SBR - Secondary Treatment/Brits, SCET - Secondary Effluent, TWAS - Thickened Waste Activated Studge, WAS - Waste Activated Studge, IndW - Industrial Wastewater, PSIn - Pump Stn. Sept - Septage, Lcht - Leachate, PrTr - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Aftio - Actifio, TeBy - Tertiary Bypass, Hold - Holding Tark, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow 10:00 60 7887307348 10:00E(

Revised: 2021.09.08



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

Works #: 1418S

Project: PO#017844

01-December-2021

Date Rec.: 25 November 2021 LR Report: CA12975-NOV21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clarifier (Grab)
Sample Date & Time					24-Nov-21 11:10	24-Nov-21 11:15
Temperature Upon Receipt [°C]					14.0	14.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	25-Nov-21	17:35	30-Nov-21	15:19	12	97
Dissolved Oxygen [mg/L]	25-Nov-21	15:17	26-Nov-21	12:27	5.6	
Total Suspended Solids [mg/L]	29-Nov-21	07:39	30-Nov-21	09:49	26	100
Alkalinity [mg/L as CaCO3]	26-Nov-21	08:18	30-Nov-21	15:40		359
pH [No unit]	26-Nov-21	09:51	30-Nov-21	15:40	7.25	7.59
Phosphorus (total) [mg/L]	25-Nov-21	16:52	26-Nov-21	12:03	0.32	3.67
Total Kjeldahl Nitrogen [as N mg/L]	29-Nov-21	17:27	01-Dec-21	09:40	2.1	34.1
Ammonia+Ammonium (N) [as N mg/L]	26-Nov-21	17:30	30-Nov-21	10:50	0.7	30.4
Nitrite (as N) [mg/L]	25-Nov-21	20:34	29-Nov-21	15:33	2.01	
Nitrate (as N) [mg/L]	25-Nov-21	20:34	29-Nov-21	15:33	16.0	
Nitrate + Nitrite (as N) [mg/L]	25-Nov-21	20:34	29-Nov-21	15:33	18.0	
E. Coli [cfu/100mL]	25-Nov-21	16:45	29-Nov-21	10:45	10400	

Hawley Anderson, Hon.B.Sc Project Specialist Assistant, Environment, Health & Safety

	0
	=
٦	9
)	Ontario C
ı	0
	0
	ē
	2
	-
	2
	at
ı	e
ı	-
ь	ğ
Г	е
ı	Ξ
l	¥
Г	
ı	D
ı	0
ı	q
ı	E
ı	S
ı	+
ı	f
ı	×
ı	_
ı	a
l	00
ı	×
ı	at
ı	0
ı	2
ı	S
ı	œ,
ı	2
ı	Ξ.
ı	e
ı	S
ı	a
ı	ᆵ
ı	-
ı	Ω
ı	Ŧ
ı	2
ı	Z
ı	0
ı	Ħ
ĺ	equest for Laboratory Services and CHAIN OF CUSTODY - SI
ı	č
ı	S
ı	\dashv
ı	0
ı	
ı	\prec
ı	
ı	S
ı	皿
ı	2
ı	P
1	3
1	m
1	SEWAGE (MONTHL)
ĺ	2
1	¥
ı	=
1	ヹ
ĺ	
1	\preceq
1	-

ı	0)
-1	(0
1	O
ı	-
ı	9
١	-
ı	

Sampler Name						Raw	Eff	Eff	Station Acronym		Email:	Fax	Telephone:	Address							
ame:						Raw	Eff .	Eff .	Station Number (Short Name)		В			r s s			<u> </u>	ÞΩ	10	П	<
							<u> </u>	2		H	cortes@	19-925	19-938	300 Cen Shelburn _9V 3Z4	ata Tra	Req	dentific	Quote # Attached	Org. #	acility	Vaten
Commones						Primary Clairfier (Grab)	Final Effluent (Grab)	Final Effluent (Grab)	Sample Location Name	Sample	ocwa com	519-925-0322	519-938-6909	300 Centennial Road Shelburne, ON L9V 3Z4	Data Transfer Contact: Melissa Cortes	Requested Turnaround Time:	Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment	Quote # Attached Parameter List	1418	Facility Name Mini Lakes WWTP	Waterworks/Project # 1418S
ne lat						1420	5641	らもかい	Date & Time Collected		mcortes@oo	519-925-0322	519-938-6909	300 Centennial Road Shelburne, ON L9V 3Z4	Data Transfer Contact: Melissa Cortes		ne sample(s) fall: No Req	No		WWTP	
0	-										owa com	322	909	ennial Ro	sfer Con		uirement	Yes			
S		_				ω		ω	# of Bottles					ad	tact: M		to Rep	io.			
Sampler Signature									Field Total (mg/L)	0					lelissa C	App. Req'd	port Sam				
Signatur									Field Free (mg/L)	CI Residual					ortes		nple Res				
Ċ.									Combined (mg/L)	a						24-48 h	sults Un				
0						×		×	CBOD ₅		apwe	(519)	(519)	300 Cent Shelburn L9V 3Z4	Invoi		der An			Labo	C of
1/1						×		×	Total Suspended Solids		apwesthighlands@ocwa.	(519) 925-0322	(519) 925-1938	300 Centennial Road Shelburne, ON L9V 3Z4	Invoice To: Ontario Clean		y Regu		Date	Laboratory Section	C of C LIMS No:
1/1						×		×	Total Phosphorous		ands(a	322	938	onial Ro	Ontari		lation t	i d	Date Rec'd:	Section	N SIV
M								×	Total Ammonia Nitrogen (TAN)		ocwa.			ad	o Clea		or Wa	Temperature Upon Receipt	PE	š	9.
M								×	Nitrate-Nitrogen		com	1 1					stewat	iture U	EC 0 2 7		
								×	Nitrite-Nitrogen	Paramaters					Water Agency		er Trea	pon R	22	(2
						×		×	TKN	naters					ncy	5-7d	atment	eceipt	021	(0
								×	D.O.									5		(1
						×		×	рН									X			3/2
							×	1	E.Coli									00	Time Rec'd:		Z
						×		1	Alkalinity		L					7-10d			Rec'd:	Samp	
						×		Ŏ	NH3		carne.	705-6	705-6	185 Cond Lakefield K0L 2H0	Labora			റ്		e cono	
								31			carne greenlaw@sqs	705-652-6365	52-2000	185 Concession St Lakefield, ON K0L 2H0	atory: So	Other				dition up	
								CB00		Comments	w@sqs.com			on St.	Laboratory: SGS Lakefield Research Ltd	Specify:			Initials	Sample condition upon receipt	
	No Yes	No Yes	No Yes	No Yes	Upload to MOE						arch Ltd			-	1						
	Z řes	ĕ Yes	Z Yes	Z Yes	Z Yes □⊠	No Yes □⊠	Z Yes □⊠	y es □	Upload to OCW	А											

Revised: 2021.09.08

RM 607915716783



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

08-December-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 02 December 2021 LR Report: CA13123-DEC21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent (Grab)	6: Raw Raw-Primary Clairfier (Grab)
Sample Date & Time					01-Dec-21 14:25	01-Dec-21 14:20
Temperature Upon Receipt [°C]					16.0	16.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	02-Dec-21	16:27	07-Dec-21	14:37	14	46
Dissolved Oxygen [mg/L]	02-Dec-21	14:55	06-Dec-21	13:56	5.9	
Total Suspended Solids [mg/L]	03-Dec-21	14:58	06-Dec-21	12:38	35	68
Alkalinity [mg/L as CaCO3]	02-Dec-21	15:50	03-Dec-21	14:03		294
pH [No unit]	02-Dec-21	15:50	03-Dec-21	14:03	7.35	7.70
Phosphorus (total) [mg/L]	02-Dec-21	15:43	03-Dec-21	12:01	0.55	3.67
Total Kjeldahl Nitrogen [as N mg/L]	02-Dec-21	17:15	03-Dec-21	11:12	2.0	20.3
Ammonia+Ammonium (N) [as N mg/L]	02-Dec-21	17:25	06-Dec-21	09:49	0.6	17.4
Nitrite (as N) [mg/L]	02-Dec-21	16:05	07-Dec-21	16:26	0.98	
Nitrate (as N) [mg/L]	02-Dec-21	16:05	07-Dec-21	16:26	18.6	
Nitrate + Nitrite (as N) [mg/L]	02-Dec-21	16:05	07-Dec-21	16:26	19.6	
E. Coli [cfu/100mL]	02-Dec-21	14:33	05-Dec-21	11:35	10000	

Carrie Greenlaw Project Specialist,

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (MONTHLY)

Waterworks/Project # 1418S Sampler Name Address: Raw Ŧ, Station Acronym Station Number (Short Name) Raw Eff 519-938-6909 519-925-0322 Org. # Data Transfer Contac 300 Centennial Road Shelburne, ON L9V 3Z4 identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment Attached Parameter List Quote # Facility Name Requested Turnaround Time RAW SEWAGE ransfer Contact: Melissa Cortes Sample Location Name Final Effluent (Grab) Final Effluent (Grab) STERY O Mini Lakes WWTP Sample 2021/12 trate 1000 0 Date & Time DO WITH CBOD 0 Collected 0 0 L9V 3Z4 Shelburne, ON 300 Centennial Road Data Transfer Contact: Melissa Cortes 19-938-6909 19-925-0322 # of Bottles Sampler Signature App. Req'd Field Total (mg/L) CI Residual Field Free (mg/L) 24-48 h Combined (mg/L) Shelburne, ON 300 Centennial Road Invoice To: Ontario Clean Water Agency C of C LIMS No: Laboratory Section 519) 925-0322 519) 925-1938 CBOD × × X Total Suspended Date Rec'd: × × Solids Total × × Phosphorous Temperature Upon Receipt Total Ammonia × Nitrogen (TAN) DEC 2 3 2021 Nitrate-Nitrogen **Paramaters** × Nitrite-Nitrogen 5-7d × TKN × × D.O FX4 × × рΗ Time Rec'd × E.Coli 7-10d Sample condition upon receipt Alkalinity Lakefield, ON K0L 2H0 Laboratory: SGS Lakefield Research Ltd × NH3 05-652-6365 705-652-2000 185 Concession St. റ് Other 8 Comments Specify Initials Ves Yes No No z Yes Yes Yes Yes Yes No. Yes No Z_o Upload to MOE Ves □ Nes Yes Z Yes Z Yes No Yes □⊠ Z és Upload to OCWA

Station Acronym Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PfBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids - Biosolids in Super, Bss - Biosolids sec super, Bsq - NAN # 607887292490

667887-292490 pm

Page 1 of 1



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

30-December-2021

Project: PO#017844

Works #: 1418S

Date Rec.: 23 December 2021 LR Report: CA12937-DEC21

Copy: #1

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn: Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent	6: Raw Raw-Primary Clairfier (Grab) Raw Sewage
Sample Date & Time					22-Dec-21 10:10	22-Dec-21 10:00
Temperature Upon Receipt [°C]					7.0	7.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	23-Dec-21	16:44	29-Dec-21	14:26	12	49
Dissolved Oxygen [mg/L]	23-Dec-21	13:50	24-Dec-21	12:31	9.5	
Total Suspended Solids [mg/L]	24-Dec-21	11:22	29-Dec-21	15:09	28	72
Alkalinity [mg/L as CaCO3]	23-Dec-21	16:05	29-Dec-21	09:21		291
pH [No unit]	23-Dec-21	17:17	29-Dec-21	09:21	7.44	7.68
Phosphorus (total) [mg/L]	23-Dec-21	14:52	24-Dec-21	11:50	1.14	2.54
Total Kjeldahl Nitrogen [as N mg/L]	23-Dec-21	15:30	24-Dec-21	09:28	3.0	19.4
Ammonia+Ammonium (N) [as N mg/L]	23-Dec-21	21:16	24-Dec-21	12:03	1.2	
Nitrite (as N) [mg/L]	24-Dec-21	16:59	30-Dec-21	10:47	0.94	
Nitrate (as N) [mg/L]	24-Dec-21	16:59	30-Dec-21	10:47	16.4	
Nitrate + Nitrite (as N) [mg/L]	24-Dec-21	16:59	30-Dec-21	10:47	17.3	
E. Coli [cfu/100mL]	23-Dec-21	13:48	24-Dec-21	12:36	8400	

Carrie Greenlaw Project Specialist,

X X X X X X X X X X
Signature Sentron

Ravision # 10

Revised 30 6.4, 15

hr:ario Chan Water Agenc	On ario Clash Water Agency - Request for Laboratory Services and AIN OF CUSTODY - SEWAGE (QUARTERLY - ge 1 of 3) Waterworks/Project # 1418S C of C L	AN OF COSTO	1.00	140		A .	C of C LIMS No:	SMI	S.					1		7
Facility Name	Mini	20				- A	Laboratory Section	ory Sac	tion)-	7	90	202	7	F	& e condition upon receipt
Org. #	1418						D	Date Rec'd:	ď	15	1	W	7		Time Res	
Quote #	Quote #		Yes						Tempera		ure Upon Receipt	Pacaip	~0	2-	(
Identificati	on under which th	II: No Requirem	nt to Rep	ort Samp	le Resul	1 45 11	∍r Any Regula:ion for Wastewater Treatment	egula:lo	n for V	/astew	ater Tr	eatme	3			
Recline	Recluested Turnaround Time:		77	App. Reg'd	24	24.4				×		5-7d				72
Data Tram	Data Transfer Contact: Don Irvine	Data Transfer Contact: Don Irvine	ntact: Do	n Irvine		-11	Invoic. To: Ontario Clear	000	ario C		Water Agency	ency				, II
Adulress: 136 Main St. E Shelbuine, ON	St. E	136 Main St. E Shelburne, ON				· (o →1	136 Main St. E. Shelburne, ON	e, ON				ŀ	1			Å
Telanhona 519-321-9	474	519-32-9474)	(219) JOE	1938		1	1	1	-			A
Fa): 519-925-0322	322	519-925-0322					(519) 325-0322	5-0322								708-652-6365
Email: divine@cowe.com	<u> </u>	divine@ggwe.com				llon Hon	apwesthighlands@ocwa.	ghland	БФосу	a.com	1					A
	Samp e			CIR	CI Residual	1					Para	Paramaters	6			
Station Acronym Station Acronym Station Name)	Sample Location Name		# of Bottles	(mg/L)	Field Free (mg/L)	Combined	CBOD5 Total Suspended	Solids Total	Phosphorous Total Ammonia	Nitrogen (TAN) Nitrate-Nitrogen	Nitrite-Nitrogen	TKN	Dissolved Organic Carbon	E.Coli		
V/ell We11 - Moni	Monitoring Well #11 (MVV-11) &) WUS	430	ω				×	×	×	×	×	×	×	×		
V/ell We12 - Moni	Monitoring Well #12 (MVV-12) 岁 1 4 3 つ	THE	ω			-	×	×	×	×	×	×	×	×		
																, /
						-70										
				_					-							
1					-			-								Å
Sampler Name:	Sathr	Anson	Sa	Sampler Signature:	gnature:	A		12	3	B						Į.
Stution Acro tym: Cell - Cell Con ants, Dis - Disinfection, Down - Downstream, Eff - Final E	s. Dis - Disinfection. Down - Downstream. Eff - Final				D.D.	la sil		ľ					l		and Direction III - Heathern Well - Monthly Well Assessment Dec - Direction	ds. Nudeo. Bth - B solids thekening 13od - Biosolids primary

Sampler Name:		Hold	Hold	Plot	Hold	14old	Station Acronym		Er iall:	Fax:	Ac dress:						
Vame:	i i i	HId6	HId5	HId4	HId3	HId1	Station Number (Short Name)	attended to	C COMMON TO		C CARTERINATION IN	a monthorn in					1.37
İ	H	1				1		ĺ	dirvine	519-32	Shelbu L9V 3K	Data	70	Identi	Attache c	Facilit Org. #	Wate
		S'N6 - Ordet from prope ty	SW5 - U agrad	S'N4 - Outlet t	S'V3 - W thin main pond	€W1 - Upgra	Sample Lo		досма.сот	2 3-0322	Shelbu ne, ON	11.71	Requested Turnaround Time:	fic ation of Regu	Quote 13 Attache d Paran eter List	Facilit / Namı)	Waterworks/ Project #
Bampler Name: SuttAIL Au		rom prope ty	SW5 - U agradient tributuries at County Rd No. 34	S'N4 - Outlet from main pond	main pond	₹W1 - Upgradient back; iround	Sample Location Name	Samt le				ontact: Don irvine	round Time:	Identific ation of Regulation under which the sample(s)		Mini Lakes 1418	ect# .418S
1		0924	Sabo	00	DZ.		202							sample(e)	No	HWWTP	
ZAM Sampler Signature:		74_	15	35	2560	010	& Time sched		dirvine@ocwa.com	519-92 :-0322	Shelbu ne, ON L9V 3K5	Data Transfer C		: No Requirement to Report Sample Results Ur			
		N	N	N	N	2	# of Bottles					ontact:		nt to Re	Yes		
Sample							Field Total (mg/L)					ontact: Don Irvine	Npp.	pcrt Sa			
Sampler Signature:							Field Free (mg/L)	CI Residual				ine		mple Results			
		1				ļ	Combined (mg/L)		Hes) 		24-48		l 	1	
at the		×	×	×	×	×	Total Phosphorous Total Ammonia		bweath	(519) 925-19:18 (519) 925-03:2	Shelt urne, OV L9V ::K5	Involve To: Cintario Clean W		Any Reg		Laboratory & ection Date Rec'd:	C of C LIMS No:
		×	×	×	×	×	Nitrogen Nitrate-Nitrogen		ighlandi	5-19:18	10,00	10.		Regulation for Wastewater Treatment		atory & ection Date Rec'd:	LIMS
4		×	×	×	×	×	Hala-Harogen		(WOCW			ario Cle		for Wa	Į,	d: Hon	S.
2		×	×	×	×	×	TKN		a.com			an We	×	stewata	mperalu	12	
8		×	×	×	×	×	E,Coli	P				ter Agency		r Treat	ire Upo	0	
		8.5	8.5 2	8.13	8.2.	7.7	рН	Paramaters				ncy	5-7d	ment	Tamperature Upon Receipt	non /8	
Ì	11	10	17.7	100	7.5	8	Temp								Cx 2	`	1
		+											Ш		0	Time	1
					1	1		11	1	11	l	11	12	1	l	Sa Time Ret	V
								H	carrie dre	7(5-652-6	Li kefield, Kirl 2Ho	Li borator	Other		lo.	200	0
						1		00	Dlaw(o	365	NC	SGS	1			noqu	1
								Cornments	sgs.com	7(5-652-6365	1	Li boraton: SGS Lakefield Research Ltd	Specify			nacelpt OK	1
	No Yes No			No Yes	No Yes	No Yes	Upload to MO	E				earch Ltd				*	/
	2 8 2 8 8	\$ 8 8 8	8 8	N és	No s	Z és	Upload to OCV	VA.	1			11					

Ravision # 10

Revised 2019.0



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

16-December-2021

Date Rec. : 09 December 2021 LR Report: CA13451-DEC21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field Static Level m	Carbonaceous Biochemical Oxygen Demand (CBOD5) mg/L	Total Suspended Solids mg/L	Dissolved Organic Carbon mg/L	Phosphorus (total) mg/L	Total Kjeldahl Nitrogen as N mg/L	Ammonia+Ammon ium (N) as N mg/L	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L	E. Coli cfu/100mL
1: Analysis Start Date				10-Dec-21	10-Dec-21	14-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	13-Dec-21	13-Dec-21	13-Dec-21	10-Dec-21
2: Analysis Start Time				14:50	20:34	09:30	19:20	15:50	22:13	17:33	17:33	17:33	11:05
3: Analysis Completed Date				15-Dec-21	13-Dec-21	14-Dec-21	14-Dec-21	14-Dec-21	13-Dec-21	15-Dec-21	15-Dec-21	15-Dec-21	13-Dec-21
4: Analysis Completed Time				14:02	14:45	14:36	12:35	14:49	10:00	12:58	12:58	12:58	11:34
5: Well Wel1-Minitoring Well #1 (MW-1)	09-Dec-21 14:10	9.0	2.19	< 4	1700	23	0.45	4.1	3.2	0.05	< 0.06	< 0.06	< 2
6: Well Wel2-Monitoring Well #2 (MW-2)	09-Dec-21 12:18	9.0	2.33	< 4	2	2	< 0.03	< 0.5	< 0.1	< 0.03	0.94	0.94	< 2
7: Well Wel4-Monitoring Well #4 (MW-4)	09-Dec-21 12:00	9.0	2.37	< 4	4	1	< 0.03	< 0.5	< 0.1	< 0.03	5.70	5.70	< 2
8: Well Wel5-Monitoring Well #5 (MW-5)	09-Dec-21 12:35	9.0	1.98	< 4	< 2	1	< 0.03	< 0.5	< 0.1	< 0.03	0.59	0.59	< 2
9: Well Wel6-Monitoring Well #6 (MW-6)	09-Dec-21 12:50	9.0	1.92	< 4	12	1	< 0.03	< 0.5	< 0.1	< 0.03	0.71	0.71	< 2
10: Well Wel7-Monitoring Well #7 (MW-7)	09-Dec-21 13:10	9.0	1.95	< 4	7	2	< 0.03	< 0.5	< 0.1	< 0.03	< 0.06	< 0.06	< 2
11: Well Wel8-Monitoring Well #8 (MW-8)	09-Dec-21 13:45	9.0	1.76	< 4	10	9	0.04	1.8	1.6	< 0.03	< 0.06	< 0.06	< 2
12: Well Wel9-Monitoring Well #9 (MW-9)	09-Dec-21 10:29	9.0	0.94	< 4	422	8	0.22	0.8	0.6	< 0.03	0.14	0.14	< 2
13: Well We10-Monitoring Well #10 (MW-10)	09-Dec-21 11:30	9.0	2.79	< 4	3	1	< 0.03	< 0.5	< 0.1	< 0.03	0.12	0.12	< 2
14: Well We11-Monitoring Well #11 (MW-11)	09-Dec-21 14:45	9.0	1.03	< 4	169	7	< 0.03	5.7	5.4	< 0.03	< 0.06	< 0.06	< 2
15: Well We12-Monitoring Well #12 (MW-12)	09-Dec-21 14:30	9.0	1.05	< 4	3	2	< 0.03	< 0.5	< 0.1	< 0.03	1.07	1.07	< 2



Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

Works #:

1418S

Project : LR Report :

PO#017844 CA13451-DEC21

Carrie Greenlaw Project Specialist,

Environment, Health & Safety



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

OCWA-Highlands (Mini Lakes RBC WWTP)

Attn : Don Irvine

136 Main St., E. Shelburne, ON L9V 3K5, Canada

Phone: 519-925-1938 ext. 225

Fax:

Works #: 1418S Project: PO#017844

15-December-2021

Date Rec. : 09 December 2021 LR Report: CA13452-DEC21

Copy: #1

CERTIFICATE OF ANALYSIS Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Hold Hld1-SW1 - Upgradient Background	6: Hold Hld3-SW3 - Within Main Pond	7: Hold Hld4-SW4 - Outlet From Main Pond	8: Hold Hld5-SW5 - Upgradient Tributaries at Country Rd No. 34	9: Hold Hld6-SW6 - Outlet from Property
Sample Date & Time					09-Dec-21 10:10	09-Dec-21 09:50	09-Dec-21 09:35	09-Dec-21 09:05	09-Dec-21 09:24
Temperature Upon Receipt [°C]					9.0	9.0	9.0	9.0	9.0
Field pH [no unit]					7.7	8.2	8.1	8.5	8.6
Field Temperature [celcius]					3.8	3.2	3.3	2.7	2.6
Phosphorus (total) [mg/L]	10-Dec-21	19:20	13-Dec-21	12:58	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Total Kjeldahl Nitrogen [as N mg/L]	10-Dec-21	15:50	15-Dec-21	08:25	0.6	< 0.5	< 0.5	< 0.5	< 0.5
Ammonia+Ammonium (N) [as N mg/L]	10-Dec-21	22:13	13-Dec-21	10:00	0.1	0.3	0.3	< 0.1	0.3
Nitrite (as N) [mg/L]	13-Dec-21	17:44	15-Dec-21	06:41	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Nitrate (as N) [mg/L]	13-Dec-21	17:44	15-Dec-21	06:41	0.17	0.15	0.16	0.47	0.16
Nitrate + Nitrite (as N) [mg/L]	13-Dec-21	17:44	15-Dec-21	06:41	0.17	0.15	0.16	0.47	0.16
E. Coli [cfu/100mL]	10-Dec-21	11:05	13-Dec-21	11:34	26	16	4	6	6



Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365

Works #:

1418S

Project : LR Report :

PO#017844 CA13452-DEC21

Carrie Greenlaw Project Specialist,

Environment, Health & Safety



APPENDIX D O&M Contract

SERVICES AGREEMENT

BETWEEN

WELLINGTON COMMON ELEMENTS CONDOMINIUM CORPORATION NO. 214

AND

ONTARIO CLEAN WATER AGENCY

Table of Contents

RECITALS	1
Section 1.1 - Definitions	2
ARTICLE 2 - RESPONSIBILITIES OF CONTRACTOR	2
SECTION 2.1 - RETENTION OF THE CONTRACTOR	2
SECTION 2.2 - PERFORMANCE OF SERVICES	
SECTION 2.3 - CONTRACTOR AS INDEPENDENT CONTRACTOR	
SECTION 2.4 - AUTHORIZED REPRESENTATIVES	4
SECTION 2.5 - INDEMNIFICATION OF THE OWNER	4
SECTION 2.6 - WAIVER OF CONSEQUENTIAL DAMAGES	4
SECTION 2.7 - INSURANCE	5
ARTICLE 3 - RESPONSIBILITIES OF THE OWNER	5
SECTION 3.1 - OBLIGATIONS OF THE OWNER	6
SECTION 3.2 - COVENANTS OF THE OWNER	6
SECTION 3.3 - EXONERATION AND INDEMNIFICATION OF CONTRACTOR	7
ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES	8
SECTION 4.1 - INITIAL TERM OF AGREEMENT	8
SECTION 4.2 - ANNUAL PRICE FOR THE INITIAL TERM	8
SECTION 4.3 - THE ANNUAL PRICE IN RENEWAL TERMS	
SECTION 4.4 - PAYMENT OF THE ANNUAL PRICE	
SECTION 4.5 - ITEMS NOT INCLUDED IN THE ANNUAL PRICE	
SECTION 4.6 - MAJOR MAINTENANCE EXPENDITURES	
Section 4.7 - Capital Projects	
SECTION 4.8 - UNEXPECTED EXPENSES	
SECTION 4.9 - INTEREST ON LATE PAYMENTS	
SECTION 4.10 - PARTIAL PAYMENT OF DISPUTED INVOICES	
SECTION 4.11 - HYDRO COSTS/UTILITY COSTS	
SECTION 4.12 - OPTIONAL SERVICES	
SECTION 4.13 - CHANGES TO THE AGREEMENT	
ARTICLE 5 - DISPUTE RESOLUTION	
SECTION 5.1 - MEDIATION	
ARTICLE 6 - TERMINATION	12
SECTION 6.1 - TERMINATION OF AGREEMENT	
Section 6.2 - Early Termination	
Section 6.3 - Inventory Count of Consumables/Supplies	
Section 6.4 - Final Settlement	
SECTION 6.5 - TRANSFER OF OPERATIONS	
SECTION 6.6 - RESTRICTIONS ON RECRUITMENT OF CONTRACTOR'S EMPLOYEES	
ARTICLE 7 - GENERAL	14
SECTION 7.1 - OWNERSHIP OF TECHNOLOGY	
SECTION 7.2 - AGREEMENT TO GOVERN	14

SERVICE SERVIC	4 4
SECTION 7.3 - ENTIRE AGREEMENT	
SECTION 7.4 - AMENDMENTS AND WAIVERS	14
SECTION 7.5 - SUCCESSORS AND ASSIGNS	
SECTION 7.6 - SURVIVAL	15
SECTION 7.7 - SEVERABILITY	15
Section 7.8 - Notices	15
SECTION 7.9 - COUNTERPARTS	
SECTION 7.10 - FREEDOM OF INFORMATION	16
SECTION 7.11 - CONFIDENTIALITY	16
SCHEDULE A - THE FACILITIES	
SCHEDULE B - Definitions	<i>I</i>
SCHEDULE C - The Services	<i>I</i>
SCHEDULE D - The Annual Price And Other Charges	Ì
SCHEDULE E - Insurance	
SCHEDULE F - List of Pre-Existing Conditions	B-I
SCHEDULE G - Change Order Form	
SCHEDULE H - Expenditure Request and Approval to Proceed	

SERVICES AGREEMENT

THIS AGREEMENT effective as of the First (1) day of January, 2018 (the "Effective Date"),

BETWEEN

WELLINGTON COMMON ELEMENTS CONDOMINIUM CORPORATION NO. 214

hereinafter called the "Owner" of the FIRST PART

AND

ONTARIO CLEAN WATER AGENCY/AGENCE ONTARIENNE DES EAUX, a

corporation established under the Capital Investment Plan Act, 1993, c.23, Statutes of Ontario.

hereinafter called the "Contractor" of the SECOND PART

RECITALS

WHEREAS the Owner owns and is responsible for the operation, maintenance and management of the water and wastewater treatment systems, as more particularly set out in Schedule A attached hereto (the "Facilities");

AND

WHEREAS the Owner is desirous that the Facilities be operated and maintained by the Contractor in accordance with the provisions of this agreement (the "Agreement");

AND

WHEREAS the Contractor is a corporation that provides operation, maintenance and management services for water and wastewater (treatment) facilities and distribution and collection systems;

AND

WHEREAS the Owner and Contractor (collectively, the "Parties" and each a "Party") are entering this Agreement to set out their respective rights and obligations with respect to the management, operation and maintenance of the Facilities;

AND

WHEREAS the owner retains a professional property management firm to act as their Authorized Representative for purposes of coordination with service providers as noted in Section 2.4 of the agreement (The Agreement)

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

ARTICLE 1 - INTERPRETATION

Section 1.1 - Definitions

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

ARTICLE 2 - RESPONSIBILITIES OF CONTRACTOR

Section 2.1 - Retention of the Contractor

(a) The Owner retains the Contractor to provide management, operation and maintenance services, as described in Schedule C to this Agreement, in respect of the Facilities (the "Services").

Section 2.2 - Performance of Services

- (a) The Contractor shall deliver the Services in compliance with all applicable Environmental Laws, except as described in Sections 2.2(b) and (c) below and in any of the following circumstances:
 - (i) the Owner not making the Major Maintenance Expenditures and/or not undertaking the Capital Projects reasonably recommended by the Contractor as per Section 4.6 and Section 4.7 herein;
 - (ii) failure of the Owner to meet its responsibilities specified in this Agreement;
 - (iii) failure of any equipment at the Facilities, unless the failure is due to the Contractor's negligence;

- (iv) the water transmitted to the water treatment Facilities for treatment contains contaminants or pathogens which cannot be treated or removed by the Facilities' treatment processes;
- (v) the quantity or quality of water transmitted to the water treatment Facilities exceeds the Facilities' design or operating capacity;
- (vi) the wastewater transmitted to the wastewater treatment Facilities for treatment contains contaminants or other substances which cannot be treated or removed by the Facilities' treatment processes;
- (vii) the wastewater transmitted to the wastewater treatment Facilities for treatment does not meet the requirements of any Environmental Law;
- (viii) the quantity or quality of wastewater transmitted to the wastewater treatment Facilities exceeds the Facilities' design or operating capacity;
- (b) The Contractor may temporarily cease to provide or reduce the level of provision of Services in the event of an emergency, a breakdown or any Uncontrollable Circumstance. The Contractor shall, when practicable, try to give the Owner reasonable advance notice of any such occurrence.
- (c) Notwithstanding any other provision of this Agreement, delay in the performance of, or a failure to perform any term of this Agreement by the Contractor, shall not constitute default under this Agreement or give rise to any claim for damages suffered by the Owner if and to the extent caused by occurrences or circumstances beyond the reasonable control of the Contractor (an "Uncontrollable Circumstance"), including but not limited to any circumstances set out in Section 2.2(a), decrees of government, acts of God (including but not limited to hurricanes, tornadoes, floods and other weather disturbances), sabotage, strikes, lockouts and other industrial disturbances, insurrections, war, civil disturbances, pandemics, riots, explosions, fire and acts of third parties.
- (d) The Owner recognizes that in an emergency situation or where an Uncontrollable Circumstance exists, the Contractor's primary concern will be to use all reasonable efforts to maintain the Facilities in compliance with Environmental Laws and that the Contractor may be required to correct a deficiency or deal with the emergency situation without obtaining the Owner's prior approval. Should such a situation arise, the Contractor shall advise the Owner as soon as reasonably possible and shall provide as much information as possible to the Owner and will work with the Owner to ensure the emergency situation is appropriately addressed.
- (e) The Contractor shall be required to continue the delivery of the Services to the best of its ability, during an Uncontrollable Circumstance

Section 2.3 - Contractor as Independent Contractor

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

Section 2.4 - Authorized Representatives

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

Section 2.5 - Indemnification of the Owner

- (a) The Contractor shall exonerate, indemnify and hold harmless the Owner, its directors, officers, employees and agents from and against Claims which may be suffered or incurred by, accrue against or be charged to or recoverable from the Owner to the extent that such Claim is solely attributed to the Contractor's negligence or wilful misconduct when performing the Services, except where such Claim is due to an Uncontrollable Circumstance or to a condition of the Facilities which existed prior to the Contractor's 's commencement of the Services (a "Pre-existing Condition"), including but not limited to those listed in Schedule F. Such Pre-existing Conditions shall be the ongoing responsibility of the Owner. The Contractor, in providing these Services, is not responsible, accountable or liable, in any way, for Pre-existing Conditions, either directly or indirectly.
- (b) The Owner shall be deemed to hold the provisions of this Section 2.5 that are for the benefit of the Owner's directors, officers, employees and agents in trust for such directors, officers, employees and agents as third party beneficiaries under this Agreement.
- (c) Notwithstanding Section 2.5(a) above, the Contractor shall not be liable in respect of any Claim to the extent the Claim is covered by the Insurance.
- (d) Claims by the Owner for indemnification from the Contractor will follow the Indemnification Process as described in Schedule B.

Section 2.6 - Waiver of Consequential Damages

In no event shall the Parties be liable to each other, and each Party specifically waives as against the other, any and all claims for consequential, incidental, indirect, special or punitive

damages resulting in any way from performance or non-performance of this Agreement, whether such damages are characterized as arising under breach of contract or warranty, tort (including negligence), fault, strict liability, indemnity, or other theory of legal liability.

Section 2.7 - Insurance

- (a) The Contractor shall maintain, subject to reasonable availability, insurance coverage as described in Schedule E to this Agreement (the "Insurance") and the Owner and the Municipality of the Township of Puslinch, shall be an additional insured under the Commercial General Liability and Contractor's Pollution Liability insurance. The Owner acknowledges that, given the unpredictability of the insurance market, deductibles and coverage limits may not be available (or may not be reasonably priced) from year to year. Insurance coverage is reviewed annually and the Owner will be notified if there is a change in coverage or price increase.
- (b) The Owner specifically recognizes and agrees that neither the Contractor nor the Crown bears any responsibility for the Pre-existing Condition(s) of the Facilities. As such, the Contractor is not required to obtain insurance for this purpose and the Owner has or will obtain its own insurance.
- (c) The Owner shall be responsible for securing its own insurance for any other operations with which it is involved that are not part of the Services. The Owner acknowledges that the Contractor's Commercial General Liability and Contractor's Pollution Liability insurance shall not extend to cover any claims, exposure or liability beyond those directly linked to the provision of Services by the Contractor's staff. The Owner further acknowledges that it will have no recourse under the Contractor's Commercial General Liability and Contractor's Pollution Liability insurance for any operations that do not form part of the Services.
- (d) In the event of a claim under the Insurance, the payment of deductibles is as specified in Schedule E.
- (e) No later than thirty (30) days following the Effective Date of this Agreement, the Owner will provide certificates of insurance for its property and boiler and machinery insurance policies to the Contractor. The insurance coverage for both policies should be on a full replacement cost basis. The Contractor will be named as an additional insured on both policies.
- (f) The policies of insurance obtained by the Owner in connection with this Agreement shall be primary, notwithstanding other insurance obtained and maintained by the Contractor.

ARTICLE 3 - RESPONSIBILITIES OF THE OWNER

Section 3.1 - Obligations of the Owner

- (a) The Owner has the full power and authority to enter into and perform its obligations under this Agreement.
- (b) The Owner has all necessary Authorizations to enable it to enter into and perform its obligations under this Agreement and to operate the Facilities, (including, without limitation, any Authorizations required from the Ministry of the Environment and Climate Change), and the Authorizations are in good standing.
- (c) As the Owner of the Facilities, the Owner is fully aware of its responsibilities and obligations regarding the operation and maintenance of the Facilities under Applicable Laws, including without limitation its responsibilities under the Safe Drinking Water Act, 2002 (the "SDWA"), the Ontario Water Resources Act and the Occupational Health and Safety Act (the "OHSA") and their regulations.
- (d) The Owner confirms that there are no Pre-existing Conditions existing at the Facilities which would affect the Contractor's ability to operate the Facilities in compliance with the terms of this Agreement and Applicable Laws, other than what is listed in Schedule F. The Owner acknowledges and agrees that the Owner shall be responsible for addressing such Pre-existing Conditions.
- (e) The Owner confirms that as of the date of execution of this Agreement, to the best of the Owner's knowledge, the Facilities are in compliance with all Applicable Laws
- (f) The Owner is not aware of the presence of any designated substances as defined under the Occupational Health and Safety Act (the "OHSA") at the Facilities. The Owner acknowledges and agrees that it is responsible for dealing with the designated substances (including but not limited to asbestos and lead) in accordance with the OHSA and its regulations and to notify the Contractor of the location of any designated substances in the Facilities.

Section 3.2 - Covenants of the Owner

The Owner hereby covenants the following for the benefit of the Contractor:

- (a) The Owner agrees to promptly pay all amounts owing to the Contractor under this Agreement as they become due, including any interest charges on late payments as determined under Section 4.9.
- (b) The Owner agrees to promptly provide the Contractor with any information relating to the Facilities which could have a bearing on the provision of Scrvices by the Contractor, including but not limited to any engineering report prepared in respect of the Facilities, any Authorization or amendment to any Authorization, as well as any governmental notice or order relating to the Facilities.

- (c) The Owner agrees to commit the necessary resources to appropriately address and comply with any such reports, Authorizations, notices or orders.
- (d) The Owner shall repair, maintain and keep in a good working state, in accordance with good engineering practices and the standards reasonably applicable to an Owner of a like facility, all water works that belong to or are under the control of the Owner and that distribute water from the Facilities.
- (e) The Owner shall repair, maintain and keep in a good working state, in accordance with good engineering practices and the standards reasonably applicable to an Owner of a like Facility, all wastewater works that belong to or are under the control of the Owner and that collect and transmit wastewater to the Facilities.
- (f) The Owner agrees to promptly commit the necessary resources to appropriately address any health and safety issues identified by the Contractor which are the responsibility of the Owner.
- (g) The Owner shall take reasonable steps to ensure that wastewater transmitted to the Facilities complies with the Owner's sewer use by-law and any Environmental Laws. If requested by the Contractor, the Owner shall provide the Contractor with copies of the Owner's inspection reports (sewer usage, cross-connections, sump pump connections), if available.

Section 3.3 - Exoneration and Indemnification of Contractor

- (a) Subject to Section 3.3(c) below, the Owner shall exonerate, indemnify and hold harmless the Contractor, its directors, officers, employees and agents and Her Majesty the Queen in Right of Ontario, as represented by the Minister of the Environment and Climate Change and all directors, officers, employees and agents of the Ministry of the Environment and Climate Change (collectively referred to as the "Indemnified Parties") from and against any and all Claims which may be suffered or incurred by, accrue against, or be charged to or recoverable from any one or more of the Indemnified Parties that is solely attributed to the Owner's negligence or willful misconduct.
- (b) The Contractor shall be deemed to hold the provisions of this Article 3 that are for the benefit of the Contractor's directors, officers, employees and agents and the other Indemnified Parties as defined above, in trust for all such Indemnified Parties as third party beneficiaries under this Agreement.
- (c) Claims by the Contractor for indemnification from the Owner will follow the Indemnification Process as described in Schedule B.
- (d) Notwithstanding Section 3.3(a) above, the Owner shall not be liable in respect of any Claim:

- (i) to the extent that such Claim is covered by the Insurance; however, the Owner shall be responsible for any deduction or self-insured retention amount in accordance with Schedule E; and
- (ii) to the extent that such Claim is caused solely by the Contractor's negligence or willful misconduct in providing the Services.

ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES

Section 4.1 - Initial Term of Agreement

This Agreement shall commence on the Effective Date January 1, 2018 and shall continue in effect for an initial term of five (5) years, ending on December 31, 2022 (the "Initial Term") and then may be renewed for successive five (5)-year terms (each a "Renewal Term") upon agreement between the Parties, subject to Sections 4.3 and 6.1 of this Agreement.

Section 4.2 - Annual Price for the Initial Term

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

Section 4.3 - The Annual Price in Renewal Terms

The Annual Price for any Renewal Term will be as agreed between the Owner and the Contractor. If the Parties cannot agree on the Annual Price for any Renewal Term within six (6) months of the beginning of the last Year of either the Initial Term or the Renewal Term, as the case may be (the "Current Term"), then this Agreement will be terminated twelve (12) months after the last day of the Current Term unless the Parties mutually agree to extend the term of the Agreement. During this twelve (12) month period or mutually agreed upon extension period, the Owner shall pay the Annual Price paid for the last Year of the Current Term, plus an adjustment for inflation calculated as described in Schedule D, pro-rated over that period.

Section 4.4 - Payment of the Annual Price

The Owner shall pay the Contractor the Annual Price for each Year of the Initial Term or any Current Term, in twelve (12) equal monthly payments, in advance, on the first day of each month. The first payment shall be due and payable on November 1, 2017. Payment shall be made by the Owner by pre-authorized bank debit from a bank account designated by the Owner.

Section 4.5 - Items Not Included in the Annual Price

The Annual Price, as further described in Schedule "D", for each Year of the Initial Term and any Renewal Term, covers all charges for the Services, but does not include any charges for the following:

- (a) any Capital Projects (as defined in Section 4.7(a) below) or costs resulting from any failure of the Owner to implement reasonably recommended Major Maintenance Expenditures;
- (b) costs or charges for services resulting from a Change in Applicable Laws;
- (c) Unexpected Expenses (as defined in Section 4.8(a) below);
- (d) Hydro/Utility costs;
- (e) charges for any Optional Services that are provided by the Contractor to the Owner.

Section 4.6 - Major Maintenance Expenditures

- (a) "Major Maintenance Expenditures" means the charges for all non-routine, non-repetitive activities, repair or replacement of machinery or equipment required for the continuity of operations, safety, and operating performance of the Facilities that are necessary to prevent or correct a failure of any component of the equipment which is not included as part of Routine Maintenance including labour charges, together with the Service Fee or fixed fee basis.
- (b) No later than September 30th of each Year this Agreement is in force, or a date as the Parties may agree in writing, the Contractor will provide the Owner with rolling three (3)-year recommendations for Major Maintenance Expenditures required for the long term operation of the Facilities. The Owner's written approval of the estimate or revised estimate, in the form set out in Schedule "H" where is this Schedule?, authorizes the Contractor to incur the Major Maintenance Expenditures included in the estimate (the "Approved Major Maintenance Expenditures").
- (c) The Contractor will invoice the Owner for the Approved Major Maintenance Expenditures together with supporting documentation and the Owner shall pay the invoice within thirty (30) days of the date of invoice.

Section 4.7 - Capital Projects

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

(c) During the term of this Agreement, the Contractor may also make reasonable recommendations to the Owner with respect to Capital Projects expenditures for the Facilities. The terms and conditions of such Capital Projects, including the fee, shall be negotiated by the Contractor and the Owner

Section 4.8 - Unexpected Expenses

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

Section 4.9 - Interest on Late Payments

- (a) **Monthly Payment of Annual Fee.** If the Owner's monthly payment of the Annual Fee is not available in the Contractor's designated bank account on the agreed to date of payment, the Contractor will notify the Owner that the funds were not available. Interest will be charged to the Owner starting from the day after the payment was due in the account. Interest shall be paid at a rate determined by the Minister of Finance, from time to time, as payable on overdue accounts, in accordance with the Licutenant Governor in Council under s.10(4) of the *Financial Administration Act*, R.S.O. 1990, c.F.12, plus any banking charges and an administrative fee.
- (b) Other Invoices. Invoices, other than for the monthly payment set out in Section 4.8(a) above, shall be paid no later than thirty (30) days from the date of the invoice and interest shall begin to accrue one (1) day after the payment is due.

Section 4.10 - Partial Payment of Disputed Invoices

If the Owner disputes any portion of an invoice, the Owner shall pay to the Contractor the undisputed portion of the invoice by the due date set out herein and provide the Contractor with written notice of such dispute by the due date. Failure to provide such written notice of any such dispute will act as a waiver of any defence or justification for failing to pay the full amount of

the invoice by the due date. Within ten (10) days of resolution of the disputed amount, the Owner shall pay to the Contractor all amounts determined to be payable to the Contractor, plus interest in accordance with Section 4.9(a).

Section 4.11 - Hydro Costs/Utility Costs

The Contractor is not responsible for paying any Hydro/Utility Costs in respect of the Facilities. The Owner shall pay all Hydro/Utility Costs.

Section 4.12 - Optional Services

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

Section 4.13 - Changes to the Agreement

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

ARTICLE 5 - DISPUTE RESOLUTION

Section 5.1 - Mediation

- (a) If a dispute arises between the Owner and the Contractor which cannot be resolved within 90 days, then the issue shall be referred to a mediator.
 - (c) (b) The fees and expenses of the mediator shall be divided equally between the Parties. Involvement in mediation is on a without prejudice basis and does not preclude and is not a bar to either Party pursuing whatever legal remedies may be available, including litigation.

ARTICLE 6 - TERMINATION

Section 6.1 - Termination of Agreement

- (a) At least one (1) calendar year before the expiry of the Current Term, the Owner shall notify the Contractor in writing whether it wishes to terminate or renew this Agreement at the end of the Current Term. However, the Contractor reserves the right to decline to renew the Agreement by notifying the Owner in writing of its decision to decline, within thirty (30) days of receipt of the Owner's written request to renew.
- (b) During the Initial Term or any Renewal Term, this Agreement may only be terminated by either the Owner or Contractor by giving at least thirty (30) days' notice in writing to the other Party if:
 - (i) there has been a material breach of the Agreement;
 - (ii) For greater clarity, a material breach shall include, but not be limited to, the Owner's failure or refusal to implement the Contractor's reasonable recommendation(s) with respect to Capital Projects expenditures for the Facilities, as set out in section 4.7(c).
 - (ii) the Party complaining of the breach has given written notice of the breach to the other Party; and
 - (iii) the other Party does not correct the breach within thirty (30) days of receiving the notice.
- (c) If either Party disputes the existence of a breach or that the breach is material, then the dispute may be referred to mediation under Section 5.1 of this Agreement.

Section 6.2 - Early Termination

If this Agreement is terminated for any reason prior to the expiry of the (Current Term, then the Owner shall pay the Contractor for all Services provided up to the date of termination, as well as any costs relating to the early termination, including but not limited to demobilization and severance costs (in accordance with the collective agreements between the Contractor and its employees); the costs associated with the removal of remote monitoring and control systems installed by the Contractor; the costs of cancelling agreements with suppliers and sub-

Contractors; as well as any previously incurred Major Maintenance Expenditures, costs related to Capital Projects, Unexpected Expenses and Optional Services.

Section 6.3 - Inventory Count of Consumables/Supplies

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

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

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

Section 6.4 - Final Settlement

If the Contractor ceases to operate the Facilities, there shall be a final settlement of all accounts with respect to the Annual Price and any other expenses incurred by the Contractor and amounts owing by or to the Owner under this Agreement, no later than ninety (90) days after the Contractor ceases to provide the Services or thirty (30) days after the Contractor has provided the Owner with a final invoice, whichever comes later.

Section 6.5 - Transfer of Operations

Upon the termination of this Agreement, the Contractor will return the following to the Owner:

- (a) The log books for the Facilities.
- (b) A list of emergency phone numbers from the contingency plan binders used by the Contractor staff in respect of the Facilities.
- (c) Maintenance and repair records of equipment at the Facilities in electronic format.
- (d) Any operational plans under the Drinking Water Quality Management Standard (DWQMS) and any Standard Operating Procedures (SOPs) identified in the DWQMS.

Section 6.6 - Restrictions on Recruitment of Contractor's Employees

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

ARTICLE 7 - GENERAL

Section 7.1 - Ownership of Technology

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

Section 7.2 - Agreement to Govern

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

Section 7.3 - Entire Agreement

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

Section 7.4 - Amendments and Waivers

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

Section 7.5 - Successors and Assigns

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

Section 7.6 - Survival

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

Section 7.7 - Severability

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

Section 7.8 - Notices

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

Wellington Common Elements Condominium Corporation No. 214 c/o MF Property Management Limited 28 Bett Court Guelph ON N1C 0A5

Telephone: 519-824-4208 Email:mfprop@mfproperty.com Attention: Property Manager

(ii) if to the CONTRACTOR:

ONTARIO CLEAN WATER AGENCY 30 Woodland Drive Wasaga Beach Ontario, L9V 2Z4

Telephone: 705-715-6865 Fax: 705-429-7967 Attention: Regional Manager

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

Section 7.9 - Counterparts

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

Section 7.10 - Freedom of Information

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

Section 7.11 - Confidentiality

The Parties shall strictly maintain confidential and secure all material and information provided, directly or indirectly, by the other Party pursuant to this Agreement. Subject to relevant legislation related to freedom of information or the protection of privacy and any other laws, neither Party shall directly or indirectly disclose to any person, either during or following the term of this Agreement, any such material or information provided to it by the other Party without first obtaining the written consent of the Party who provided such material or information, allowing such disclosure.

IN WITNESS WHEREOF the Parties have duly executed this Agreement.

By:

(Authorized Signing Officer)

By:

(Authorized Signing Officer)

WELLINGTON COMMON ELEMENTS
CONDOMINIUM CORPORATION NO. 214

By:

(Authorized Signing Officer)

ONTARIO CLEAN WATER AGENCY

SCHEDULE A - The Facilities

Part 1. Description of the Facilities

For the purposes of this Agreement, the description of the Facilities is set out in the following document(s):

Wellington Common Elements Condominium Corporation No.214 c/o MF Property Management Limited 28 Bett Court Guelph, Ontario N1C 0A5

WATER

As per PERMIT TO TAKE WATER - Ground Water, NUMBER 7137-AG7SV2

For the water

taking from: Four Wells (Well PW1, Well PW2, Well PW3, Well PW4)

Located at: Lot 21, Concession 8, Geographic Township of Puslinch, County of Wellington

WASTEWATER

Existing sewage works comprising of a sanitary collection system, pumping stations and forcemains, a sewage treatment and subsurface disposal system re-rated at approx. 158 m3/d average daily flow serving the Mini Lakes Subdivision and Wellington Common Elements Condominium Corporation No. 214 comprising of a maximum of 292 units (from the original 400 units) for year round use in the Township of Puslinch

SCHEDULE B – Definitions

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

- "Agreement" means this Agreement together with Schedules A, B, C, D, E, F, G and H attached hereto and all amendments made hereto by written agreement between Owner and the Contractor.
- "Annual Price" is defined in Section 1 under Schedule D of this Agreement.
- "Applicable Laws" means any and all statutes, by-laws, regulations, permits, approvals, standards, guidelines, certificates of approval, licences, judgments, orders, injunctions, authorizations, directives, whether federal, provincial or municipal including, but not limited to all laws relating to occupational health and safety matters, fire prevention and protection, health protection and promotion, land use planning, environment, Building Code, or workers' compensation matters and includes Environmental Laws. As well as the agreement between the Township and the Client dated 2014/12/15 for wastewater and 2014/12/16 for water.
- "Approved Major Maintenance Expenditures" is defined in Section 4.6(b) of this Agreement.
- "Authorizations" means any by-laws, licences, certificates of approval, permits, consents and other authorizations or approvals required under Applicable Laws from time to time in order to operate the Facilities.
- "Authorized Representative(s)" is defined in Section 2.4 of this Agreement.
- "Business Days" means a day other than a Saturday, Sunday or statutory holiday in Ontario.
- "Business Hours" means the hours between 7:30 a.m. and 4:00 p.m. on a Business Day.
- "Capital Projects" is defined in Section 4.7(a) of this Agreement.
- "Change in Applicable Laws" means the enactment, adoption, promulgation, modification, issuance, repeal or amendment of any Applicable Laws that occur after the date this Agreement is executed by both Parties.
- "Change Order" means the document shown in Schedule "G" describing the changes to the Agreement agreed to by both parties.
- "Claim" means any claim, fine, penalty, liability, damages, loss and judgments (including but not limited to, costs and expenses incidental thereto).
- "CPI Adjustment" means the percentage difference between the Statistics Canada Consumer Price Index, All Items (Ontario) ("CPI") during September of the previous Year as compared to

the CPI of September of the current Year. For example, the CPI Adjustment for Year 2017 is the CPI of September 2016 divided by the CPI of September 2015.

"Current Term" means the period of time in which the Contractor is providing the Services, whether during the Initial Term or during any Renewal Term.

"Crown" means Her Majesty the Queen in Right of Ontario.

"Drinking Water Quality Management Standard (DWQMS)" means the standard that sets out the minimum requirements for the operation of a drinking water system.

"(DWS)" is defined as Drinking Water System and further described in 8(d), Schedule C of this Agreement.

"Effective Date" is defined on Page 1 of this Agreement.

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

"ESA" means the Electrical Safety Authority.

"Facilities" is defined in the Recitals to this Agreement and further described in Schedule A.

"Hydro Costs" means hydroelectricity costs due to the operation and maintenance of the Facilities.

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

- (a) upon receipt of a Claim, or notice of claim, the Indemnified Party shall immediately forward such Claim or notice of Claim to the Indemnifying Party;
- (b) if requested by the Indemnifying Party, the Indemnified Party shall provide all documentation relating to the Claim or notice of Claim;
- (c) the Indemnified Party shall take such steps necessary to protect its right to defend such Claim or notice of Claim and shall assign such right to the Indemnifying Party including any subrogation rights;
- (d) the Indemnifying Party shall not settle any Claim, or notice of Claim without the prior written consent of the Indemnified Party; and
- (e) the Indemnified Party shall have the right to take-over the defence of any Claim, or notice of Claim and the Indemnifying Party shall fully co-operate with such action.

- "Indemnified Parties" is defined in Section 3.3(a) of this Agreement.
- "Indemnifying Party" means the Party responsible for dealing with any Claims and paying out any Claims.
- "Initial Term" is defined in Sections 4.1, 4.3, 4.4, 4.5, 6.1 and 6.2 of this Agreement."
- "Insurance" is defined in Section 2.7(a) and further described in Schedule E.
- "Intellectual Property Rights" means any copyright, trademark, patent, registered design, design right, topography right, service mark, application to register any of the aforementioned rights, trade secret, rights in unpatented know-how, right of confidence and any other intellectual or industrial property rights of any nature whatsoever in any part of the world.
- "Major Maintenance Expenditures" is defined in Section 4.6(a) of this Agreement.
- "MOECC" means the (Ontario) Ministry of the Environment and Climate Change.
- "MOL" means the (Ontario) Ministry of Labour.
- "OHSA" means the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.
- "Optional Services" means any services not included in the Annual Price that the Owner and the Contractor agree in writing to designate as "Optional Services" subject to Section 4.12.
- "Outpost 5" means a remote monitoring and control system designed and constructed by the Contractor and its consultants for the purpose of monitoring and controlling processes at water treatment facilities and their related parts.
- "Overall Responsible Operator" means the person who will act as the overall responsible operator pursuant to Section 23 of O. Reg. 128/04 under the Safe Drinking Water Act, 2002 (the "SDWA") and Section 15 of O. Reg. 129/04 under the Ontario Water Resources Act (the "OWRA") in respect of the Facilities.
- "OWRA" means the Ontario Water Resources Act, R.S.O. 1990.
- "Parties" is defined in the Recitals to the Agreement.
- "PDM" or "Process Data Management" means technology that allows process data to be entered into a format that can be viewed, manipulated and retrieved in the form of customized reports.
- "Pre-existing Condition" is defined in Section 2.5 of this Agreement.
- "Renewal Term" is defined in Section 4.1 of this Agreement.

- "Routine Maintenance" means regular and/or repetitive activities recommended by the equipment or facility manufacturer or practices of a prudent operator to maintain the reasonably expected service life of the equipment and components thereof and includes preventative maintenance.
- "SCADA" means Supervisory Control and Data Acquisition.
- "SDWA" means the Safe Drinking Water Act, 2002, S.O. 2002 c.32.
- "Service Fcc" is defined and described in Section 4 of Schedule D.
- "Services" is defined in Section 2.1 of this Agreement.
- "Technology" is defined in Section 7.1 of this Agreement.
- "Township" is defined as The Corporation of the Township of Puslinch.
- "Uncontrollable Circumstance" is defined in Section 2.2(c) of this Agreement.
- "Unexpected Expenses" is defined in Section 4.8(a) of this Agreement.
- "Utility Costs" means the costs of natural gas used in the operation of the Facilities.
- "WMMS" or "Work Management Maintenance System" means a computer program used to determine a program of preventive maintenance activities for equipment in a facility based on a risk analysis that considers factors such as equipment life expectancy, present value and replacement cost.
- "WWTF" is defined as Waste Water Treatment Facility
- "Year" means the three hundred and sixty-five (365) day period from January 1 to December 31 of the calendar year.

SCHEDULE C - The Services

A - Services for Water Distribution, Supply System and Water Wells

Part 1 - Services included in the Annual Price

The Contractor will provide the following services:

- 1. Staffing
- (a) certified operator(s) to attend at the Facilities as required under normal operating conditions on Business Days and during Business Hours and supply other personnel as may be necessary to operate, maintain and manage the Facilities under normal operating conditions in compliance with the requirements of Applicable Laws, terms of an Agreement, including management, operation, routine maintenance, administration and reporting;
- (b) supply a certified operator(s), who will be on call 24 hours per day, 365 days per year to respond to emergency conditions in respect of the operation of the Facilities, any such response to be charged to the Owner in accordance with Schedule D herein or by way of an annual set amount:
- (c) provide all necessary training and continuing education for staff to ensure the continued operation of the Facilities, in accordance with all Applicable Laws;
- (d) provide an Overall Responsible Operator for the Facilities.
- 2. Regulatory Reporting
- (a) prepare and submit all reports to the Owner, Township and the MOECC respecting the operation and maintenance of the Facilities as required by the MOECC or any other regulatory agency or body having jurisdiction at the time of the Agreement;
- (b) review any inspection reports prepared by the MOECC in respect of the Facilities and, subject to any approvals of the Owner and Township, either correct or negotiate with the MOECC amendments to a deficiency and to deal with Township Peer reviews (i.e. Council, Township Engineer or Township Hydrogeologist), if required
- report to the Owner, Township and the MOECC non-compliance with a regulatory requirement;
- (d) maintain a Drinking Water Quality Management System plan.
- 3. Operations Manuals

- (a) recommend to the Owner, any section in the operating manuals that should be modified/changed to ensure that the operating manuals reflect the actual or revised approach to operating the Facilities; which recommendations may require third party assistance.
- 4. <u>Initial Inventory</u>
- (a) develop and maintain an inventory of the Owner's original equipment tools and attractables in place as of the effective date of the Agreement;
- (b) develop an inventory of critical spare parts.
- 5. Change In Laws
- (a) notify the Owner of any modifications or changes to the Services or the Facilities required to comply with any Change in Laws and subject to Owner approval make the required modifications or changes at an additional cost.
- 6. Facility Emergency Preparedness
- (a) prepare and revise, as necessary, an Emergency Plan for the Facilities consistent with the requirements of the Applicable Laws, and Confined Space Entry Policy, if applicable.
- (b) establish procedures for managing foreseeable emergencies or abnormal conditions affecting the Facilities.
- 7. General
- (a) good housekeeping to maintain a safe work environment;
- (b) provide security at the Facilities by inspecting fences and gates and locking same and notifying the Owner of the need for any repairs;
- (c) provide mobile communications services;
- (d) annual flow meter calibrations;
- (e) For both water and wastewater a total of four (4) hours per day have been included in the Estimate (Monday to Friday). Weekends and stat holidays are excluded. Regular call-ins are estimated at 3 a month for both the water and wastewater system. The estimated 36 call-ins a year include a four hour minimum charge at Contractor's overtime rate. This would also include travel time to site.

8. Operations & Maintenance

- (a) in providing routine operation of the Facilities, the Contractor will conduct:
 - (i) visual inspection of all buildings, equipment and Facilities insofar as can be observed while these are in service;
 - (ii) instrumentation cleaning, verification of meters;
 - (iii) sampling of groundwater and surface water and/or on-site analysis and will cover the cost of the laboratory testing as well;
 - (iv) sample collection of groundwater and surface water, preservation, packing and shipment for off-site analyses as required by Applicable Laws at the time of the commencement of this Agreement;
 - laboratory sampling, analysis and reports including costs of the laboratory testing as required by Applicable Laws at the time of the commencement of this Agreement;
 - (vi) coordination of chemical supply with chemical vendors including the cost of the chemicals and sampling;
 - (vii) checks and response to alarms during Business Hours;
 - (viii) inspection of process control equipment to ensure proper operation of disinfection system, pumps, valves, chemical system;
 - (ix) maintenance of daily on-site logs and records, including process control log sheets, laboratory data log sheets, bypass reports and routine checklists as required by Applicable Laws;
 - (x) consolidation and processing of the Contractor's internal operational data forms for statistical input into a reporting system for the annual report;
 - (xi) detection of significant water loss based on monitoring of flow readings,
 - (xii) recording and analysis of flows, chemicals used, residuals and other process readings as required;
 - (xiii) utilize Owner's SCADA system (if applicable) for trending review and reporting, gap analysis, testing, and compliance;
 - (xiv) before September 30th^t (as per Agreement Section4.6(b), prepare a rolling three year (3) report outlining the foreseeable Major Maintenance Expenditures and Capital Projects required for the Facilities, complete with cost estimates for the Owner's budgeting purposes;
 - (xv) maintenance of vehicle(s) used in providing the services, including fuel and any other operating costs associated with such vehicle(s);
 - (xvi) flushing, opening, exercising and winterizing of water hydrants as required;
 - (xvii) main distribution shut-off valves and dedicated distribution system sampling stations exercising on a routine basis.

- (b) perform Routine Maintenance on the equipment used in the operation of the Facilities as specified in the maintenance management system.
- (c) implement and utilize a maintenance management system which shall record information related to the maintenance of the Facilities.
- (d) complete a visual inspection of the Facilities at Agreement commencement, The Facilities visual inspection would take place during the initial month of the Agreement and continue in the first quarter from the Effective Date.

Part 2 - Optional Services

The Contractor may provide additional services to the Owner including but not limited to the Optional Services set out below:

- 1. Operation Related Services
- (a) operation manual updates;
- (b) water service disconnect and reconnect;
- (c) new water service installation or connection inspection;
- (d) well cameraing/well level monitoring;
- (e) back flow prevention measures.
- 2. <u>Capital Projects Plans</u>
- (a) prepare a detailed Capital Projects Plan for the facility(ies)
- 3. Watermain Services
- (a) water infrastructure locates;
- (b) contract repair for watermain breaks including road restoration;
- (c) inspection of repaired water pipes;
- (d) thawing water pipes;
- (e) new watermain conditioning;
- (f) watermain swabbing;
- (g) intake inspection;
- (h) exercising secondary valves;
- (i) leak detection;
- (j) chamber inspections, monitoring.

B – Services for Wastewater Treatment System

Part 1 – Services included in the Estimate

CONTRACTOR will provide the following services:

1. Staffing

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

2. Regulatory Reporting

- (a) prepare and submit all reports to the Owner, Township and the MOECC respecting the operation and maintenance of the Facilities as required by the MOECC or any other regulatory agency or body having jurisdiction at the time of the Agreement;
- (b) review any inspection reports prepared by the MOECC in respect of the Facilities and, subject to any approvals of the Owner and Township may correct or negotiate with the MOECC amendments to a deficiency.
- (c) and to deal with Township Peer reviews (i.e. Council, Township Engineer or Township Hydrogeologist), if required;
- (d) report to the Owner and Township and the MOECC non-compliance with a regulatory requirement.

3. Operations Manuals

(a) recommend to the Owner, any section in the operating manuals that should be modified/changed to ensure that the operating manuals reflect the actual or revised

approach to operating the Facilities, which recommendations may require third party assistance.

4. <u>Initial Inventory</u>

- (a) develop and maintain inventory of the Owner's original equipment tools and attractables in place as of the date of the Agreement;
- (b) develop inventory of critical spares.
- 5. Change In Laws
- (a) notify the Owner of any modifications or changes to the Services or the Facilities required to comply with any Change in Laws and subject to Owner approval make the required modifications or changes at an additional cost.
- 6. Facility Emergency Preparedness
- (a) prepare and revise, as necessary, an Emergency Plan for the Facilities consistent with the requirements of the Applicable Laws, and Confined Space Entry Policy, if applicable;
- (b) establish procedures for managing foreseeable emergencies or abnormal conditions affecting the Facilities.
- 7. General
- (a) good housekeeping to maintain a safe work environment;
- (b) provide security at the Facilities by inspecting any fences and any future replacement fencing and gates and locking same and notifying the Owner of the need for any repairs;
- (c) provide mobile communications services;
- (d) Annual flow meter calibrations;
- (e) regular call-ins are required and are included at 3 a month for both the water and wastewater system. The call-ins include a four hour minimum charge at Contractor's overtime rate. This would also include travel time to site, less than an hour.
 - 8. Routine Operations & Maintenance
 - (a) in providing routine operation of the Facilities, the Contractor will conduct:
 - (i) visual inspection of all buildings, equipment and Facilities insofar as can be observed while these are in service;
 - (ii) instrumentation cleaning, verification of meters;

- (iii) sampling of wastewater effluent, groundwater and surface water and will also cover the cost of the laboratory testing as well and/or on-site analysis;
- (iv) sample collection of wastewater effluent, groundwater and surface water, preservation, packing and shipment for off-site analysis as required by Applicable Laws at the time of the commencement of this Agreement;
- (v) laboratory sampling, analysis and reports including costs of the laboratory testing as required by Applicable Laws at the time of the commencement of this Agreement;
- (vi) coordination of chemical supply with chemical vendors including the cost of the chemicals (alum, carbon source) and sampling;
- (vii) checks and response to alarms during Business Hours;
- (viii) inspection of process control equipment to ensure proper operation of disinfection system, pumps, valves, chemicals system;
- (ix) maintenance of daily on-site logs and records, including process control log sheets, laboratory data log sheets, bypass reports and routine checklists as required by Applicable Laws;
- (x) consolidation and processing of the Contractor's internal operational data forms for statistical input into a reporting system for the report;
- (xi) calculation, recording and analysis of the amount of wastewater treated;
- (xii) recording and analysis of flows, chemicals used, residuals and other process readings as required;
- (xiii) monitor and adjust dosages of process chemicals;
- (xiv) utilize Owner's SCADA system (if applicable) for trending review and reporting, gap analysis, testing, and compliance;
- (xv) before September 30th (as per Agreement Paragraph 4.6(b), prepare a report outlining the foresceable Major Maintenance Expenditures and Capital Projects required for the Facilities, complete with cost estimates for the Owner's budgeting purposes;
- (xvi) maintenance of vehicle(s) used in providing the services, including fuel and any other operating costs associated with such vehicle(s);
- (xvii) removal of grit and screening;
- (xviii) clean valve chambers and exercise valves;
- (xix) development and implementation of a hauling plan for land application and/or alternative disposal methods by January 31, 2018.
- (xx) coordination and removal of biosolids, haulage and disposal from the Facilities in accordance with applicable MOECC Guidelines for sludge disposal to the sites approved and permitted by the Owner to receive such sludge and biosolids. All work to be in accordance with MOECC's "Guideline for Sludge Utilization on Agricultural Lands", dated October 1992;

- (xxi) OCWA is responsible for the first \$5,000 for sludge haulage costs in the Estimate
- (xxii) No service fee will be charged by OCWA for sludge haulage administration.
- (xxiii) OCWA is responsible for the first \$5,000 for preventive and breakdown maintenance costs in the Estimate.
- (b) perform routine preventive maintenance on the equipment used in the operation of the Facilities as specified in the maintenance management system.
- (c) implement and utilize a maintenance management system which shall record information related to the maintenance of the Facilities.
- (d) develop a specific Standard Operational Procedure (SOP), in collaboration with the Owner for timely and effective communication of any critical wastewater infrastructure problem incident (eg. Power outage taking pumping station off-line) to Mini Lakes Residents, pursuant to OWRA section 53 and best management practices;
- (e) The Contractor and Owner shall conduct a yearly joint comprehensive inspection of the Facilities to evaluate the Facilities' condition, safety and other items. The Contractor shall prepare a capital budget for any recommendations.
- (f) The Contractor will attend quarterly Mini Lakes Community Board meetings as requested to present information concerning the Facilities.

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

The Contractor may provide additional services to the Owner including but not limited to the Optional Services set out below:

1. Operation Related Services

- (a) operation manual updates;
- (b) maintenance and repair of sewage collection system, including but not limited to, smoke/dye testing, manhole inspections, rodding, CCTV inspections, and tree root removal/treatments;
- (c) sewer system locates as set out by applicable legislation and Ontario One Call;
- (d) new sewer service installation or connection inspection;
- (e) contract repair for sewer line breaks including road restoration;
- (f) inspection of repaired sewer services;
- (g) inspect and flush sanitary collection system, including sewers, manholes and clean outs;
- (h) high pressure sewer flushing;
- (i) acoustic pipe inspection;
- (j) infiltration surveys, sewer cameraing;
- (k) adjust and leveling manholes;
- (1) odour control system;
- (m) manage the existing stormwater systems on the development lots and Elm street, and carry out periodic flushing of catch basins and storm pipes and the maintenance of stormceptor when required
- 2. <u>Capital Projects Plans</u>
- (a) prepare a detailed Capital Projects Plan for the Facility(ies).
- 3. Engineering Services
- (a) engineering services;
- (b) energy audits;
- (c) provide assistance and/or complete applicable funding applications;
- (d) financial plans.
- 4. Information Technology Services
- (a) SCADA development and maintenance.

SCHEDULE D - The Annual Price And Other Charges

1. Annual Price for the Initial Term

In accordance with Section 4.2 and subject to any adjustments made pursuant to other provisions of this Agreement, the Owner shall pay the Contractor a price for the Services for each Year of the Initial Term in the following amounts (the "Annual Price"):

- (i) For January 1, 2018 through to December 31, 2018 inclusive the annual price will be: \$221,032.00;
- (ii) For Year Two and subsequent Years: \$221,032 plus the CPI Adjustment, plus an adjustment for maintaining the Insurance which is renewed annually by the Contractor. The CPI Adjustment shall be calculated as soon as necessary information is available from Statistics Canada. In Year Two of the Agreement, the CPI Adjustment shall be added to the Annual Price for Year One of the Agreement and for Subsequent Years, on a cumulative basis.

2. Payment of the Annual Price

In Year One of the Initial Term, the monthly payment of the Annual Price shall be \$18,419.33

3. Optional Services

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

- (a) Labour rates on Business Days, Monday to Friday, 07:3004:00 shall be billed at \$90.00/hour/person for a Senior Operations Manager, and \$65.00/hour/person for an operator or mechanic, plus vehicle expenses at \$0.50/km/vehicle;
- (b) Labour rates on statutory holidays shall be billed at \$132.50/hour/person for a Senior Operations Manager, and \$87.50/hour/person for an operator or mechanic, with a minimum cight (8) hour charge, plus vehicle expenses at \$0.50/km/vehicle;
- (c) Labour rates at all other times (after hours and on weekends) shall be billed at \$132.50/hour/person for an operations manager and assistant operations manager, and \$87.50/hour/person for an operator or mechanic, with a minimum four (4) hour charge, plus vehicle expenses at \$0.50/km/vehicle;
- (d) Costs for parts, equipment and supplies, and outside labour charges (i.e., Contractors), used by the Contractor staff to provide the Optional Services shall be billed to the Owner, and the Owner will pay such costs together with a Service Fee;

4. Service Fee

"Service Fee" means an additional fee charged to the Client when the Contractor purchases materials, supplies, equipment or Contractor's services on behalf of the Client. For any individual item or service purchased, the Service Fee shall be calculated as follows:

- (a) 15% on the first \$10,000; plus
- (b) 10% on the amount in excess of \$10,000 but less than \$30,000
- (c) 5% on the amount in excess of \$30,000.

SCHEDULE E - Insurance

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

Automobile Insurance

Coverage: Automobile Liability for the Contractor owned or leased vehicles.

Limit: \$5,000,000

Commercial General Liability Insurance

Coverage: Third party liability including legal fees, for property damage and/or

bodily injury as caused by the Contractor's negligence arising out of the

Contractors's operations of the Facilities.

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

Deductible: \$50,000 for the year 2017; subject to change on an annual basis.

Contractor's Pollution Liability/Professional Liability Insurance

Coverage: Professional Liability: To pay on behalf of the Contractor sums which the

Contractor shall become legally obligated to pay as damages and/or claims expense as a result of claims made first against the Contractor, and

reported to the insurer, in writing during the policy period, automatic extended reporting period (60 days), and by reason of any act, error or omission in professional services rendered or that should have been rendered by the Contractor, or by any person for whose acts errors or omissions the Contractor is legally responsible, and arising out of the

conduct of the Contractor's profession.

Pollution legal liability covering third party property damage and bodily injury and clean up costs for pollution conditions arising out of the

performance of the services provided by the Contractor.

Limit: \$10,000,000 per loss on a Claims Made basis with automatic extended

reporting periods for Pollution Liability. \$10,000,000 aggregate.

Limit: \$5,000,000 for Professional Liability Insurance

Deductible: \$100,000 for the year 2017; subject to change on an annual basis.

SCHEDULE F - List of Pre-Existing Conditions

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

Water

- No automatic switch over for chemical pumps.
- · No air gap for sampling locations.

Wastewater

- SCADA controls and access in treatment building
- Septic beds
- Known issues with RBC and main gear replacement.
- Continuous feed to RBC, not enough food (influent flow)
- Float issues with pumping stations.
- · No separate chemical storage building.
- No separated sewers which can result in "Variable Flows" higher than normal, higher than design parameters.

Background.

- The WWTP was originally designed for 400 homes with an Average Daily Flow Rate of 216m3/d. Somewhere along the way this was down rated to 262 homes with an Average Daily Flow Rate of 1S8m3/d. Now it will need to be adjusted again to suit the extra 31 homes under construction.
- The monthly BODS have been up and down, which as you know can be adjusted by the adding/decreasing chemicals, carbon etc. but the readings are still within the required MOECC limits.
- Same with the Nitrogen levels which of course fluctuate with the chemicals used but again are within the MOECC limits.
- Generally speaking the WWTP has been operating fairly well and been in accordance with the MOECC requirements (see previous Monitoring Reports).
- Recently we have been experiencing solids in the Leaching Beds but as noted the BODS and nitrogen levels are still within the required MOECC limits.

Problem.

- The WWTP is under pressure to perform when there is a heavy rainfall.
- Water is seeping into the sanitary system due to the system being old (around manholes due to settlement cracks, possible cracked pipes, whatever).
- When this happens, this water is flowing too fast for the RBC to cope.
- Under this condition, the pumps in the Final Clarifiers are unable to pump the excess effluent back to the Primary Clarifier.
- The flow is so fast that solids do not have time to drop to the bottom of the Final clarifiers and therefore some solids flow over the Weir into the Effluent Tank.

Suggested Solution.

- Immediately install filters/strainers between the Final Clarifiers and the Effluent Tank. This would be a solution no matter what the problem is and probably should have been installed originally, in any case.
- Flush out the Leaching Beds as necessary.
- Carry out remedial repairs/replacements to the sanitary system as time and money permits, as this would be a major undertaking.

SCHEDULE G - Change Order Form



Change Order Form

Change Being Requested							
Name of Change:							
Ontario Clean Water Agency (CONTRACTOR)		Per:	Date (YYYY/MM/DD):				
Owner		Per:	Date (YYYY/MM/DD):				
Adjustment							
	riate Type of Change						
Apply (Y/N)	Type of Change:	n anno					
	Adjustment to Annua	ıl Price					
	Change to Service						
	Impact						
Adjustment to	Annual Price		-				
Description -	Attach Additional Docu	umentation if Required					
		100					
Change in Ser	Change in Services						
Description -	Attach Additional Docu	mentation if Required	<u></u>				
	The same of the sa						

SCHEDULE H - Expenditure Request and Approval to Proceed



Hub Name Hub Address City, ON Code

Phone: XXX-XXX-XXXX

Fax: XXX-XXX-XXXX

Facility Name:			
Project Name:			(A. III SIII—IN-MISS SA. 2 III 243
Project Number:	Tox	Estimated Project Start Date:	
Total Estimated Cost of the Project:	\$	Detailed Quote Attached:	☐ Yes ☐ No
It is recognized that this is a budget est where the final invoice price varies from Type of Project:	250		iditional justification
☐ Maintenance Project ☐ ☐ Health & Safety	Out of Scope Work	☐ Contingency	☐ Emergency
Description of Project or Expenditure:			
Submission Prepared By:			
Name (Print)	Signature	Da	te
Authorized Representative for the N	Municipality		
PART 2	8855555555555555555555555555	848888888888888888888888888888888888888	
Approval to Proceed:			
☐ Approved ☐ Declined	☐ Deferred Reason	if Declined or Deferred	
The Ontario Clean Water Agency is aut estimate provided above. This may income The OWNER agrees to pay CONTRACTO OWNER's agreement with CONTRACTO	clude but not limited to the DR the costs associated with	hiring of sub-Contractors, consulting t	firms, etc. as required.
Approved By:			
Name (Print)	Signature	Dat	te
Authorized Representative for the N	Municipality		
PART 3			entervariosen entervaringen nord
CONTRACTOR Internal Use Only:			

Owner PO / Project #:	Date:		*	1	
Project Start Date:	Project Cor	Project Completion Date: Date:			
CONTRACTOR Invoice #	Date:				
CONTRACTOR Account Code:	CONTRACTOR Work Order #				
Cost Breakdown for Change in Services					
Item		Quantity	One-time Cost	Annual Cost	
S. C. Control					
				8	
L. Commonwealth		-m-Ar			
www.					
		200000			
and the particular par					
		Total		III DOMA DA DA DA	
		Cost:			



APPENDIX E Process Optimization and Technical Services (POTS) Site Visit Report



November 24, 2021

Mark Thomson Condominium Manager Wellington Common Element Condominium Corp #214

Dear Mr Thomson,
Mark.Thomson@wilsonblanchard.com

Re: Wastewater Treatment Plant Upgrades

The existing wastewater treatment at Mini Lakes is based on an RBC process (Rotating Biological Contactor). The major equipment for this process has been in service for approximately 20 years and has been performing poorly for the past several years. In OCWA's 2018 Trade-Off Study, three options for replacing the RBC were analyzed: (1) rehabilitating the existing RBC, (2) replacing the RBC with an SBR, and (3) replacing the RBC with an MBBR. At that time, the order of magnitude budgets (Class 5 Estimate) were \$610,000 for rehabilitating the existing RBC and \$1,455,066 for replacing it with an SBR. Based on discussions, Mini Lakes chose to replace the RBC facility with an SBR facility and this effort is currently in the detailed design stage (30% design completed). Unfortunately, the Consulting Engineer, Associated Engineering (AE), now estimates (September 2021) that upgrading the plant to an SBR facility may potentially cost in the range of \$5.6M to \$6.5M due to a number of factors including: pandemic pricing, the addition of biosolids handing (i.e. geotubes), etc. Additionally, the existing single phase power must also be upgraded to three-phase, a task that Hydro One is currently expecting to cost \$2M, an increase from their original estimate of \$400,000 (July 2021). Even with "optional" upgrades removed from the scope, these costs are significantly higher than originally anticipated in 2018, when the project was proposed.

As OCWA has been working with AE and Mini Lakes to mitigate the rising costs, existing RBC is struggling to consistently meet compliance. In an effort to alleviate these issues, OCWA's Process Optimization and Technical Services (POTS) team conducted a site visit to determine if operational changes could be made to improve treatment until the system was upgraded. The attached document describes their findings and recommendations. This letter summarizes these findings and recommendations and organizes them within the context of the on-going upgrade work.

1.1 Overview of Optimization Report

OCWA's Optimization Report recommends a number of short term and long term improvements including operational process changes, installing new equipment and sampling improvements (to better monitor the effects of the other improvements). Refer to the attached report for a detailed description of the short-term and long-term recommendations. OCWA's Engineering team is following up with vendors to determine whether the upgrades recommended in the Optimization Report are able to be implemented while maintaining the single phase electrical service currently available to the community.



2 Summary of Report

The existing RBC treatment facility was designed to treat an average flow of 216 m³/d and a peak flow of 319 m³/d. Currently, the treatment facility is operating at 56% of its design capacity.

A 2016 ECA includes upgrades to the chemical dosing system, improvements to the primary/ equalization tank, and the addition of crossover connections between the two anoxic tanks. None of these upgrades have been completed. The 2016 ECA also lists an effluent limit for nitrate of 8 mg/L. Since 2018, the nitrate concentration has been increasing and recently, has often exceeded this limit.

Flow into the facility is divided between two RBC process trains that operate in parallel. An analysis of the flow and cBOD5 (carbonaceous biological oxygen demand) indicates that the RBC is under-loaded both hydraulically and with respect to carbon load. This leads to high dissolved oxygen at the later stages of the RBC process, which then results in the poor performance of the subsequent anoxic process (nitrite and nitrate removal) and subsequent effluent nitrate concentrations that exceed the 8 mg/L limit. Further, it results in an unbalanced biofilm weight across the RBC shaft leading to mechanical issues.

One of the improvements in the 2016 ECA is to install a crossover connection between the two anoxic tanks (where denitrification occurs) so that instead of operating two RBC trains, flow can be directed mainly through one and then be split between the two anoxic tanks. This will increase the load in the RBC, which in turn will reduce the dissolved oxygen entering the anoxic tanks, thereby reducing the nitrite leaving the facility. This improvement has not yet been implemented.

3 Path Forward

Due to the increasing cost of the SBR upgrades, and the new recommendations from the OCWA POTS team, OCWA recommends pausing the design work and revaluating the decision to upgrade the RBC to an SBR. In the mean time, OCWA recommends implementing the short term improvements recommended in the attached report immediately to improve the system's compliance. If sampling results over the next few months show that the RBC process can indeed create effluent that meets the criteria, a life cycle cost analysis (cost and schedule) should be conducted to compare the cost of upgrading the RBC system (in addition to the other building modifications and improvements necessary to keep the system operating within current standards and improve the health and safety of the plant) to the cost of replacing the RBC process with an SBR process.

This can be summarized as follows:

- 1. Implement the short term recommendations from OCWA's Optimization Report and the 2016 ECA.
- 2. Monitor the effluent for one to three months to determine feasibility of continuing to treat the wastewater using the existing RBC equipment. Note that any operational changes to the treatment process do not have an instantaneous effect and it may take a few weeks for the biology (in the RBC) to adjust (especially in colder weather). This means that each time a step change is made to the system, a monitoring period must follow to assess the effects.



- If warranted, conduct a life cycle analysis to compare the cost of renewing the RBC system versus
 upgrading it to an SBR system within the current market and with the identified constraints (power
 requirements, etc.).
- 4. Determine which approach (RBC/SBR) to implement going forward. AE will either complete the design for the SBR or create any necessary designs for tendering the RBC work so that there is no need to procure another consulting firm.
- 5. Construct the selected treatment technology.

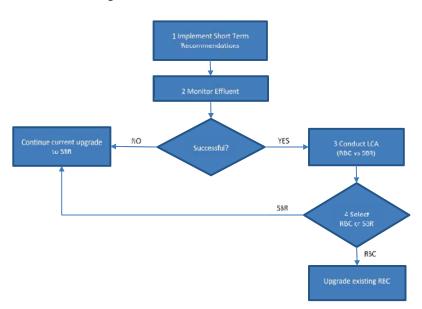


Figure 1: WWTP Decision Process

4 Summary of Recommended Actions and Status

There are a number of short term recommendations in OCWA's Optimization report and in the 2016 that have been listed below with the current status.

- 1. Divert flow from one RBC train to the other (but keep both operating)
 - November 19, 2021 OCWA has throttled flow from RBC1 by 50%. There is a possibility that the deterioration of the infrastructure may reduce the effectiveness of controlling flow via the valve but this is being monitored and will be addressed if necessary. Note that with any change to a biological system, it will take several weeks for the operation to stabilize.
- 2. Increase recirculation by increasing RAS pump rate
 - Week of November 15 OCWA increased pump flow rate from 4 minutes every 3 hours to 4 minutes every 2 hours. This is being monitored and may be re-adjusted if necessary.
- 3. Add step feeding of wastewater to RBC halfway down tank More investigation is needed to determine feasible way to implement this. In progress.



4. Add crossover connection between anoxic tanks

 In progress - The separating wall between the two tanks will need to be perforated. A Request for Information has been submitted to Stantec to collect the information required. This modification was recommended in the 2016 ECA and will need to be completed to allow flow diversion between the tanks to meet nitrate compliance limits in the effluent.

5. Adjust speed of RBC shaft

- In progress Additional information from the RBC vendor is needed to determine if this is possible with single phase power
- 6. **Install new peristaltic pumps** These pumps are currently operational and will be replaced if they fail and cannot be repaired.
- 7. Adjust chemical dosing for phosphorus and denitrification OCWA's Operations team has been provided with a new sampling schedule with updates to adjust chemical dosing based on rolling average influent phosphorus levels. The sampling results will also be monitored by OCWA's Engineering team as part of the quarterly reporting and although some improvements may be visible in 2021 Q4, we expect that we will have better visibility on process improvement effectiveness at the end of 2022 Q1.
- 8. **Partition the clarifier** more study is necessary to confirm if this is required. Will not be done unless the final decision is to maintain the RBC process instead of upgrading the system to an SBR.

9. Add a chemical storage building

 In progress – Regardless of the final treatment technology (RBC or SBR) selected, OCWA is investigating the possibility of constructing temporary storage on the site until a permanent building is designed and constructed under the treatment plant upgrades. As the building must be heated for winter months, it may not be implemented as quickly as the other items.

Although this additional work will delay the wastewater treatment upgrades by approximately six months, we feel that with the escalating costs of the SBR upgrade project, it will be time well spent to ensure that the community is receiving best value for money. Also note that some of the above items may have additional costs associated with them, which will be submitted to Mini Lakes for approval once they have been confirmed.

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

Yours truly,

Sonya M Semanuik, P.Eng., PMP

Senior Project Manager - Studies & Condition Assessments



ATTACHMENT A Mini Lakes Site Visit Report October 27



Site Visit Summary - Mini Lakes Sewage Treatment Facility

REPORT TO: Don Irvine, Senior Operations Manager, Georgian Highlands Region

Emanuel Castro, Senior Operator, Georgian Highlands Region Melissa Cortes, Process and Compliance Technician (PCT)

Geordie Wheeler, Operator Mechanic

FROM: Yaldah Azimi, PhD, P. Eng., Senior Wastewater Program Manager, Process

Optimization and Technical Services (POTS)

REVIEWED BY: Sangeeta Chopra, M. Eng., Director (POTS)

DATE: October 18th, 2021 SUBJECT: Mini Lakes RBC

Background

On September 24th, 2021, the Process Optimization and Technical Services (POTS) Team visited the Mini Lakes Community Sewage Treatment Facility. The visit was in response to a request from Operations Staff to assist with the challenge with recent high effluent nitrate levels.

The process consists of a primary clarifier feeding into two parallel trains, each with an RBC and a clarifier (i.e., intermittent clarifiers), alum dosing for phosphorus removal, a denitrification chamber with carbon dosing (for alkalinity addition), and a final clarifier. The effluent from both trains then flows into a pumping chamber where the treated effluent is discharged to a subsurface disposal system. The system provides wastewater treatment to the Mini Lakes Subdivision and Common Elements Condominium comprising of a maximum of 292 units. The facility is operated under the most current Environmental Compliance Approval (ECA) no. 8154-AR4J2T. A simplified process schematic is provided below in Figure 1.

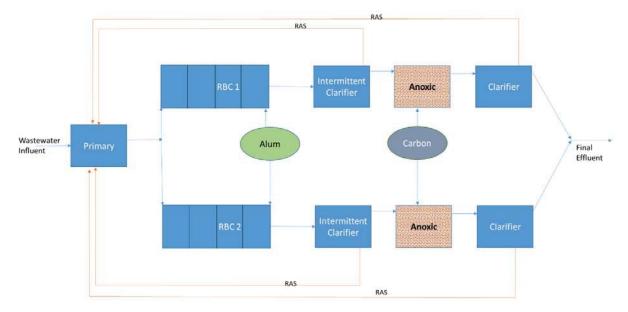


Figure 1. Schematic of Mini Lakes Sewage Treatment Process

There are discrepancies on the reported rated capacity of the sewage treatment facility in the ECAs that have been approved over the years. Since its construction in 1999, the plant has had 7 ECA-related documents and amendments. Key information from each ECA is summarized below in Table 1. The amended 2016 and 2017 ECAs state an average day rated capacity of 158 m³/d. The ECAs from 2000, 2006 and 2009 state the rated capacity as 216 m³/d, which is the average design flow of the RBC system. Based on engineering drawings and the Operations and Maintenance (O&M) manual (by Stantec and Hannah Environmental), the sewage treatment facility was designed to treat an average daily flow of 216 m³/d and peak flow of 319 m³/d. The average day and maximum day flows for 2020 were 122 m³/d and 245 m³/d, respectively. Hence, in 2020, the sewage treatment facility was operating at 56 percent of its design capacity.

The proposed changes in the 2016 ECA include upgrades to the chemical dosing system, improvements to the primary/equalization tank and providing process crossovers between the two anoxic tanks for improving operational flexibility. Also, the number of households serviced by the facility reduces from 400 to 292 in the 2016 iteration of the ECA, and it appears that the reduction of rated capacity from 216 m³/d to 158 m³/d is directly proportional to the change in number of households. It should be emphasized here that the number of houses serviced by a facility *should not* change the rated capacity of a sewage treatment facility. The firm sewage pumping capacity of all five pumping stations is at a maximum of 622 m³/d and the maximum effluent pumping capacity with the five pumps is at 1,166 m³/d. This means that there is sufficient capacity upstream and downstream the sewage treatment facility and the actual system was not the reason for the reduction in the 2016 ECA rated capacity. Further investigation with the MECP is needed to determine the cause of the change in the rated capacity in 2016.

Nitrate (NO_3 -N) in the final effluent is measured by a grab sample on a monthly basis and the ECA lists an effluent nitrate limit of 8 mg/L as an annual average concentration. The historical monthly effluent nitrate sampling results (obtained from WISKI), since 2018 are displayed in Figure 2. As seen in the figure, since 2018 the frequency of NO_3 -N concentration above 8 mg/L in the effluent has increased. This has led to a higher risk of exceeding effluent NO_3 -N compliance in the recent years.

2085 Hurontario Street, 5th Floor Mississauga ON L5A 4G1

ECA No. (year)	3-0356-99-006 (2000)	3-0356-99-006 (2000)	3-0356-99-006 (2000)	6792-6U8JKA (2006)	2113-7M8RBP (2009)	2391-9KCJUS (2016)	8154-AR4J2T
		Notice 1	Notice 2				(2017)
Rated Capacity, m ³ /d	216	216	216	216	216	158	158
Effluent Total Nitrogen limit, mg/L	5	-	-	-	-	-	-
Effluent Nitrate Limit, mg/L	-	5	5	5	5	8	8
Key Changes in Compliance Limits	Not Applicable	This notice corrected the effluent limit from 5 mg/L Total Nitrogen to 5 mg/L Nitrate	None	None	None	Decreased the rated capacity from 216 m ³ /d to 158 m ³ /d. The effluent nitrate limit was increased from 5 mg/L to 8 mg/L.	None
Key Changes in Sampling Requirements	Not Applicable	None	Added 2 new surface water monitoring locations (SW2 and SW5)	None	Removed BOD5 and Total Coliform requirements for effluent, added cBOD5 and E. Coli requirement. Removed BOD5, Total Coliform, pH, Conductivity, Sodium and Chloride groundwater sampling requirements, added cBOD5 and E. Coli. Changed the frequency of groundwater sampling from monthly to quarterly. Removed TSS and Total Coliform requirement for surface water sampling, added E. Coli.	Removed one surface water sampling location (SW2). Removed one ground water sampling location (MW-3).	None
Key Process Changes	Not Applicable	None	None	Proposed Specific use of molasses as a carbon source for denitrification (900L Tank)	The Works became subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works"	Proposed upgrades to add a partition wall, influent baffle, outlet weir and sludge recirculation piping to the primary clarifier. Proposed to add cross-train piping between the two anoxic tanks for redundancy and to operate 1 RBC train and 2 tertiary trains. Proposal to add a chemical storage building with a 600L carbon storage tank and 2,300 L alum tank.	Proposed carbon storag requirement change from 600 L to 900 L



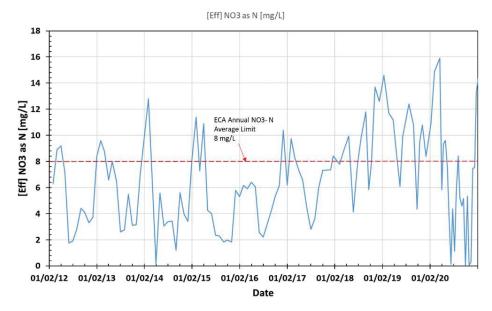


Figure 2. Historical Monthly Effluent Nitrate Concentration at Mini Lakes

Process Review and Site Observations

RBCs

Currently, flow is divided between the two RBC process trains and they operate in parallel with no
cross over lines between the two trains. Analysis of the flow and carbonaceous biological oxygen
demand (cBOD5) loads demonstrate that the RBCs are under loaded. Figure 3 and Figure 4 show the
historical hydraulic and cBOD5 loading to the RBCs considering equal division of flow (as currently
operated) between the two RBC process trains.

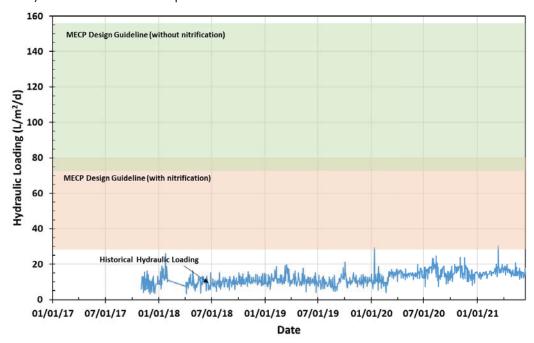


Figure 3. Historical (2018 – Present) Hydraulic Loading to the Mini Lakes RBCs (Equal Flow Distribution between the Two RBCs Considered) – The RBCs at Mini Lakes have Nitrification Requirement

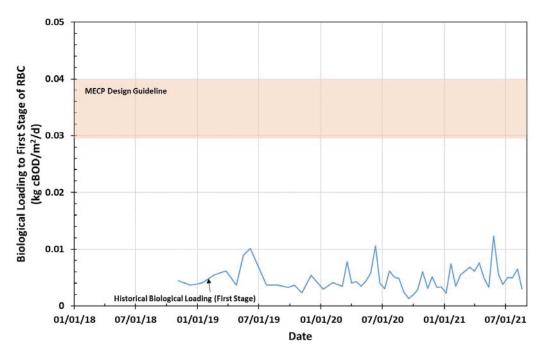


Figure 4. Historical (2018 – Present) cBOD5 Loading to the Mini Lakes RBCs (Equal Flow Distribution between the Two RBCs Considered)

- In under loaded RBCs, the biofilm uses oxygen in the early stages to treat all the carbon and ammonia, leading to high dissolved oxygen (DO) at the later stages of the RBC. The uneven distribution of biofilm (weight) on the RBC shaft, as a result of being under loaded, leads to mechanical issues. Mini Lakes' RBCs and intermittent clarifiers are followed by anoxic tanks to further treat the nitrates and nitrites generated via denitrification. The denitrification process occurs in the anoxic tanks where in the absence of DO, nitrates and nitrites are converted to nitrogen gas. In the case where the RBC discharge flow has high DO (> 2 mg/L), oxygen levels will not reduce sufficiently before the anoxic process. The DO of the flow leaving the two RBCs were measured during site visit and were at 5.8 and 4.5 mg/L. Dissolved oxygen was measured at all four stages of the two RBCs during site visit. Since the DO in RBC 1 is higher, the results show that RBC 2 is likely receiving more flow than RBC 1 and the flow distribution is currently not equal.
 - \circ RBC 1 from inlet to outlet 0.9 mg/L, 3.5 mg/L, 5.5 mg/L and 5.8 mg/L.
 - \circ RBC 2 from inlet to outlet 0.5 mg/L, 2.9 mg/L, 3.8 mg/L and 4.5 mg/L.
- The historical measured effluent flow at Mini Lakes is displayed in Figure 5. As noted earlier, the
 measurements prior to 2020 have lower accuracy than after 2020, and based on the 2020 average
 day flow the plant is operating at 56% of design capacity.

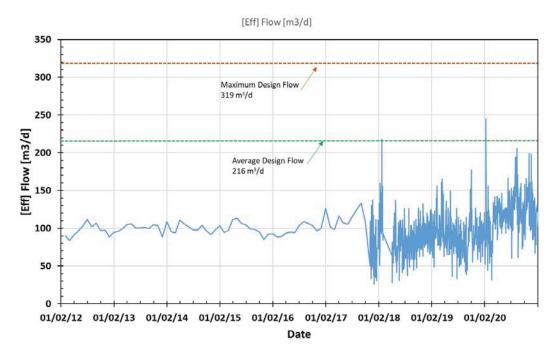


Figure 5. Historical Measured Effluent Flow at Mini Lakes Sewage Treatment Facility

• The RBC system was designed for a cBOD load of 43.2 kg/d. The Plant received an average cBOD load of 9.3 kg/d between 2018 and 2020 (Figure 6). This shows that the plant is receiving cBOD loads significantly less than the intended Stantec/Hannah design.

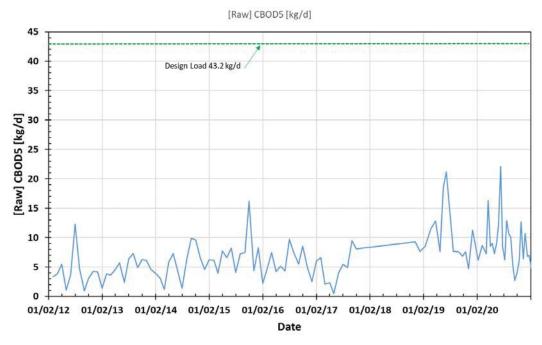


Figure 6. Historical BOD Loading to the Mini Lakes Sewage Treatment Facility

Anoxic Tanks

• Target operating DO for the anoxic tanks is < 0.5 mg/L. Based on field measurements during site visit, the DO level in various points of the anoxic tanks ranged from 1.8 to 4.8 mg/L. This is the main reason why the plant is unable to consistently meet the effluent nitrate limit of 8 mg/L. As noted in

- the RBC section, this issue originates from the RBC where the DO leaving the RBCs were measured to be 4.5 and 5.8 mg/L.
- The proposed works listed in amended ECA No. 8154-AR4J2T (2016- revoked) and ECA No. 8154-AR4J2T (2017- current) include modifications to the inlet of the denitrification tank to allow for crossover between trains for redundancy and for the option to operate one RBC train and two tertiary treatment (i.e., anoxic tank ad final clarifier) systems. The crossover, however, does not exist in the field. This is an important modification that will allow for the division of flow between the two RBCs, making full use of the anoxic tanks which will lower the DO levels in the system and resolve the issues the plant is currently experiencing with denitrification.
- MICROC2000[™] is added to the inlet of the anoxic tanks for denitrification, as denitrifying bacteria require readily biodegradable carbon in the absence of oxygen to convert nitrates and nitrites to nitrogen gas. The chemical feed system noted in the 2016 ECA proposed modification section, does not exist on site. Using peristaltic pumps, carbon is dosed directly from the MICROC2000 totes to the troughs upstream of the anoxic tanks. Due to high DO in the anoxic tanks, a large fraction of the added carbon is not used for denitrification and is oxidized in the presence of aerobic organisms.

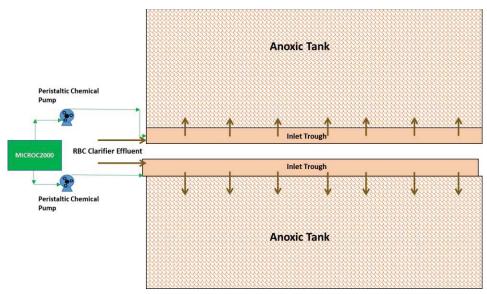


Figure 7. Simple Schematic of the Anoxic Tanks and Chemical Dosing at the Mini Lakes Sewage Treatment Facility

Process Diagnostics Sampling Protocol

As part of process diagnostic for this study, a comprehensive sampling program was recommended by POTS to the Operations Group for late September and early October 2021 to determine nitrification and denitrification performance, phosphorus removal and clarifier operation. Figure 8 in conjunction with Table 2 demonstrate the sampling locations and measured parameters.

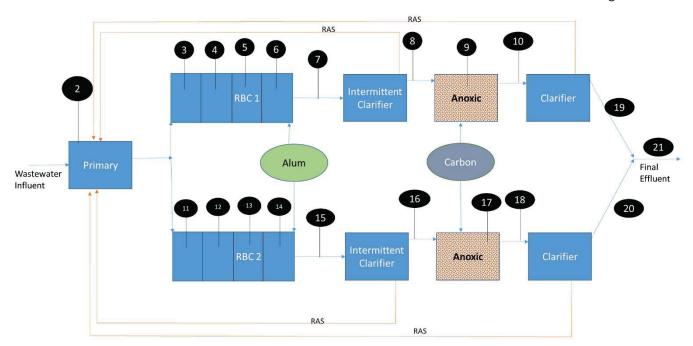


Figure 8. Mini Lakes Sewage Treatment Schematic Demonstrating OCWA POTS Recommended Sampling for Process Trouble-Shooting on September 1, 2021.

Table 2. Recommended Sampling by POTs Team for Process Trouble Shooting for September and October 2021, Communicated on September 1, 2021						
Sampling Point, as						
shown in Figure 8	Parameters	Sampling	Comment			
	TSS, TP, cBOD, TKN, TAN,					
2	pH, Alkalinity	Biweekly for September and October	Send out to lab			
	DO, pH (take photos of					
3, 4, 5, 6, 11, 12, 13,	biofilm from each stage		Operator to measure these			
14, 9, 17	of the RBC weekly)	Biweekly for September and October	parameters using a hand held probe			
7 and 15	TSS, TP cBOD, NH3,	Biweekly for September and October	Send out to lab			
	NO3, NO2, NH3, cBOD,					
8, 10, 16, 18	TSS	Biweekly for September and October	Send out to lab			
8,16	TP	Biweekly for September and October	Send out to lab			
	cBOD, TSS, TKN, TP, pH,					
19 & 20	NO3, Alkalinity	Biweekly for September and October	Send out to lab			
21	As Required by ECA	As Required by ECA				
All Five Clarifiers	Sludge Level	Biweekly for September and October	Measure on Site			

Findings from Recent Sampling

The results from three sampling instances (September 10th, September 15th and September 29th) are shown in Figure 9. The following can be concluded:

- <u>Insufficient nitrate removal across the anoxic tank</u> From the nitrate balance around the anoxic tank (points 8 and 10), it can be seen that the denitrification process is not complete. This is likely a result of the high DO across the system.
- RBC is performing well Based on low TAN levels in points 7 and 15, and low cBOD levels in points 8 and 16.
- Unequal distribution of flow between the two process trains Differences in the quality of flow discharged from the two RBCs (points 7 and 15) demonstrate that the flow is likely not equally distributed between the two process trains.

- <u>Improved sludge blanket monitoring and RAS pump adjustments required</u> The TSS balance around the intermittent and final clarifiers show that improved sludge blanket monitoring and RAS operation is needed.
- <u>TP removal is effective</u> Alum dosing appears to be sufficient for the removal of phosphorus across the process train (low TP levels at points 19 and 20).
- <u>Alkalinity looks healthy</u> Alkalinity seems to be in good balance across the system. Sufficient alkalinity is present for ammonia removal (nitrification).
- <u>Nitrification is complete</u> Due to the excess oxygen available in the system, nitrification reaction is complete (all ammonia is converted to nitrate) and the presence of nitrites is minimal (as shown in points 8 and 16).
- There is a risk of a cBOD5 exceedance due to incomplete denitrification The cBOD increases from points 8 to 10 and 16 to 18 due to incomplete denitrification and carbon (MICROC2000) addition to the system.

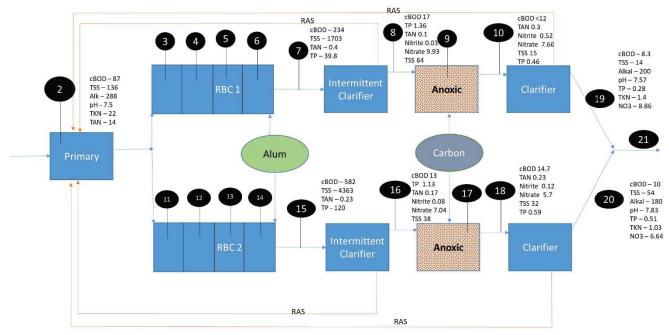


Figure 9. Three- Sample Average Results at Mini Lakes Sewage Treatment Facility. All Values have Unit mg/L. Sampling Point 2 Results Show the 2021 Average Data. The Plant has been Collecting Data Twice a Month on Raw Wastewater Collected from Sampling Point 2. .

Process & Mechanical Recommendations

It is evident that the main cause of nitrate exceedances is directly related to the high DO concentration in the RBC effluent and in the anoxic tank. The following summarizes recommendations for improved process performance and reliability.

Reducing DO Upstream of the Anoxic Tank

Enable diversion of a higher percentage of the incoming flow to one RBC train. This will increase the
hydraulic and organic loading onto the one RBC and a larger amount of oxygen will be consumed in
the tank. Currently, the operator can manually divert more flow to one RBC. The following should be
considered when implemented this strategy:

- 1. Ensure that change is gradual. With the diversion of more flow to one RBC, it will take time for additional biofilm to grow on the media. Ensure that no more than 10% change (in flow diversion) is made over a two to three-week time period. Monitor the ammonia (TAN), DO and pH exiting the RBC (sampling points 7 and 15 as shown in Figure 8). To ensure full nitrification is still taking place. Depending on the limitations of diverting flow in the field, supplementing load to the RBC receiving lower flow maybe required.
- 2. Monitor TSS exiting the intermittent primary clarifier (sampling points 8 and 16).
- 3. Monitor DO across the RBC (points 3, 4, 5, 6, 11, 12, 13, 14 as shown in Figure 8) and ensure that the DO in the last stage of the RBC (points 6 and 14) doesn't go below 2 mg/L.
- 4. Monitor sludge blanket in the clarifiers following the RBCs. RAS pump to be adjusted to maintain a sludge blanket level of 1-3 ft in both train 1 and train 2. Given that flow distribution is not equal, the frequency of RAS pumping would be higher for one clarifier vs. the other. Frequent monitoring of sludge blanket in these clarifiers (two or three times a week) is highly recommended for good process control and RAS pump adjustments.
- 5. We don't recommend completely shutting down one RBC as this can sometimes lead to start up issues and process failure. In this case, the process equipment is also currently at end of its service life.
- Increase recirculation by increasing the RAS pumping rates from the intermittent clarifiers will reduce the hydraulic retention time in the RBC basin. This can also help reduce the DO.
- Step feed the RBC to encourage better DO distribution across the RBC. This will entail the addition of a wastewater inlet point halfway down the RBC tank. Again, with this option the TAN, DO and pH across the RBC should be monitored carefully to make process adjustments. If this method is implemented, plant staff should start by feeding 10 percent of the influent flow to the middle section of the RBC and monitor performance before increasing this flow. As with any change in biological systems, changes should be made slowly and gradually to ensure the system is not shocked.
- Improve operational flexibility by providing the cross overs between the two anoxic tanks. This will
 enable the use of full denitrification capacity of the sewage treatment facility, while using only one
 RBC. This is a proposed modification in the 2016 ECA and should be made as soon as possible to
 improve operation and reduce nitrate levels at the facility.
- Add variable frequency drive to control the RBC rotational speed, which would assist operators
 control DO and biofilm thickness. This would lead to a lower DO leaving the RBCs. This is apparently
 not within the mechanical capability of the system at present.

Chemical Dosing System

- The chemical dosing pumps (both for alum and MICROC2000) have passed their service life (10-15 years). Installation of new peristaltic pumps is recommended. Given that the proposed modifications concerning chemical addition in the 2016 ECA have not been implemented, we recommend that at least new pumps be installed and drum mixers be purchased (for the totes used as day tanks) at the facility to ensure chemical addition is homogeneous and adequate.
- Chemical dosing for phosphorus removal is currently practiced. Alum is not diluted and it is directly added to the process downstream of the RBCs (between the RBC and the intermittent clarifier). We recommend that the operator adjust chemical dosing based on a three week rolling average

concentration of total phosphorus (TP) as measured in raw wastewater (Sampling point 2). Our understanding from the review of background information is that the dosing point was relocated from the intermittent clarifiers to the last stage of RBC a few years ago. We have provided a calculation excel sheet with this report to help the operator with calculating chemical dosing rates to each process train. An example of this calculation is shown below in Figure 10.

3 Week Rolling Average Phosphore	us Loading	2
TP Concent	trations	
Raw Wastewater TP (Sampling Point 2)	3.6	mg/L
Train Fl	OME	
Train 1 Flow	70	m3/d
Train 2 Flow	55	m3/d
Phosphoru	s Loads	
TP Load, Train 1	0.252	kg/d
TP Load, Train 2	0.198	kg/d
Chemical Information Chemical Name		Formula WW 8210
Active Ingredient	· '	Aluminum
Density	1.3	kg/L
% Active Ingredient	4.30%	, Kg/L %
Active Ingredient to Phosphorus Ratio	1.3	kg Al/ kg P
netive ingredient to mosphoras natio	113	1871/181
Dilution Ratio	1	L Mixed Solution / L Alur
Required Chemical Dose		
Train 1 Chem	ical Dose	
Dose of "Pure" Alum	7.62	kg/d
Dose of Diluted Alum	5.86	L/d
Dose of Diluted Alum	244	mL/h
Train 2 Chem	ical Dose	
Dose of "Pure" Alum	5.99	kg/d
Dose of Diluted Alum	4.60	L/d
Dose of Diluted Alum	192	mL/h

Figure 10. Example Calculation for Alum Addition at Mini Lakes Sewage Treatment Facility. Blue Numbers are Input by Operator, Red Numbers are Input Specific to the Chemical and Black Numbers are Automatically Calculated.

• Chemical dosing for denitrification should be adjusted based on the nitrate and nitrite levels entering the anoxic tank. Based on the WEF MOP No. 37., carbon dosing should be applied at a ratio of 6.5:1 (mass to mass) for carbon to nitrogen for MICROC2000. Dosing MicroC2000 above the required (calculated) dose to complete denitrification could potentially cause an increase in final effluent cBOD5. It is important to monitor the nitrates and nitrites and adjust the MICROC2000 dosage, accordingly. We have provided a calculation excel sheet with this report to help the operator with calculating chemical dosing rates to each process train based on measured nitrate and nitrite levels at sampling points 8 and 16. An example of this calculation is shown below in Figure 11.

3 Week Rolling Average Nitrate	and Nitr	ite Loading
Nitrate and Nitrite (a	s N) Conce	ntrations
NO3-N Concentration, Train 1 (Point 8)	7.22	mg/L
NO2-N Concentration, Train 1 (Point 8)	0.01	mg/L
NO3-N Concentration, Train 2 (Point 16)	6.49	mg/L
NO2-N Concentration, Train 2 (Point 16)	0.01	mg/L
Train F	lows	
Train 1 Flow	70	m3/d
Train 2 Flow	55	m3/d
Nitrate (as	N) Loads	
NO3-N Load, Train 1	0.5054	kg/d
NO2-N Load, Train 1	0.0007	kg/d
NO3-N Load, Train 2	0.35695	kg/d
NO2-N Load, Train 2	0.00055	kg/d
Chemical Information		
Chemical Name		MicroC2000
Active Ingredient	G	lycerine, Methanol
Density	1.225	kg/L
% Active Ingredient	72.00%	%
Active Ingredient to Nitrate Ratio	1.2	kg / kg NO3-N
Active Ingredient to Nitrite Ratio	1.6	kg / kg NO2-N
Dilution Ratio	6	L Mixed Solution / L
Required Chemical Dose		
Trai	n 1	
Dose of "Pure" MicroC2000	0.84	kg/d
Dose of "Pure" MicroC2001	0.69	L/d
Dose of Diluted MicroC2000	4.13	L/d
Dose of Diluted MicroC2000	172	mL/h
Trai		
Dose of "Pure" MicroC2000	0.60	kg/d
Dose of "Pure" MicroC2001	0.49	L/d
Dose of Diluted MicroC2000	2.92	L/d
Dose of Diluted MicroC2000	122	mL/h

Figure 11. Example Calculation for MICROC2000 Addition at Mini Lakes Sewage Treatment Facility. Blue Numbers are Input by Operator, Red Numbers are Input Specific to the Chemical and Black Numbers are Automatically Calculated.

Other

- All the major process equipment on site are over 20 years old at this point in time and passed their
 effective service life. For the more reliable operation of the RBCs into the future and to reduce the
 probabilities of non-compliance, the supplier (Hannah Environmental) should be engaged to replace
 all the failing process mechanical equipment, such as the RBC shaft, RBC and anoxic tank media, all
 RAS and chemical dosing pumps.
- As part of the process-reliability upgrade to the RBC system, the following is recommend:
 - Add the cross over line between the two anoxic tanks as noted in the 2016 ECA;
 - Add cross over line and valves to enable the operation of the two intermittent clarifiers in series;
 - Add proper chemical dosing system as noted in the 2016 ECA
 – storage tank, day tank, mixing, control on chemical dosing;
 - Electronic strain gauge cell to enable continuous monitoring of RBC shaft load. This is a
 useful parameter that alarms the operator on shaft failure but also provides information on
 biofilm growth across the RBC. Communicate with the supplier to obtain more information
 on the maintenance and failure frequency of this piece.
 - Integrate online monitoring and logging of temperature, DO and pH in the RBCs could help with process control.
 - Add sampling ports to all four RAS lines so that the mass balance of solids across the clarifiers can be calculated and monitored.

- Add instrumentation to the primary clarifier for the operator to be able to assess water level in the tank.
- Add two small hatches in the primary tank at a location closer to the middle of the tank for sludge removal and for the operator to monitor sludge levels.
- Other upgrades, including but not limited to:
 - The building housing the RBCs is old, has a leaking roof and is poorly lit. The ventilation system also needs to be upgraded.
 - The control room houses MCCs and disconnect switches. This room is not properly waterproofed and water seeps into the building and rusts the electrical component. This is a safety problem that needs to be addressed.
 - Depending on the electrical upgrades required to support the process and ventilation upgrades to the RBC for improving process reliability, the requirement for three phase power needs further investigation. The addition of this service could benefit the community in other ways too. This could be further explored with the client.
 - Our understanding based on the site visit and speaking to the operations team is that efforts are underway to reduce the presence of storm flows in the sanitary sewer system. The sanitary system is separate from storm at Mini Lakes, but the maintenance hole covers need to be raised [Sonya please comment on this the operators said that there are some improvements in progress to prevent storm entering the sewage collection system]. RBCs operate best with consistent flow and loads. This provision will help with reducing flow fluctuations to the sewage treatment facility.
 - The plant currently has no SCADA system for record keeping and control. We recommend that SCADA integration be carried out.
- Currently, no odour issues have been reported at the sewage treatment facility. Given that residential properties are very close (about 2 to 3 meters) to the sewage treatment site property line, we recommend that any upgrade to the existing facility consider odour control.

Future Sampling Requirements (From November 2021 Onwards)

The comprehensive sampling scheme recommended in Table 2 for September and October 2021 was to obtain information on the current operation of the plant. From November 2021 onwards, we recommend that the plant continue sampling across the process in accordance with Table 3.

Table 3. Recommended Sampling by POTs Team for Process Monitoring Starting November 2021						
Sampling Point, as		Sampling				
shown in Figure 8	Parameters	Frequency	Comment			
	TSS, TP, cBOD, TKN, TAN,					
2	pH, Alkalinity	Weekly	Send out to lab			
			Operator – Using a Weekly Calibrated Hand Held Probe.			
3, 4, 5, 6, 11, 12, 13,			For Points 9 and 17 measure DO in a few locations at			
14, 9, 17	DO, pH	Biweekly	various distances from the trough.			
7 and 15	TSS and TAN	Weekly	Send out to lab			
8, 10, 16, 18	NO3, NO2, NH3, cBOD, TSS	Weekly	Send out to lab			
8,16	TP	Weekly	Send out to lab			
	NO3, NO2, NH3, cBOD, TSS,					
19 & 20	TP	Weekly	Send out to lab			
		As Required by				
21	As Required by ECA	ECA	Send out to lab			
All Five Clarifiers	Sludge Blanket	Biweekly	Operator – Using Sludge Judge			

#	GM Blue Plan Recommendations	OCWA responses	Remarks
Sec	tion 8.0: Condition Assessments and Investigations		
1	Recommendations were made for operational changes that could improve the RBC process. It appears that as of November 2021, some of these changes were beginning to be implemented, whereas additional investigation was needed prior to implementing others. No further update has been provided.	 Some changes has been implemented as part of the recommendations made: Divert flow from one RBC train to the other (but keep both operating): November 19, 2021 - OCWA has throttled flow from RBC1 by 50%. There is a possibility that the deterioration of the infrastructure may reduce the effectiveness of controlling flow via the valve but this is being monitored and will be addressed if necessary. Ops staff implemented this recommendation; however it was observed that sewage was still flowing frequently into the RBC tank via holes in the structure (wall) between the primary clarifier and the RBC area. Increase recirculation by increasing RAS pump rate: Week of November 15 - OCWA increased pump flow rate from 4 minutes every 3 hours to 4 minutes every 2 hours. OCWA has replaced the old pumps for brand new pumps. Flow adjustments are still done on as needed basis as part of the standard operating procedure. Add step feeding of wastewater to RBC halfway down tank – More investigation was required to determine feasible way to implement this. Upon completion of investigations, it was determine that this addition is unfeasible. There are very limited space to accommodate this new line as proposed. Add crossover connection between anoxic tanks: This recommendation was deemed unfeasible with the current system as is. The works not only requires prolonged system interruption but more importantly, creating this interconnection between the anoxic tanks (large hole would need to be cut into the concrete structure) will most likely compromise the structural integrity of these tanks. Adjust speed of RBC shaft: Based upon discussion with an electrician (Belwood Electric), the proposed adjustments were not recommended given the age and conditions of the se RBC units. Install new peristaltic pumps – Existing pumps are fully functional. Ops team have made provision to replace these pumps on as needed basis (i.e. failure) as part of the stand	

#	GM Blue Plan Recommendations	OCWA responses	Remarks
		 has no capabilities to adjust dosage on real time based on incoming raw sewage quantity and/or quality. It is anticipated, that this element will be addressed in the proposed facility upgrades. Partition the Primary clarifier – the installation of baffles in the primary clarifier was deemed unfeasible. Limited access into the primary clarifier renders the placement and installation of baffles as very difficult. It is likely that a large hole would need to be cut into the concrete structure which would likely compromise the structure. Add a chemical storage building: The feasibility of adding a new temporary chemical storage building was assessed. The limited foot print availability together with the need for access (Loading/offloading chemicals) along with the required line connections, rendered this effort unfeasible. Notwithstanding, the design of the new WWTP upgrade makes provision for a chemical storage building in compliance with all standards, codes and regulations). 	
2	The Process Optimization Report recommends that design of the WWTP upgrades being undertaken by Associated Engineering, including upgrade of the RBCs to an SBR system, be paused until the impact of the recommended RBC operational changes could be implemented and assessed. It is not known if recommended changes to the RBC process were completed and if improvements were observed, or if the design process has recommenced. Reportedly, due to increasing costs associated with installing an SBR system, it may be determined that updating the existing RBC system is preferable to designing and installing a new SBR system.	A design is ongoing. A Preliminary Design Report (PDR) was submitted in Sep 2022. At this stage, high capital costs (\$6 million plus); triggered a revision of alternatives, as requested by Mini Lakes. A technical memorandum has been produced by AE assessing several options. This Tech memo was presented to Mini Lake board for approval on Feb 1 st , 2023. The next is for Mini Lakes to make a decision with option would like to proceed. Upon approval, the design phase will resume.	
3	Previously, a site visit was conducted in February 2020 to assess the conditions of the facility and correct deficiencies were possible. Many deficiencies were reportedly corrected in spring 2020; however, based on the 2020 annual report, the following items did not appear to have been addressed, and have not been further reported on in 2021/2022: • SCADA upgrades. • Review of feasibility of changing flocculant/coagulant chemicals for RBCs. • Ongoing review of revision of MicroC dosage for denitrification tank.	SCADA Upgrades will be part of the new WWTP upgrade. Chemical dosage adjustments occurs frequently when operators see changes in flow or effluent quality; however the current system has no capabilities to adjust dosage on real time based on incoming raw sewage quantity and/or quality. This makes this operational task very challenging. It is anticipated, that this elements will be addressed in the proposed facility upgrades.	
4	A Sewage Treatment System Trade-Off Study by was completed by OCWA in 2018. The study concluded that the likelihood of failure and consequence of failure scores are sufficiently high	The design of a new WW treatment system is ongoing. AE completed a preliminary Design report. Cost estimates of the solution provided escalated substantially. Mini Lakes decided to review the options. The	

#	GM Blue Plan Recommendations	OCWA responses	Remarks
	enough that a system upgrade is warranted. As noted above, design of upgrades was reportedly paused during 2021 and the status of the design is currently unknown. A status update is required.	design was put on hold temporarily until options were reviewed (AE to submit a tech Memo). At present the tech memo was finalized and presented to Mini Lakes on February 1 st , 2023.	
Sec	tion 9: Required Improvements		
5	It appears that operational changes to the RBC process, recommended in the November 2021 Process Optimization Report, may not have been fully implemented and assessed. A further status update is required	AE incorporated the recommendations from the November 2021 Process Optimization Report into an options evaluation study. The options evaluation study is in the process of finalization. Immediate implantation of the recommendations from the Optimization report was not completed due to the complexity of execution. For example, cross over connection between neighbouring tankage required long term bypass pumping and major structural retrofit (no structural as-builts available, rendering structural modifications complicated).	
6	In addition, the Process Optimization Report states that the building housing the RBCs and the control room housing the MCCs and disconnect switches are leaking, poorly lit and require better ventilation.	This will be part of the new facility upgrade.	
7	Currently only single-phase power is available for the community and an upgrade to three phase power is necessary to allow for many of the necessary upgrades.	Based on correspondence from Hydro One (Feb 2022), an electrical upgrade will not be required for any WWTP upgrade. Per their confirmation, Hydro One is comfortable providing a three-phase tie-in at the highway, with Mini Lakes being responsible for a private service line to the WWTP. At present, Mini Lakes board is working with Hydro One to determine the right of way path. Most likely, an easement permission will be required.	
8	It appears that SCADA and historian system upgrades are still required to improve accessibility, control and data recording capabilities.	This will be part of the new facility upgrade.	
9	The Process Optimization Report recommends that odour control be incorporated into any future plant upgrades.	This will be part of the new facility upgrade.	
10	Both the November 2021 Process Optimization Report and 2020 Condition Assessment report make sampling and monitoring recommendations in order to allow for better optimization of chemical dosing at various stages in the treatment system.	See point 1	
11	As noted in previous review letters, previously the wastewater treatment plant was found to be out of compliance with the requirements for chemical storage. It appears from the 2021 annual report that these required upgrades have not yet been	A new building for chemical storage will be part of the new WWTP upgrade project. Mini Lakes to address these upgrades in the ECA as an interim "action" until the new facility is built and operational.	

#	GM Blue Plan Recommendations	OCWA responses	Remarks
	made. The June 1, 2016, Amended ECA included approval for this upgrade. In order to achieve conformance with the Amended ECA, a 900 L carbon tank and 2,300 L alum tank, complete with secondary spill containment were required to be installed. Previously it was reported that a new chemical storage building was planned to resolve this issue and a temporary storage site may be used until then. An update regarding the status of the proposed work, to bring the wastewater treatment plant into compliance with respect to ECA requirements, is once again requested.		
12	In addition, the 2016 ECA included upgrades to the chemical dosing system, improvements to the primary equalization tank, and the addition of crossover connections between the two anoxic tanks. We understand that none of these updates have been completed to date.	Due to complexity of the upgrades outlined in the ECA, the implementation was delayed. These upgrades required significant disruptions to service (bypass pumping of secondary process, major structural retrofits). In addition, some of the upgrades did not appear to be feasible. An example of this is the installation of baffles in the primary clarifier. Limited access into the primary clarifier renders the placement and installation of baffles as very difficult. It is likely that a large hole would need to be cut into the concrete structure which would likely compromise the structure.	Structural condition of the existing infrastructure is unknown. The retrofits could affect constructability and result in costly change orders to rectify.
13	Sludge management is a continued issue. Sludge removal frequency has been increased but the addition of an equalization tank for variable flow conditions to improve sludge accumulation in the intermediate clarifiers would reportedly be beneficial.	This will be part of the new facility upgrade.	
14	It is reported that Tile Bed 1 repairs were being planned by OCWA in 2021, with remaining tile beds to be repaired at a later stage in phases. No further update has been provided.	The design to repair/rehab the tile beds is in progress. Geotechnical investigation has been completing (pending final report). It is anticipated that this upgrade could be tender for construction early summer. Construction anticipated by late summer or fall (phased approach may be needed).	
15	It has previously been reported that characterization of the raw (incoming) sewage commenced in late 2018. Discussion of wastewater characterization has not yet been provided. As recommended previously, it would be helpful to discuss this analysis in future reports.	Characterization of the incoming raw sewage was completed for a period of time during the optimization works. Sampling/Monitoring of the raw sewage has been discontinued. If required, this could be implemented subject to discussion and approval by Mini Lakes.	

#	GM Blue Plan Recommendations	OCWA responses	Remarks	
16	It has been noted previously that a Wastewater Treatment System Process Flow Diagram (PFD) would be beneficial with subsequent reports to assist with overall process understanding and analysis.	This can be provided	RBC 1 Intermittent Clarifier Wastewater Influent RBC 2 Intermittent Clarifier Anoxic Clarifier Final Effluent Final Effluent Figure 1. Schematic of Mini Lakes Sewage Treatment Process	
17	Easy to implement practices to reduce sewer inflow should be considered, such as installation of inflow dishes on low lying maintenance hole lids or raising sanitary maintenance hole covers.	To be discussed with Mini Lakes		
SECTION 10.0 CONCLUSIONS AND RECOMMENDATIONS				
18	The design of future system upgrades should be completed as soon as possible, with a goal of construction within the next one to two years. The Owner and Operators should take appropriate action to bring the wastewater treatment plant into compliance with respect to ECA requirements.	That's the goal. See point 2		
19	Plant effluent flow rates should be monitored closely moving forward.	It is currently monitored.		
20	Operators should continue to closely monitor effluent parameters and take corrective action, as required.	It is currently monitored.		

ABOUD & ASSOCIATES INC. Consulting Arborists • Ecologists • Landscape Architects







3-5 Edinburgh rd Guelph . Ontario N1H 7L5

519.822.6839 info@aboudtng.com www.aboudtng.com

URBAN FORESTRY

ARBORIST REPORTS
MANAGEMENT PLANS
TREE PRESERVATION PLANS
TREE RISK ASSESSMENT
GIS TREE INVENTORIES
TREE APPRAISALS
MONITORING

ECOLOGICAL RESTORATION

NATURAL SYSTEMS DESIGN
HABITAT RESTORATION
EDGE MANAGEMENT PLANS
RAVINE STEWARDSHIP PLANS
NATURALIZATION PLANS
INTERPRETIVE DESIGN
MONITORING
CONTRACT ADMINISTRATION

ENVIRONMENTAL STUDIES

SUBWATERSHED STUDIES
ENVIRONMENTAL IMPACT
STATEMENTS
ECOLOGICAL LAND
CLASSIFICATION
WETLAND EVALUATION
VEGETATION ASSESSMENT
BOTANICAL INVENTORIES
WILDLIFE SURVEYS
MONITORING

LANDSCAPE ARCHITECTURE

MASTER PLANNING
RESIDENTIAL COMMUNITIES
COMMERCIAL/INDUSTRIAL
HEALTHCARE AND EDUCATION
STREETSCAPES
PARKS AND OPEN SPACES
TRAIL SYSTEMS
GREEN ROOFS
CONTRACT ADMINISTRATION

EXPERT OPINION

LPAT TESTIMONY LEGAL PROCEEDINGS PEER REVIEW RESEARCH EDUCATION February 1, 2023

Our Project #: AA21-049A-013 Sent by email: lbanks@puslinch.ca

Lynn Banks, Development and legislative Coordinator Township of Puslinch 7404 Wellington Rd. 34 Puslinch, ON N0B 2J0

Re: 2022 Ecological and Aquatic Monitoring Report Roszell Pit, Puslinch, License No. 625189 (Prepared by: Dance Environmental Inc.)

Peer Review – Ecology

Dear Ms. Banks:

Aboud & Associates Inc. has been retained by the Township of Puslinch to complete a Peer Review of the 2022 Ecological and Aquatic Monitoring Report, as they pertain to the annual monitoring requirements of aggregate extraction within the Roszell road pit. The Roszell wetland is identified as part of the Speed River Provincially Significant Wetland complex. We have reviewed the following document as part of our assessment:

- 2022 Ecological and Aquatic Monitoring Report Roszell Pit,
 Puslinch Township. ARA Licence No. 625189. Dance Environmental Inc. December 28, 2022.
- 2021 Roszell Road Pit Ecological and Aquatic monitoring report peer review Ecology (Aboud & Associates inc., January 23, 2022).

Per the methods described in the report, the requirements of the annual monitoring report include the following components:

- Vegetation monitoring, including quadrat sampling of herbaceous vegetation, photo monitoring, soil moisture sampling, and tree and shrub health information.
- Trout spawning surveys, including an evaluation of hydrogeological monitoring results and any evidence of resulting changes.
- Salamander egg mass surveys and amphibian call surveys.

Additional monitoring was implemented in 2022 based on concerns noted during the 2021 monitoring season, this included weekly water level monitoring within the wetland from May until June and identifying the presence of any salamander egg masses or larvae during those visits.

The December 2022 report and associated appendices have identified the following regarding ecological and aquatic conditions of the associated natural heritage features in proximity to the Roszell pit:

- Vegetation surveys occurred within the same timing as previous surveys; changes in spring vegetation species cover from 17-50% were noted in the vegetation plots from 2021 values. While fall values showed a difference of 19-31% in the vegetation plots from 2021 values. Changes in standing water levels were not indicated for all plots in the 2022 results.
- Trout Redd Surveys occurred in the appropriate timing window and identified that trout spawning continues in both the main creek and tributary 7. No Trout Redds have ever been observed in tributaries 8 & 9, and are no longer surveyed per data included in the report.
- Salamander egg mass surveys conducted yearly since 2013 confirmed salamander breeding in the subject site in 2022 within Wetland Area A, however, water levels dropped prior to completion of larval development.
- Amphibian calling surveys completed in 2022 observed similar numbers of species but reduced population levels at several of the established calling stations. An additional station has been established within the edge of one of the aggregate pits that includes wetland plant species.

Based on our review of the provided information, Aboud & Associates find the monitoring report continues to lack in discussion and analysis of the provided data, with no updates to the report or its methodology per the same or similar comments provided on the 2021 report. In particular, the following components should be reviewed and continue to require addressing in an updated report:

• In general, discussion of all monitoring results should compare current vegetation monitoring to pre-extraction conditions, as well as the previous years' post-extraction monitoring effort.

- While the methods state that soil moisture levels will be sampled for each plot using a soil moisture meter, as was noted in our 2021 review, the results of the moisture sampling are not included in the monitoring report for 2022. Please update these results.
- Section 3.1 (Methods) continues to indicate that vegetation monitoring was to be conducted in spring and summer; however, the vegetation monitoring results (Section 4.1) provide results for spring and fall surveys. Wording within Section 3.1 should be revised to spring and fall for consistency and accuracy throughout the report. The generally accepted timing window for late summer vegetation surveys is approximately mid-July through late August, late September is considered a fall vegetation survey.
- In Section 4.1 soil moisture is indicated as 'damp', 'dry' and 'saturated' in several instances. The soil moisture measurement method or sampling technique used to determine these results should be stated.
- In section 4.1, Soil moisture and standing water levels is not described for all plots. Please include these results.
- Section 4.1 does not include any discussion of changes in dominant taxa or a summary of the herbaceous cover present within vegetation subplots as compared to pre-extraction conditions. While some level of succession and change in dominant species composition is to be expected, some discussion of these changes is warranted. It is also difficult to discern changes when only 3 species are listed per plot. In reviewing appendix 3, several dominant species listed are at <1% cover in a plot, if new species have filled those areas, they should be included in the dominant taxa list, if it is bare earth, this should be noted.
- A complete plant list should be appended that includes species present for each plot, or all field forms should be appended, an example field form from 2013 does not provide any additional information.
- Any community level changes in overall wetness index may indicate a change in groundwater levels and should be included and discussed in detail and compared with relevant hydrogeological data.
- A review and analysis of the average wetness index for each vegetation plot, including all species observed, compared year to year, to determine any

changes to the vegetation composition and wetness index should be included graphically, and discussed in the context of potential changes in groundwater level.

- Tables 3 and 4 in Section 4.3 only provide the results of the Trout Spawning surveys for 2012-2013 and 2018-2021, respectively. However, it is stated in Section 4.3 of the report that the highest trout Redd count occurred in 2016. Results of all trout spawning surveys should be included within the report or an appendix so a year-to-year analysis can be completed. This data would benefit from being displayed graphically for analysis.
- Amphibian call survey locations should include the direction of the survey on the figure or as part of table 7.
- The amphibian data presented in Section 4.4 (table 8) does not indicate if amphibians were heard calling within or beyond 100 m of the survey station. If frogs calling from beyond 100 m of the survey station were excluded, this should be indicated in the data table.
- In Section 4.4 provide reasoning that leads to understanding why water levels have changed in those sampling locations that includes references to the hydrogeological assessment is required.
- Section 5.0 of the report (Discussion) states that salamander egg mass surveys began in 2013; however, the data in table 5 identifies it as 2014, post-extraction. Clarify if any surveys were completed in 2013, pre-extraction.
- Within Section 5.0, complete and include a summary review, analysis, and integration of the results of the hydrogeological monitoring report, as it relates to trout spawning, wetland water levels and changes in amphibian and salamander breeding.
- The recommendations section should include adaptive mitigation measures to address results of the amphibian and salamander breeding studies.
- It is recommended that the dam structure be removed, or discussions with the adjacent landowner regarding the presence of the dam structure are undertaken, as impacts to Trout Redds and habitat are being observed.

- In general, using more recent imagery for base mapping and figures is recommended.
- Appendix 3 does not include all species observed per year or plot, as indicated in Section 3.1 of the report.
- Complete species lists observed in each plot for each sampling year should be included as an appendix to the report, alternately, inclusion of all field forms should be included in the appendix.

In conclusion, our review of the submitted report has determined that while the proponents have outlined the results of the monitoring for 2022, they have not completed a thorough analysis of the data, or comparison to baseline conditions. Additional details are required pertaining to the changes observed in 2022, including changes to amphibian breeding and wetland water levels. Additionally, analyses should measure changes between pre- and post-extraction conditions as well as the year-over-year post-extraction changes. We also recommend a comprehensive discussion of the results that reviews and summarizes supplementary studies (e.g., hydrogeological report) in supporting its conclusions.

Please contact the undersigned should you require additional information of the above.

Yours truly,

ABOUD & ASSOCIATES INC.

Cheryl-Anne Ross, B. Sc.

MNRF Certified ELC & OWES

Ecology Lead & Wildlife Ecologist



2022 Ecological and Aquatic Monitoring Report Roszell Pit, Puslinch Township. ARA Licence No. 625189.

Prepared for:

CBM Aggregates 55 Industrial Street Toronto, ON M4G 3W9 Attn: Hudson Selles

Prepared by:

Dance Environmental Inc. 807566 Oxford Rd. 29 R.R. #1 Drumbo, ON N0J 1G0

December 28, 2022. DE-382

1.0 BACKGROUND

Dance Environmental Inc. was retained on September 7, 2012 by CBM Aggregates to begin initial data collection on wetland vegetation, fish spawning, and sediment and erosion control monitoring in accordance with the site plans for the Roszell Pit, Puslinch Township.

The Roszell Pit was approved for aggregate extraction prior to 2012. The Roszell Pit is licenced for extraction into the water table.

The Summer of 2012 was characterized as a hot dry summer with lower than average precipitation, resulting in low water levels in streams and rivers throughout much of Ontario.

Aggregate extraction started to take place at the Roszell Pit in 2013, so the 2014 to 2022 monitoring provides data during aggregate extraction.

2.0 PURPOSE OF MONITORING

The monitoring started in the Fall of 2012, and has continued yearly from 2013 to 2022. Monitoring has been conducted in order to meet ecological mitigation measures and ecological and aquatic monitoring requirements laid out in the site plan conditions for the Roszell Pit. The details of the ecological and aquatic mitigation measures for the Roszell Pit are outlined in the 2020 Ecological and Aquatic Monitoring Report, Roszell Pit prepared by Dance Environmental Inc. (Dance Environmental, 2020).

3.0 MONITORING METHODS

3.1 Vegetation Monitoring

Wetland Vegetation Quadrat Sampling

Objective: The objective of the vegetation quadrat sampling was to document the vegetation composition (species and relative abundance) and structure (vertical structure within the wetland) before extensive extraction had occurred, to record the baseline vegetation community conditions.

Baseline data were collected in 2012, to provide a basis for comparison as the extraction progresses both above and below the water table. In successive years (2013 to 2022) monitoring was conducted in Spring and Summer.

Data Collection Methods:

The locations of the six 10x10 m quadrats which were established in 2012 are shown on Figure 1. The exact locations of the 10x10 m quadrats were randomly selected, but were generally placed near the upslope seepage areas of some of the tributaries within the Speed River Wetland Complex adjacent to the Roszell Pit, and were sited near existing piezometer locations. The location of quadrat placement was selected to specifically document vegetation and conditions around significant groundwater seepage features that the hydrogeology consultants had identified and monitored along the eastern margin of the wetland, to the west of the extraction area. Quadrats were

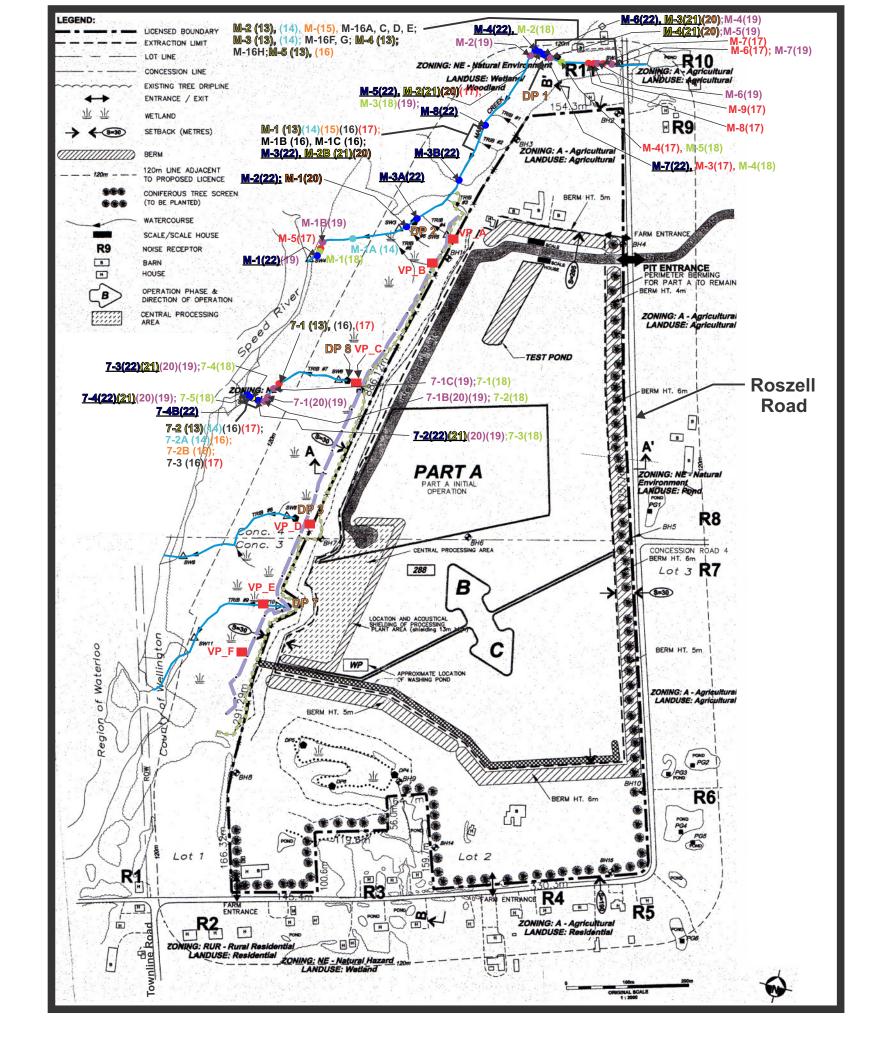


Figure 1. Location of Vegetation Plots and Creeks Surveyed and Locations of Trout Redds, 2013 to 2022, Roszell Pit.

VP_A	LEGEND = Vegetation Plot & Photomonitoring Locations = Watercourse in Which Spawning Surveys Were Conducted
	= Wetland Limit (Flagged by Stovel & Associates Inc. and GRCA, 2005) = Existing Tree Dripline
	Existing 1100 Bripinio
M-1 (13)	= Trout Redd Location, 2013
7-1 (14)	= Trout Redd Location, 2014
	= Trout Redd Location, December2015 or January 2016
M-1(16)	= Trout Redd Location, December 2016
M-1(17)	= Trout Redd Location, 2017
M-1(18)	= Trout Redd Location, 2018
M-1(19)	= Trout Redd Location, 2019
M-1(20)	= Trout Redd Location, 2020
M-1(21)	= Trout Redd Location, 2021
M-1(22)	= Trout Redd Location, 2022

Base Map Source:

Operational Plan Page 2 of 6. Stovel and Associates Inc. 2010.



DE-382 December 23, 2022 placed in these locations since this is where any change in groundwater discharge might be first observed and subsequently where vegetation changes could be first observed

The centre of each quadrat was marked by a steel T-bar with the top sprayed white. The outer margins of each quadrat were marked by wooden stakes which had the tops sprayed orange. The ground vegetation was to be monitored during early Fall 2012 and in successive years will be monitored in both Spring and late Summer to ensure accurate identification of species and to capture plants blooming at different times throughout the season (CVC 2010).

Collection of Herbaceous Vegetation Information:

Four 1x1 m quadrats were then set-up to record the herbaceous species and their relative abundance within each of the 10x10 m quadrats. The 1x1 m quadrats were set-up so that the one corner of the quadrat was on the ordinal direction stake, with the quadrat being entirely inside the 10x10 m quadrat, see Figure 2. The percent cover that each species within the 1x1 m quadrat occupied, was recorded. The percent cover within each 1x1 m quadrat that roots, deadfall, or mosses occupied were also recorded. The water depth within each 1x1 quadrant was recorded. These steps were repeated for each of the 4 quadrats within each of the six 10x10 m quadrats. An example of a completed data sheet from 2012, with data from a vegetation plot at the Roszell Pit, is contained in Appendix 1.

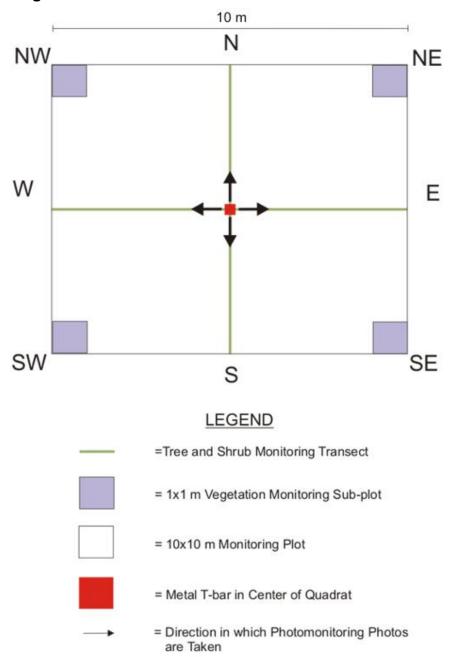
Collection of tree and shrub Information within vegetation plots:

As changes to shrubs and trees happens more in the long-term, data were to be collected on trees and shrubs within the vegetation plots only during the late summer inventory.

Information on the trees and shrubs within the vegetation plots was modified from the 2012 baseline data collection year, based on Greg Scheifele's comments on the 2012 vegetation monitoring. In order to capture trends/changes in the higher strata within the 10x10 m quadrat, two transect lines were surveyed within each 10x10 m quadrat. The transect lines were conducted to record information about trees and shrubs including density, species composition, and strata (sub-canopy or understory) in which they are present within each of the six 10x10 m quadrats.

Trees or shrubs which were <10cm DBH were identified as being within the understory category for height class. For consistency between all six 10x10 m quadrats, the one transect line that was sampled ran north-south and the other ran east-west across each 10x10 m quadrat. Along each of the tree and shrub transect lines data was collected for a 1 m wide area centered along the entire transect. Standing dead trees were also recorded, along with the strata in which they occurred. An example of a completed data sheet from 2013, with data from the tree and shrub transect, is contained in Appendix 2.

Figure 2. Vegetation Monitoring Plot Layout and Position and Direction of Photomonitoring.



A digital soil moisture meter (Vegetronics VG-METER-200 and VH-400 soil moisture sensor) was used to provide volumetric water content for soils in each of the six vegetation plots. The soil moisture probe was pressed into the soil until the entire probe was in the soil, and then a reading was taken. Soil moisture content was to be recorded as a percent and was recorded at the north, east, south and west corners of each vegetation monitoring plot along with a reading at the center t-bar, providing 5 soil moisture values from across the plot.

Starting in 2013, the health of each tree or shrub stem encountered along the east-west and north-south transect lines were to be recorded as dead, poor, or good.

It was also recommended by Greg Scheifele that tree health of all trees of >10cm dbh within the entire vegetation plot be recorded. For each tree >10cm dbh within the entire vegetation plot, the tree's health and whether it was a canopy or sub-canopy tree were recorded. We also recorded the same information for standing dead trees.

Photomonitoring:

As outlined in the site plans for the Roszell Pit, photomonitoring was to take place at fixed point locations so that photos can document potential changes to the vegetative conditions within the Speed River Wetland Complex adjacent to the Roszell pit.

Photomonitoring locations were to be located at the steel T-bar in the center of each of the 10x10 m vegetation quadrats. A total of six fixed point photo monitoring locations were set-up in 2012 with photos taken from the steel T-bar facing north, east, south and west, see Figure 2.

3.2 Spawning Surveys

The spawning surveys were to be conducted along Main Creek and Tributaries 7, 8, and 9 located within the Speed River Wetland Complex, to the west of the extraction area of the Roszell Pit. Surveyors wore polarized glasses and walked along each of the streams to be surveyed.

The location, number, size and species of redds were mapped and described on data sheets. Trout redds are the particular focus of the spawning surveys. Weather conditions including wind speed, percent cloud cover, precipitation, and air temperature were recorded during each survey visit and water temperatures were recorded for each of the streams or tributaries which were surveyed.

Observations of trout and their activities were recorded. Substrate conditions and water depth where spawning was observed were to be noted.

Spawning surveys were conducted on two dates to document the range of spawning dates and locations for Brook Trout.

The following approach was followed to determine whether the pit operation has affected fish habitat in a measurable way:

- Evaluate what the groundwater/hydrology consultant has determined about any significant changes in stream temperature, stream flow, ground water flux relative to meteorological conditions during the study period;
- Determine geographically where ground water/surface water changes have occurred relative to the aggregate pit margins and predicted impact zones;
- Where groundwater/ surface water data show significant changes the potential effects on fisheries data will be carefully inspected for any evidence of changes;

• In turn, any significant changes in trout redd number and location shifts would be compared with groundwater/surface water data trends.

3.3 Salamander Egg Mass Surveys

As part of the monitoring plan for the pit, annual surveys for salamander egg masses were to be undertaken. Spring 2013 was the first year that salamander egg mass surveys were conducted.

Salamander egg mass surveys were to focus on searching the wetland located in the southwestern end of the Roszell pit property. A survey was to be undertaken at the wetland in the spring once the salamanders have laid their egg masses some time between April to May, as egg laying times are dependent upon weather conditions for each given year. At the beginning of the survey weather conditions including temperature, wind speed, water temperature, and water temperature were to be recorded.

To find and estimate numbers of egg masses of salamanders area searches throughout the wetland were to be conducted. Areas searches involved the searcher wearing chest waiters, and walking throughout the wetland wearing polarized sun glasses, scanning into the water for egg masses. When egg masses were found they were to be identified to species along with number of eggs/egg masses, vegetation egg masses were attached to and any other details worth noting.

3.4 Amphibian Call Surveys

As outlined in the ecological and aquatic monitoring plan, amphibian call surveys were to be undertaken once extraction begins, so surveys began in 2013. Amphibian call surveys were undertaken in general accordance with the Marsh Monitoring Program Protocols. Surveys were to be undertaken at the wetland south of the southern most extraction limit for the pit, and at any adjacent properties (with ponds) where landowners provide permission to survey for frogs.

Surveys are to be conducted on three dates from April to June, at least 15 days apart. Night-time air temperature should be greater than 5°C (41°F) for the first survey, 10°C (50°F) for the second survey and 17°C (63°F) for the third survey (MMP 2008). Surveys are to be conducted between one half hour after sunset and no later than midnight (MMP 2008).

Weather conditions will be recorded for each of the surveys conducted, including wind speed, air and water temeprature, cloud cover, and precipitation. Each survey station will be monitored for 3 minutes. Surveys are to be conducted only when wind strength is between 0 and 3 on the Beaufort Scale (MMP 2008).

3.5 Water Level Monitoring within the Roszell Wetland, South of the Pit For several reasons monitoring of the water levels in the Roszell wetland to the south of the Roszell Pit was undertaken on an approximately weekly basis from May until the end of June. This monitoring started in 2022 as a result of the low water levels in the

wetland noted during 2021, which was attributed to drought conditions throughout Summer 2021.

Water levels were recorded within the wetland in polygons A, B, and C as identified for the salamander egg mass surveys. During the Months of May and June water levels were recorded (in cm) in the deepest locations in each polygon when water was present. The presence of any salamander egg masses or larvae in the water which was present was to be recorded. The dug pond farther south of the Roszell Wetland was also monitored during the same May to June period with water depth recorded at a stake in the southwest corner of the pond, which had been put in during previous years. When water levels at the stake were 0cm, the distance to the water's edge from the stake was then recorded (in cm).

4.0 MONITORING RESULTS

4.1 Vegetation Monitoring

A total of six permanent vegetation monitoring plots were set up near the eastern edge of the Speed River Wetland Complex, adjacent to extraction area of the Roszell Pit. Vegetation monitoring quadrats were set up on September 28, 2012 (Plots A, B, and C) and October 1, 2012 (Plots D, E, and F).

The UTM co-ordinates (obtained with a hand-held GPS) for vegetation monitoring plots A to F, are shown in Table 1.

Table 1. UTM Co-ordinates for the Center of Vegetation Monitoring Plots and Photo Monitoring Locations

Plot Name	UTM Co-ordinates
Plot A	17T 0557139 4812349
Plot B	17T 0557132 4812259
Plot C	17T 0557057 4811973
Plot D	17T 0557042 4811849
Plot E	17T 0557005 4811745
Plot F	17T 0557017 4811664

As outlined in the ecological and aquatic monitoring site plans, vegetation monitoring was to be conducted in the spring and late summer. The first late summer vegetation information was conducted on September 28 and October 1, 2012, while the first set of spring vegetation information was collected on May 30, 2013. The 2013 late summer vegetation inventory was conducted on September 20th.

It was noted when setting up the vegetation plots that cattle from the farm to the north of the Roszell Pit had access to the Speed River Wetland Complex in the area of vegetation plots A and B. It was evident during the Spring 2022 monitoring that the cattle still had access to the areas of vegetation plots A and B, but there appeared to be no recent use in that area by cattle during the Fall surveys.

The dominant taxa, their percent cover, and total number of species for each sub-plot for vegetation plots A to F during Spring 2014 to 2022 is summarized in Appendix 3. The fall vegetation survey results showing dominant taxa, their percent cover are provided in Appendix 4.

Tree and shrub data within the vegetation plots collected during the late summer vegetation monitoring, at each of the six monitoring plots are summarized below.

2022 Survey Results:

The 2022 Spring vegetation plot survey was conducted on May 25, 2022 and the Fall survey was conducted on September 30, 2022. The data from vegetation plots A to F are summarized below. A summary by species and sub-plot of the percent cover by certain species in Spring from 2014 to 2022 is provided in Appendix 3, and the data from the Fall 2014 to 2022 surveys is summarized in Appendix 4.

Spring Surveys:

Plots A and B show ≥50% of percent cover values remained the same from the Spring 2021 findings. Some of the decrease in percent cover of some species is anticipated to be due to the reduced use of the area by cattle, causing few ruts with standing water, and less disturbed areas, in addition to recovering from the previous year's drought conditions. Plot C showed 64% of species had no change in percent cover from the previous year with Field Horsetail, Bulblet Fern and Coltsfoot being species that had decreases in percent cover in some subplots. In Plot D, 75% of species in Appendix 3 had the same percent cover as 2021, with Bulblet Fern and Field Horsetail showing decreases from 2021, similar to findings at Plot C. At Plot E 69% of species listed in Appendix 3 showed no change in percent cover from Spring 2021, with Bulblet Fern and moss sp. showing decreases in percent cover compared to 2021. The Plot F Spring findings indicated 83% of species in Appendix 3 showing no change in percent cover, compared to 2021. Canada Mayflower and Bulblet Fern were noted to have increased in percent cover in Plot F in Spring 2022

Fall Surveys:

At Plot A in Fall, 69% of species examined in Apendix 4 show no change in percent cover in 2022 from 2021, and Fowl Mana Grass, Bulblet Fern and Coltsfoot show an increase in percent cover compared to Fall 2021. In Fall at Plot B, 75% of species in Appendix 4 show no change in percent cover from Fall 2021, and *Carex schweinitzii*, Bulblet Fern and Tall Buttercup show declines in percent cover from 2021 results, but the sedge and fern were never in high abundance in the subplots over any of the survey years. In Plot C, 76% of species showed no change in percent cover, while Dwarf Scouring Rush and Bulblet Fern were noted to have increased in percent cover from 2021. Plot D had 81% of species in Appendix 4 with no change in percent cover compared to Fall 2021, and Dwarf Scouring Rush increased in one subplot and Bulblet Fern decreased, both only by one category of percent cover compared to 2021. Plots C and D both showed wetland indicator species (Bulblet Fern and Dwarf Scouring Rush) increased in percent cover in 2022. At Plot E, 77% of species listed in Appendix 4 showed no change in percent cover compared with 2021, with Moss sp. and Bulblet

Fern showing an increase in percent cover in one subplot and Bulblet Fern decreasing in one subplot. In Fall, Plot F indicated 69% of species listed in Appendix 4 showed no change in percent cover compared to 2021, with increases in Glossy Buckthorn and moss sp. in two subplots, and a decrease in moss in one subplot.

The tree and shrub transects are summarized in the following text for each vegetation plot with the numbers found in 2022 listed, and for reference the 2021 values are provided in brackets after the 2022 survey values.

Vegetation Plot A:

Vegetation Plot A was located in the upslope area where seepage begins which becomes Tributary #4, see Figure 1. Areas of rutted soils within vegetation Plot A were evident again in Spring 2022 throughout the area as a result of cattle foraging within the vegetation plot area, but no signs of recent use were present during the Fall surveys. In Spring and Fall 2022 surface water was present in all sub-plots. Water was present at <1-4mm depth in Spring and Fall 2022 (similar to 2020 and 2021 findings).

A generally limited abundance of trees and shrubs are present within vegetation Plot A. The east-west transect had three species: Glossy Buckthorn 11(10), Yellow Birch 1(1) and Eastern White Cedar 11(11), showing more Buckthorn and Cedar are now big enough to be counted.

The north-south transect had 1 Chokecherry in good health (same as 2020 & 2021), Eastern White Cedar 4(4) and Yellow Birch 1(1). All understory trees and shrubs were identified to be in good health, as in all previous years. There were no trees (>10 cm dbh) within the entire vegetation plot in 2022, same as in previous years.

Vegetation Plot B:

Vegetation Plot B was located approximately 33m to the southwest of Plot A, near the eastern wetland edge of the Speed River Wetland Complex. Vegetation Plot B was located in the upstream seepage area of Tributary #6, see Figure 1. In Spring 2022 evidence of cattle use within the plot was noted, but by Fall there were no recent signs of use. In Spring 2021 a large tree was noted to have fallen across part of the NW subplot and it was still there in 2022.

There was no surface water present in Spring 2022 (same as in 2021,2020, and 2018) and soils were dry in two of the plots. No surface water was present in any of the subplots in Fall 2022, similar to 2018 and 2021 (NW plot in Fall 2020 had <1mm). Soils in Fall 2022 at this plot at SE, SW noted to be damp while in the NW and NE plots soils were saturated (damper than noted in 2021 and 2020).

Tree and shrub transect data indicates Plot B contains slightly more trees and shrubs than Plot A (and similar in that they were all in the understory), but it is still a generally open habitat of predominantly herbaceous vegetation. Species present within the eastwest transect included Glossy Buckthorn 13(13), Eastern White Cedar 9(9), Yellow Birch 2(2), Red-Osier Dogwood 1(1); in the north-south transect Glossy Buckthorn

15(12), Yellow Birch 4(3), and Eastern White Cedar 5(6). Within the entire vegetation plot there were no trees that were >10 cm dbh, as was noted in previous years.

Vegetation Plot C:

The Vegetation Plot C was located in fresh-moist cedar swamp. Vegetation Plot C was located in the upstream seepage area of Tributary #7 and near drive point piezometer DP8, see Figure 1. The vegetation plot is on a slope with scattered seeps which flow downslope towards the cedar swamp. Surface water was present in only 1 sub-plot (Southeast) in the Spring 2022 at 1-3mm, similar to 2016, 2017 and 2021 (while in 2020 it was 4-5mm). In the Southeast sub-plot, 2-3mm of flowing water was observed in the Fall 2022, while 2018-2020 had less standing water and 2021 had 3-4mm.

Tree and shrub diversity within the transects continues to be limited, with only two species being present, Glossy Buckthorn and Eastern White Cedar. In the understory along the east-west transect Glossy Buckthorn 6(7) and Eastern White Cedar 2(2) were recorded to be present and in good health. Along the north-south transect line in 2022 Eastern White Cedar 8(8) and Glossy Buckthorn 1(0) were recorded. Eastern White Cedar was recorded with 20(23) in good health, fair health 3(3), and none in poor health. Glossy Buckthorn was recorded in the SE, in the sub-canopy in good health with 3(2) trees recorded.

Vegetation Plot D:

The Vegetation Plot D was located in wet cedar swamp located in the upstream seepage area which enters Tributary #8 near the eastern edge of the wetland. Vegetation Plot D was located just east of drive point piezometer DP3. This vegetation plot is on a slope with scattered seeps with marl deposits. Standing water was present in the Northwest sub-plot in Spring at 2-4mm (2021 had 1-2mm, comparable to 2019 & 2020) and flowing water was present in Fall 202 at 1-2mm (same a 2021; 2018 & 2020 had 2-3mm). Standing water was present in the Southeast sub-plot in 2022 at 1-6cm in Spring and 2-3mm in the Fall (more than noted in 2021). In Spring and Fall 2016 & 2017 no surface water was present in any sub-plots. This continues to suggest wetter soils being present in Plot D after 2018.

Within Vegetation Plot D there was 1 Common Buckthorn in good condition along the north-south transect, same as in 2020 & 2021. This vegetation plot is located within cedar swamp, with Eastern White Cedar and Yellow Birch as the tree species of >10 cm dbh which were present within the entire plot. Eastern White Cedar was present with 20(20) in good health, and Yellow Birch with 2(2) also recorded in good health. No change was noted in 2022.

Vegetation Plot E:

The Vegetation Plot E was located in fresh-moist cedar swamp. Vegetation Plot E was located in a seepage area approximately 30m downslope of the trail along the Speed River, in the bottomlands of the cedar swamp. The seepage area in which Vegetation Plot E was located is part of Tributary #9 and is located downslope of drive point piezometer DP7, see Figure 1. In 2022, standing water was present in the Spring at the

Northwest sub-plot at 1-2mm (same as 2020 & 2021) and 1mm in Fall 2022 including areas of saturated mud/soils) similar to 2019 and 2020 findings, while 2021 had 3-4mm in the Fall. In contrast, in 2018 and 2016 no surface water was recorded in the Spring or Fall.

Tree and shrub species along the north-south and east-west transects at >1m in height were very limited in this vegetation plot. Along the east-west transect Glossy Buckthorn 5(4) were present in good health, and 1(1) Glossy Buckthorn was recorded as dead (present since 2014). New in 2022 in the east-west transect was 1 Eastern White Cedar in good health. There were no shrubs recorded along the north-south transect in 2022 (same since 2014).

There were four species of trees and shrubs of >10cm dbh found within the entire vegetation plot, including: Eastern White Cedar, Yellow Birch, Speckled Alder, and Black Ash. Within the entire Vegetation Plot E there were 16(15) Eastern White Cedar found in good health, 8(8) Yellow Birch were found in good health, 1(1) Speckled Alder was in good health. There was also 1 dead Black Ash which has been present since 2018. No significant change was noted in 2022.

Vegetation Plot F:

The Vegetation Plot F was located in the bottomlands of a fresh-moist cedar swamp, dense with Eastern White Cedar. Vegetation Plot F was located in a seepage area downslope of the trail along the Speed River, to the west of the southeastern corner of the extraction area of the Roszell Pit. The closest drive point piezometer is DP7, to the northeast. Vegetation Plot F is not in a seepage area which contributes to a tributary through surface water flow, Tributary #9 is the closest tributary to this vegetation plot and is located to the west of it.

In Spring 2022, the Southeast sub-plot had flowing water at 2-4mm, same as in 2020, 2016 and 2017 (2021 had 2-3mm). In 2019 and 2018 slightly deeper water was noted at 4-5mm. In Spring 2022, the Northwest sub-plot had 2-3mm of standing water similar to 2019 (2021 had 1mm; 2018 & 2016 had 1-2mm; and 2020 had 2-4mm).

The Southeast sub-plot in Fall 2022 had 4-5mm of flowing water noted (similar to 2017, 2016, 2020 and 2021), while 2019 and 2018 had less water was noted at 1-2mm. The Northwest sub-plot had 1-2mm of standing water in Fall 2022 (similar to 2016), while 2021 had <1mm and 2018 to 2020 had no water, but saturated soils). The greatest water depths in the plot were noted in 2017 at 4-6mm deep, and indicates that the plot shows high variability over the years.

The tree and shrub transect data from Vegetation Plot F indicates a limited understory, with only Eastern White Cedar being present along the east-west or north-south transect. The north-south transect had 6(6) Eastern White Cedar in good condition, 5(1) in fair condition and 7(5) dead. Tree and shrub species within the entire vegetation plot of >10cm dbh include Eastern White Cedar, Tamarack, and White Birch. Eastern

White Cedar was present in good health with 23(24), and White Birch in good health with 1(1). The 2 standing dead Tamarack (snags of <8ft high) were still present in 2022.

Photo Monitoring Stations:

A total of six fixed point photo monitoring stations were established in 2012, which provide baseline photos of the Speed River Wetland Complex located to the west of the Roszell pit. Photos were taken at each photo monitoring station facing north, east, south and west, from the center T-bar of the 10x10 m plots. A photo from each of the six vegetation plots in Spring 2022 is shown in Appendix 5. A photo from each of the six vegetation plots in Fall 2022 is shown in Appendix 6.

4.3 Trout Spawning Surveys

Trout spawning surveys started in 2012 and have been undertaken every year since. A summary of the more recent survey dates and weather conditions during searches for trout redds from 2018 to 2022 are shown in Table 2.

The locations of the Main Creek and Tributary #7 and #8 are all shown on Figure 1. No trout redds have been found in Tributary #8 during the first 5 survey years, so effort was focused after that on the Main Creek and Tributary #7.

In 2015 spawning surveys were conducted on two separate dates for each of the creeks surveyed. With fewer trout redds being found over the two separate surveys for each creek, in December 2015, an additional survey was conducted in January 2016. The January 2016 survey was to identify whether any additional trout redds were present in the creeks being surveyed once the temperatures became cooler in case this had triggered Brook Trout spawning.

Brook Trout redds have been found annually from 2012 to 2022 in both Tributary 7 and the Main Creek channel. The approximate locations of Brook Trout redds are shown on Figure 1. In 2015, fewer than normal trout redds were found in the Main Creek and none were found in Tributary #7, but by January 2016, 7-9 redds were found in total in the Main Creek and 2 redds were present in Tributary #7. Previous years field data sheets have been archived for future reference.

The results of the 2012 and 2013 trout spawning surveys are summarized in Table 3 (considered pre-extraction survey years), and the most recent 5 years (2018 to 2022) of survey results are provided in Table 4. Table 3 and 4 both list the redd numbers by watercourse for each year. The 2013 trout spawning survey was the first data collected after part of a year of aggregate extraction occurred at the Roszell Pit.

The Main Creek has consistently had the most redds present each year of the creeks surveyed. The numbers of redds present in the Main Creek in 2013 was double that of 2012. The year with the highest trout redd count during extraction years to date had been 2016 with 15-16 redds found, but 2022 had 16-20 redds...

During the 2020 and 2021 drought years, the lower water levels in the creek and the homeowners on the north side of the Main Creek creating a rock dam across the entire creek were considered the main factors to have resulted in slightly lower trout spawning

Table 2. Summary of Dates and Weather Conditions for Trout Redd Surveys on the Main Creek, and Tributaries #7 and #8, from 2018 to 2022.

Year	Survey	Weather Conditions
i cai	Date	Weather Conditions
2018	December 5	Air Temp. = -3 ⁰ C; Wind = 0 km/hr; Percent Cloud = <10%; no precip.; Water Temperature: Main Creek = 4.0 ⁰ C
	December 12	Air Temp. = -2 ⁰ C; Wind = 0 km/hr; Percent Cloud = 70%; no precip.; Water Temperature: Trib. #7 = 6.6 ⁰ C
2019	December 13	Air Temp. = 4-7°C; Wind = 0-5 km/hr; Percent Cloud = 50%; no precip.; Water Temperature: Main Creek = 4.5°C; Trib. #7 = 6.6°C
	December 17	Air Temp. = -4 ⁰ C; Wind = 0-5 km/hr; Percent Cloud = 60%; no precip.; Water Temperature: Main Creek = 3.8 ⁰ C; Trib. #7 = 6.2 ⁰ C
2020	December 11	Air Temp. = $2-7^{\circ}$ C; Wind = $0-5$ km/hr; Percent Cloud = 10% ; no precip.; Water Temperature: Main Creek = 4.7° C; Trib. #7 = 7.1° C; Trib. #8 = 12.9° C
	December 16	Air Temp. = -7°C; Wind = 20-35 km/hr; Percent Cloud = 70- 90%; no precip.; Water Temperature: Main Creek = 3°C; Trib. #7 = 5.2°C; Trib. #8 = 11.1°C
2021	December 1	Air Temp. = 4 ⁰ C; Wind = 5-10 km/hr; Percent Cloud = 15%; no precip.; Water Temperature: Main Creek = 4 ⁰ C; Trib. #7 = 11 ⁰ C; Trib. #8 = 14 ⁰ C
	December 21	Air Temp. = 0°C; Wind = 0-5 km/hr; Percent Cloud = <5%; no precip.; Water Temperature: Main Creek = 4.5°C; Trib. #7 = 7.5°C; Trib. #8 = 12°C.
2022	December 14	Air Temp. = -4 ⁰ C; Wind = 5-15 km/hr; Percent Cloud = 90%; no precip.; Water Temperature: Main Creek = 3.4 ⁰ C; Trib. #7 = 5 ⁰ C.
	December 22	Air Temp. = -2 ⁰ C; Wind = 5-10 km/hr; Percent Cloud = 60%; no precip.; Water Temperature: Main Creek = 3.8 ⁰ C; Trib. #7 = 6.6 ⁰ C.

than historically noted. The dam structure (first noticed in 2020) was still in place in 2022 and the slow moving current in that area has resulted in a large area which had been bare cobble historically now being covered in silt.

The 2022 trout spawning results in Main Creek were similar to 2013, 2016, 2018 and 2019 findings which were average to high count years for the Main Creek. After the second trout redd survey, 2022 had 16-20 redds in the Main Creek, compared to the previous high count year, 2016. During the December 14th survey 11 Brook trout were

observed (including an 8-9" trout on the M-3(22) redd) and 10 were observed during the December 22^{nd} survey, in the Main Creek.

The trout redd surveys in 2022 showed typical numbers of redds in Tributary 7, despite water levels being lower than historically (as also noted in 2020 and 2021) with 6-8 redds being present. Overall the 2022 survey results showed continued spawning in both creeks despite low water levels as 2022 was another drought year, with spawning in 2022 occurring at typical levels and locations to 2016, 2018 and 2019 (prior to drought years).

Table 3. Summary of 2012 and 2013, Pre-extraction, Brook Trout Spawning Surveys, Roszell Pit.

	Tributary Name	Station Location	Number of Redds	Total Number of Redds
		M-1	2 to 3	
	Main Creek	M-2 2 M-3 1		8 to 9 redds
	wain Creek			8 to 9 redus
2012		M-4	3	
2012		7-1	2	
	Tributary 7	7-2	2	5 redds
		7-3	1	
	Tributary 8 and 9		No redds	0
	Main Creek	M-1 (13)	3	
		M-2 (13)	3	
		M-3 (13)	6	19 redds
		M-4 (13)	5	
2013		M-5 (13)	2	
		7-1	1	
	Tributary 7	7-2	4	5 redds
		7-3	0	
	Tributary 8 & 9	No redds	No redds	0

Table 4. Summary of 2018 to 2022, Extraction years, Brook Trout Spawning Surveys, Roszell Pit.

	Tributary Name	Station Location	Number of Redds	Total Number of Redds			
Dec.		M-1(18)	3				
2018		M-2(18)	1				
	Main Creek	M-3(18)	1	13 redds			
		M-4(18)	7				
		M-5(18)	1				
		7-1(18)	1				
		7-2(18)	1-2				
	Tributary 7	7-3(18)	2	6-9 redds			
		7-4(18)	1-2	1			
		7-5(18)	1-2	1			
Dec		M-1(19)	2-3				
2019		M-1B(19)	1				
		M-2(19)	1				
	Main Creek	M-3(19)	2	42 44			
	Wain Creek	M-4(19)	3	13-14 redds			
		M-5(19)	2	1			
		M-6(19)	1	1			
		M-7(19)	1	1			
		7-1(19)	1				
		7-1B(19)	2	1			
	Tributon, 7	7-1C(19)	1	9 redds			
	Tributary 7	7-2(19)	2	9 redds			
		7-3(19)	2				
		7-4(19)	1	1			
Dec		M-1(20)	1				
2020		M-2(20)	1-2	1			
	Main Creek	M-2B(20)	1-2	8-10 redds			
		M-3(20)	2				
		M-4(20)	3				
		7-1(20)	1				
		7-1B(20)	1-2				
	Tributary 7	7-2(20)	1-2	6-9 redds			
		7-3(20)	1-2	1			
		7-4(20)	2	1			
Dec		M-2(21)	3				
2021		M-2B(21)	3	44 ***			
	Main Creek	M-3(21)	3	11 redds			
		M-4(21)	2				
		<u> </u>					
		7-2(21)	3	و المراجعة			
	Tributary 7	7-3(21)	4	8 redds			
		7-4(21)	1	1			

Dec		M-1(22)	1	
2022		M-2(22)	1-2	
		M-2B(22)	1	
		M-3(22)	3-4	
	Main Creek	M-3A(22)	1	16-20
	Main Creek	M-4(22)	1	10-20
		M-5(22)	1-2	
		M-6(22)	2-3	
		M-7(22)	4	
		M-8(22)	1	
		7-4(22)	2-3	
	Tributary 7	7-2(22)	2	6-8
		7-3(22)	1]8
		7-4B(22)	1-2	

In contrast to the last three years, 2012, 2013, 2014, 2015 and 2017 had between 2 and 5 trout redds found in Tributary #7 during the surveys.

Based on comparison to the findings in previous years, both pre-extraction and during extraction, the 2022 findings indicate there is continued typical spawning in both creeks which have historically had Brook Trout spawning.

4.4 Salamander Egg Mass Survey

Salamander egg mass surveys were conducted in 2022, making it the ninth year of salamander egg mass surveys conducted within the southwestern wetland on the Rozell Pit property. The salamander egg mass survey dates and weather details for the salamander surveys for all of the years of monitoring are provided in Table 5.

The total number of areas with salamander egg mass concentrations from 2013 to 2019 ranged from 6 to 13 within the wetland, excluding 2015 where no egg masses were counted. In contrast in 2022 salamander egg masses were concentrated in two areas within wetland area A.

For analysis the wetland was divided into three different areas based on the wetlands ecological characteristics, see Figure 3. Wetland area "A" comprises of Reed Canary Grass and Red-osier Dogwood around the wetland edges and willow thicket through the majority of it. Area "B", shown on Figure 3, exhibits the characteristics of a Silver Maple swamp, very limited emergent vegetation, with leaves and sticks being predominant in the water column. Area "C" comprises the southern wetland lobe which extends in a southwesterly direction.

Spring water levels within the wetland were noted to be lower than historically typical in April 2020 and 2021, where both years had no standing water in wetland areas "B" and "C". In wetland area "A" even less area of surface water was present in 2021 compared to 2020.

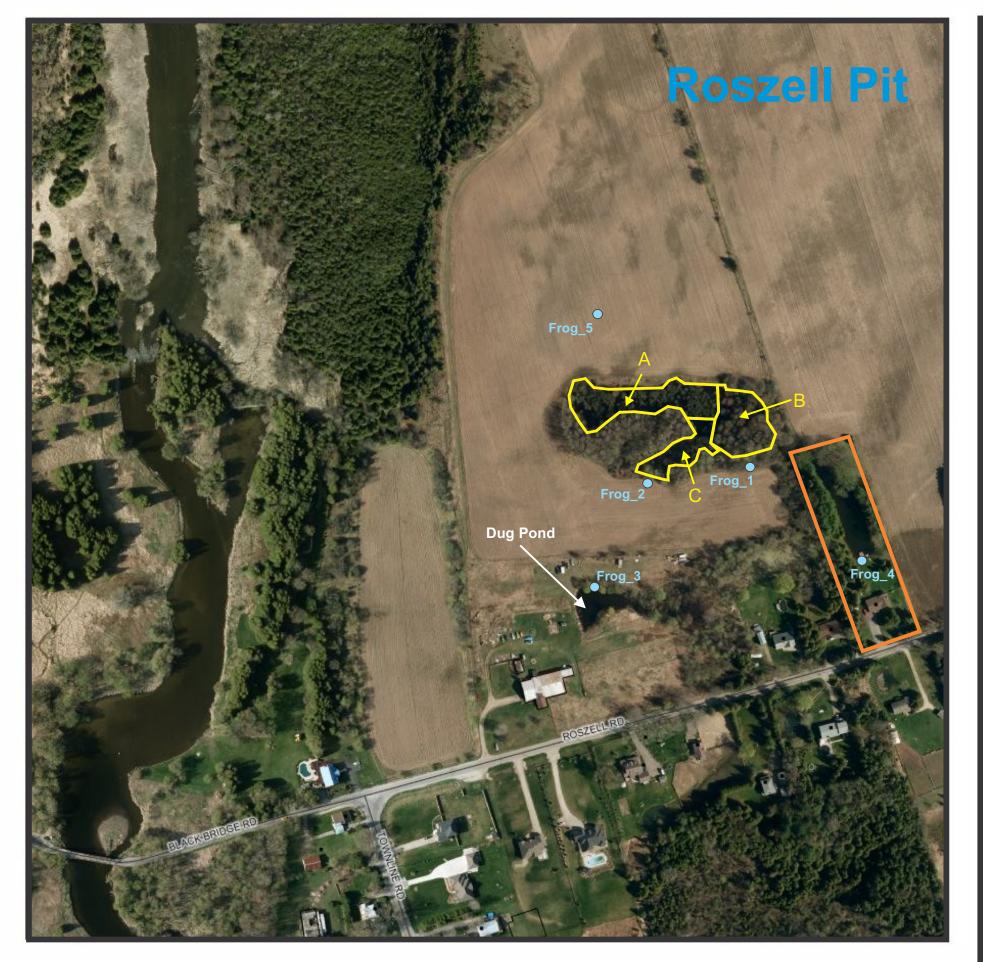


Figure 3. Areas Searched for Salamander Egg Masses, and Amphibian Call Survey Station Locations, Roszell Pit.

LEGEND



Area Searched for Salamander Egg Masses, Areas "A to C" Categorized by Habitat Type

Frog_2 Approximate Amphibian
Call Survey Station
Location

П

Approximate Property
Boundary of the Jones
Property

Base Map Source: GRCA GRINS mapping 2012



DE-382

December 21, 2022



Table 5. Salamander Egg Mass Survey Details 2014 to 2022.

	r Egg Mass Survey Details 2014 to 2022.
Survey Date	Survey Details (Weather)
May 9, 2014	11:20 hrs to 14:09 hrs.
	temperature: 24°C; wind: 6.6 km/hr; water temperature:
	18.3°C; cloud 40%; no precipitation, and water pH: 8.4
May 21, 2015	13:57 hrs to 15:21 hrs
	temperature: 18°C; wind: 3.7 km/hr; water temperature:
	16.1°C; cloud 40%; no precipitation, and water pH: 7.8
June 3, 2015	13:55 hrs to 15:32 hrs
	temperature: 22°C; wind: 5-10 km/hr; water temperature:
	21°C; cloud 60%; no precipitation, and water pH: 7.3
March 30, 2016	12:23 to 14:21 hrs
	temperature: 8°C; wind: 10-15 km/hr; water temperature:
	8.6°C; cloud 40%; no precipitation, and water pH: 7.7
March 28, 2017	13:00 to 14:08 hrs
	temperature: 10°C; wind: 5-15 km/hr; cloud 60%; no
	precipitation
April 11, 2017	14:19 to 14:40 hrs
	temperature: 20°C; wind: <5 km/hr; water temperature:
	18.1°C; cloud 30-40%; heavy precipitation, and water pH: 7.1
April 12, 2017	11:40 to 14:00 hrs
	temperature: 10°C; wind: 5-10 km/hr; water temperature:
A	11°C; cloud 80-90%; no precipitation, and water pH: 7.5
April 24, 2018	11:20 to 13:09 hrs
	temperature: 9°C; wind: 0-5 km/hr; water temperature: 12°C;
Amril 22, 2040	cloud 60%; no precipitation, and water pH: 7.3
April 22, 2019	11:00 to 13:40 hrs
	temperature: 15°C; wind: <5 km/hr; water temperature: 12°C; cloud 30%; no precipitation, and water pH: 8.4
April 7, 2020	11:30 to 12:45 hrs
Αριιι 7, 2020	temperature: 11°C; wind: 5 km/hr; water temperature: 10.8°C;
	cloud 50%; no precipitation, and water pH: 8.1
April 20, 2021	10:55 to 11:40
Αριτί 20, 2021	temperature: 4°C; wind: 5-15 km/hr; cloud: 60%; cloud 50%;
	no precipitation; no standing water in wetland.
April 7, 2022	10:45 to 13:05
7.01111, 2022	temperature: 11°C; wind: 3-5 km/hr; water temperature:
	10.9°C; cloud 5%; no precipitation, and water pH: 6.4
	. c.

The 2020 data indicated an approximate 88% decrease in number of egg masses present in wetland area "A" compared with 2019. The 2021 findings showed no salamander reproduction (no egg masses present) in the 3 small areas of standing water that were present.

The salamander egg mass survey in 2022 found salamander egg masses being present within the wetland, but only in Area "A" of the wetland (which represents the area of wetland with the deepest water). Table 3 shows that most salamander eggs are typically laid in Area A and this trend was continued in 2022.

Despite only one of the three areas of the wetland having salamander eggs found in it, the egg mass count was the second highest count ever, being similar to 2017 and 2018 counts (years prior to drought condition years). The 2022 findings are 20% less egg masses than the highest count year (2019), and was found to be double that of the average egg mass count of 878, for all years.

Based on the results from April 7, 2022 salamander breeding was confirmed to have occurred and at a level above average for the wetland, despite the previous two years of drought conditions when very limited to no salamander breeding occurred.

Table 6. Summary of Total Number of Blue-Spotted Salamander Egg Mass Found in 2014 to 2022.

111 2011										
Wetland Area	2013	2014	2015		Number (2017	of Egg N 2018	Masses 2019	2020	2021	2022
Α	46	147	0	571	1785	1439	2243	277	0	1931
В	9	39	0	32	16	0	170	0	0	0
С	3	4	0	0	22	46	0	0	0	0
Total # Egg Masses	58	190	0	603	1823	1485	2413	277	0	1931

The Roszell wetland was continued to be monitored in May and June 2022 to identify whether conditions would remain that would allow for a successful salamander reproduction cycle in 2022 and to monitor what happens with the water levels in the wetland. By the May 13, 2022 survey no standing water was present in areas "B" and "C" of the wetland and most of area "A", where egg masses had been found, had no water. The details of findings of those surveys are discussed in Section 4.5

4.4 Amphibian Call Surveys

Amphibian call surveys were conducted starting in 2013 at two wetlands, one to the south of the southern extraction limit of the pit (Roszell Wetland) and the other a small wetland to the southwest of the Roszell Wetland (dug pond). Adjacent landowners with a pond/wetland on their property were also contacted in Spring 2013 by CBM staff to see if any would allow for frog call surveys to be undertaken on their property. One landowner, Denise Jones, gave permission to conduct the amphibian surveys on her property (#6512 Roszell Road), see Figure 2 for its location. Amphibian call surveys were conducted at all of the same locations from 2013 to 2019. On April 7, 2020 Denise Jones was contacted to obtain permission to undertake the amphibian surveys at her property as in previous years. Denise did not want the surveys done at her property in 2020. Station Frog_4 was therefore moved to the north area of the Jones

pond, and frogs listened for from the Roszell pit lands to the west of the Jones pond. Denise Jones provided permission again for the amphibian surveys on her property in 2021 and 2022.

Amphibian call surveys were conducted on April 8, May 5, and June 16, 2022. Details of the weather conditions and survey dates for each year of amphibian call surveys, from 2015 to 2022, are shown in Table 7.

The results of the 2022 amphibian call surveys for each of the 4 point count stations where data were collected are summarized in Table 8. The results from 2020 to 2015 are shown in Tables 9 to 14, respectively.

Since 2013 a total of seven different species have been heard/observed during the amphibian call surveys, with six species heard/observed in both 2020 and 2019, five species heard/observed in 2013, 2014, 2016, 2017 and four species heard/observed in 2015. In 2022 and 2021 a total of 5 species were heard/observed during the amphibian call surveys.

Table 7. Amphibian Call Survey Dates and Weather Conditions, Roszell Pit 2015 to 2022.

10 20	<u> </u>						
Survey #	Survey Date	Time (hrs)	Weather Conditions				
2022		` '					
1	April 8	20:40 to 21:11	Air Temp. = 5°C; Water Temp. = 7.7°C to 9°C; Wind = 0 - 1 (Beaufort); Percent Cloud = 70- 80%; Light Drizzle; Water pH = 7.3 to 8.2				
2	May 5	20:39 to 21:43	Air Temp. = 11°C; Water Temp. = 13.2°C to 15.7°C; Wind = 0 (Beaufort); Percent Cloud = 15% to 20%; No Precip.; Water pH = 8.3 to 8.6				
3	June 16	21:04 to 22:57	Air Temp. = 28°C; Water Temp. = 23°C to 25°C; Wind = 1 (Beaufort); Percent Cloud = 80%; No Precip.; Water pH = 7.5 to 8.2				
2021							
1	April 9	19:48 to 20:25	Air Temp. = 17°C; Water Temp. = 17.1 °C; Wind = 1 (Beaufort); Percent Cloud = 15%; No Precip.; Water pH = 7.4				
2	May 28	20:40 to 21:36	Air Temp. = 22°C; Water Temp. = 21.3 °C; Wind = 1-2 (Beaufort); Percent Cloud = 80%; No Precip.; Water pH = 8.0 to 8.2				
3	June 24	21:12 to 21:53	Air Temp. = 24°C; Water Temp. = 21.3 to 23.7 °C; Wind = 0-1 (Beaufort); Percent Cloud = 60%; No Precip.; Water pH = 7.7 to 8.0				
2020							
1	April 7	20:15 to 20:48	Air Temp. = 12°C; Water Temp. = 11.3 °C; Wind = 0-1 (Beaufort); Percent Cloud = 80%; No Precip.; Water pH = 7.8				
2	May 16	21:10 to 22:07	Air Temp. = 13 ^o C; Water Temp. = 17 ^o C; Wind = 0 (Beaufort); Percent Cloud = 15%; No Precip.; Water pH = 7.8				
3	June 16	21:12 to 22:05	Air Temp. = 16 ^o C; Water Temp. = 22.2 ^o C; Wind = 0-1 (Beaufort); Percent Cloud = 30%; No Precip.; Water pH = 7.7				
2019							
1	April 24	20:44 to 21:08	Air Temp. = 12°C; Water Temp. = 11.7°C to 12.3; Wind = 0 (Beaufort); Percent Cloud = <5%; No Precip.; Water pH = 6.9 to 7.3				
2	May17	21:37 to 21:59	Air Temp. = 12°C; Water Temp. = 15.4°C to 15.8; Wind = 1 (Beaufort); Percent Cloud = 20%; No Precip.; Water pH = 6.9 to 7.4				

3	June 6	21:16 to 21:55	Air Temp. = 20°C; Water Temp. = 20.6°C to 20.7; Wind = 1 (Beaufort); Percent Cloud = 20%; No Precip.; Water pH = 6.7 to 7.0
2018			του γ
1	April 26	20:52 to	Air Temp. = 10.5°C; Water Temp. = 11.5°C to 13.1; Wind = 0 (Beaufort);
	-	21:35	Percent Cloud = <5%; No Precip.; Water pH = 6.7 to 7.2
2	May 9	21:02 to	Air Temp. = 19°C; Water Temp. = 19.2°C to 20.0; Wind = 2 (Beaufort);
		21:42	Percent Cloud = 50%; No Precip.; Water pH = 6.8 to 7.2
3	June 11	21:02 to	Air Temp. = 19°C; Water Temp. = 19°C to 19.9; Wind = 0 (Beaufort);
		21:49	Percent Cloud = 0%; No Precip.; Water pH = 7.3 to 7.4
2017			
1	April 13	20:32 to	Air Temp. = 10°C; Water Temp. = 7.6°C; Wind = 0 (Beaufort); Percent
		20:52	Cloud = 20%; No Precip.; Water pH = 7.6 to 7.9
1	April 19	20:08 to	Air Temp. = 11.5°C; Water Temp. = 12.7°C; Wind = 1 (Beaufort);
		20:25	Percent Cloud = 100%; No Precip.; Water pH = 8.4
2	May 23	21:02 to	Air Temp. = 17°C; Water Temp. = 17.3°C; Wind = 0 (Beaufort); Percent
		21:32	Cloud = 80%; No Precip.; Water pH = 7.3 to 8.1
3	June 28	21:21 to	Air Temp. = 20°C; Water Temp. = 21.1°C; Wind = 0 (Beaufort); Percent
		22:08	Cloud = 100%; No Precip.; Water pH = 7.5 to 8.5
2016			
1	Mach 30,	20:00 to	Air Temp. = 13.7°C; Water Temp. = 7.9°C; Wind = 1 (Beaufort);
	2016	20:33	Percent Cloud = 100%; No Precip.; Water pH = 7.5 to 8.2
2	May 25	19:18	Air Temp. = 23.1 ⁰ C; Water Temp. = 21.8 ⁰ C; Wind = 0 (Beaufort);
			Percent Cloud = 80%; No Precip.; Water pH = 8.4
2	May 26	21:16 to	Air Temp. = 22.1°C; Water Temp. = 10.8°C; Wind =0(Beaufort);
		21:38	Percent Cloud = 50%; No Precip.; Water pH = 7.0 to 8.6
4	June 17	21:35 to	Air Temp. = 23°C; Water Temp. = 24.2°C; Wind = 1 (Beaufort); Percent
		22:16	Cloud = 0%; No Precip.; Water pH = 7.7 to 8.3
2015	_		
1	April 15	20:35 to	Air Temp. = 11°C; Water Temp. = 10.8°C; Wind = 1 (Beaufort); Percent
		21:20	Cloud = 80%; No Precip.; Water pH = 7.7 to 8.5
2	May 6	20:42 to	Air Temp. = 20°C; Water Temp. = 15.8°C; Wind = 0 (Beaufort); Percent
		21:31	Cloud = 80%; No Precip.; Water pH = 7.7 to 8.2
3	June 16	21:19 to	Air Temp. = 21.6°C; Water Temp. = 18.2°C; Wind = 1 (Beaufort);
		21:52	Percent Cloud = 0%; No Precip.; Water pH = 6.8 to 8.1

Frog_1:

During 2022 the Wood Frog was recorded at this station at call code 1 in April, and Spring Peeper at call code 1 in May. During the May and June surveys no surface water was present in the wetland area "C".

During 2020 and 2021 Grey Tree Frog at call code 1 was the only frog heard (during the June survey visit). In 2013, 2015 and 2016 four species were heard at this station, in 2017 & 2018 three species were heard and in 2019 five species were heard. In 2019 Spring Peeper, Grey Tree Frog and American Toad had maximum call codes of 3, with Wood Frog having a call code of 2 in 2019.

The 2020 and 2021 survey results at station Frog_1 were the lowest of all the years to date, based on number of species heard and lower call codes heard. The 2022 results had more species recorded than in the previous 2 years, but were still at low call code levels.

Frog_2:

In 2022 during the survey period at the Frog_2 survey station no frogs were heard during the April and June surveys, but during the May survey Spring Peeper was recorded at call code 1 within the 100m survey radius. American Toad was also heard at >100m at call code 2 during the May survey. No water was present in the wetland near this station during the June survey.

In 2020 and 2021 the only frog species which was recorded at this station was Grey Tree Frog at call code 1 during the June survey visit. Grey Tree frog was not heard at this station in 2022.

The 2019 & 2017 surveys had Spring Peeper and Grey Tree Frog recorded with a maximum call code of 3, and in 2019 American Toad at call code 3. Wood Frog is heard at this station most years at either call code 2 or 3. Spring Peepers had been heard consistently every year since 2013 at call code 3 at this station, but in 2021 and 2020 none were present.

Frog_3:

It was noted that the water levels in the pond at Frog_3 dropped from April to June again in 2022. In 2022 three species were recorded at this station. In April and May only Spring Peeper was recorded at call code 2 then code 3, respectively. In June Northern Leopard Frog was recorded at call code 2 and Grey Tree Frog at call code 1.

The number of species heard at Frog_3 historically has ranged from 2 to 4 species. The 2021 results indicated that Spring Peeper was recorded at call code 3 in 2021, which based on the historical data was higher than previous years where it was typically heard at call code 2. Four species were recorded in 2013, 2015, 2017 and 2019 and again in 2021. In 2020 three species were heard. The 2022 result show an improvement in number of species present from 2021.

Between 2013 and 2019 a total of five different species have been heard at this station. Spring Peeper is the most consistent species having been heard over the survey years. Green Frog seems to alternate between being present in small numbers (call code 1) and not being present at all (none heard in 2013, 2014, 2019, 2020 and 2022) but was recorded in May and June 2021. Grey Tree Frog was heard in 2022 and most other years at this station (at call codes of 1 or 2), except for in 2018 and 2020.

Frog_4:

The location of survey station Frog_4 (Jones Property), is shown on Figure 3, with the survey station in 2022 again being back on the Jones pond, as permission was granted for access in 2022. In 2020 the survey station was changed from its historical location due to no permission being given by Denise Jones to enter their property. The 2020 location of the survey station is shown on Figure 3.

The 2022 surveys had no species heard in April while in May Spring Peeper was heard at call code 1 in the Jones' pond and American Toad at call code 2 and Spring Peeper

were heard at call code 3 in the wetland to the northwest of the pond, but within 100m of the station. In June 2022 Northern Leopard Frog and Grey Tree Frog were both heard at call code 1.

The 2021 surveys resulted in no frogs heard in April, three species heard in May (Grey Tree Frog, Green Frog and Northern Leopard Frog), and in June only Green Frog was heard. Green Frog having the highest call code at 2 in 2021. Prior to 2020 the maximum number of species recorded during the surveys was two, while 2020 resulted in three species recorded with Spring Peeper and American Toad having been new species for the Jones pond.

The Jones pond continues to show erratic variation year by year in what species are present. The Spring Peeper and American Toad heard in 2022 and 2020, but were not recorded in 2021.

The presence of some of the frogs recorded may be due to frogs having moved locations for breeding since the wetland where Frog_1 and Frog 2 are located had no water for breeding. The Jones Pond is only 45-50m away to the southeast.

Frog _5:

A new survey station, shown on Figure 1, was created during the June 2022 survey as frogs were heard calling from the closest lake of the Aggregate Pit (north of the Roszell Wetland). The Frog_5 station is located at the edge of the aggregate pit lake where Willow shrubs and Broad-leaved Cattail has established along the southwest corner of the lake edge. Grey Tree Frog was heard at call code 3 and American Toad at call code 1.

This survey station will now be part of the annual monitoring to continue to understand what species are using this habitat and help understand how amphibian breeding in the pit lake may relate to breeding in the Roszell wetland at Frog_1 and Frog_2. Searches will be undertaken in 2023 in this area to see if frog egg masses can be found, to confirm whether successful amphibian breeding is taking place in the pit lake.

Table 9. Summary of 2022 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

and Station Number, Roszell Pit, Puslinch.								
	Survey Station Number							
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Frog_4 (Jones Property #6512 Roszell Road)	Frog_5		
	1	-	-	3	-	-		
Spring Pepper	2	1	1	3	1	3		
	3	-	-	-	-	-		
	1	1	-		-	-		
Wood Frog	2	-	-	-	-	-		
_	3	-	-	-	-	-		
	1	-	-	-	-	-		
Green Frog	2	-	-	-	-	-		
_	3	-	-	-	-	-		
	1	-	-	-	-	-		
Grey Tree Frog	2	-	-	-	-	-		
	3	-	-	1	1	3		
Northern	1	-	-	-	-	-		
Leopard Frog	2	-	-	-	-	-		
Leopaid Flog	3	-	-	2	1	-		
	1	-	-	-	-	-		
American Toad	2	-	2	-	2	2		
	3	-	-	-	-	1		

LEGEND Call level codes (MMP):

- 1 = calls can be counted; not simultaneous
- 2 = some simultaneous call; but distinguishable
- 3 = calls not distinguishable individually, overlapping

Table 8. Summary of 2021 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

	Survey Station Number Frog_4 (Jones						
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Property #6512 Roszell Road)		
	1	-	-	3	-		
Spring Pepper	2	-	-	-	1		
	3	-	-	-	-		
	1	-	-	1	-		
Wood Frog	2	-	-	-	-		
	3	-	-	-	-		
	1	-	-	-	-		
Green Frog	2	-	-	1	1		
	3	-	-	1	1		
	1	-	-	-	-		
Grey Tree Frog	2	-	-	1	1		
	3	1	1	-	1		
Northern	1	-	-	-	-		
Leopard Frog	2	-	-	-	1		
Leopard 110g	3	-	-	-	-		
	1	-	-	-	-		
American Toad	2	-	-	-	-		
	3	-	-	-	-		

<u>LEGEND</u> Call level codes (MMP):

1 = calls can be counted; not simultaneous

2 = some simultaneous call; but distinguishable

Table 9. Summary of 2020 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

		Survey Station Number				
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Frog_4 (Jones Property #6512 Roszell Road)	
	1	-	-	2	Not surveyed	
Spring Pepper	2	-	-	2	2	
	3	-	-	-	-	
	1	-	-	-	-	
Wood Frog	2	-	-	-	-	
	3	-	-	-	-	
	1	-	-	-	-	
Green Frog	2	-	-	-	-	
	3	-		-	1	
	1	-	-	-	Not surveyed	
Grey Tree Frog	2	-	-	-	-	
	3	1	1		-	
Northern	1	-	-	-	-	
Leopard Frog	2	-	-	-	-	
Leopard Frog	3	-	-	1	-	
American Toad	1	-	-	-	Not surveyed	
	2			2	1	
	3	-	-	-	-	

<u>LEGEND</u> Call level codes (MMP):

- 1 = calls can be counted; not simultaneous
- 2 = some simultaneous call; but distinguishable
- 3 = calls not distinguishable individually, overlapping

Table 10. Summary of 2019 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

		Survey Station Number				
Species	Survey Visit #	Frog_1	Frog_2		Frog_4 (Jones Property	
	1	3	3	1	-	
Spring Pepper	2	2	2	1	-	
	3	-	-	-	-	
	1	2	2	1	-	
Wood Frog	2	-	-	-	-	
	3	-	-	-	-	
	1	-	-	-	-	
Green Frog	2	-	-	-	-	
	3	-	1	-	1	
	1	-	-	-	-	
Grey Tree Frog	2	-	-	-	-	
	3	3	3	1	1	
Northern	1	1	1	1	-	
Leopard Frog	2	-	-	1	-	
	3	-	-	-	-	
American Toad	1	-	-	-	-	
	2	3	3	-	-	
	3	-	-	-	-	

<u>LEGEND</u> <u>Call level codes (MMP):</u>

- 1 = calls can be counted; not simultaneous
- 2 = some simultaneous call; but distinguishable
- 3 = calls not distinguishable individually, overlapping

Table 11. Summary of 2018 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

		Survey Station Number			
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Frog_4 (Jones Property #6512 Roszell Road)
	1	3	3	1	-
Spring Pepper	2	3	3	2	-
	3	-	-	-	-
	1	3	3	-	-
Wood Frog	2	-	-	-	1
	3	-	-	-	-
	1	-	-	-	-
Green Frog	2	-	-	-	-
	3	-	1	1	1
	1	-	-	-	-
Grey Tree Frog	2	-	-	-	-
	3	-	-	-	-
Northern Leopard Frog	1	1	-	-	-
	2	-	-	-	-
	3	-	-	-	-
Bullfrog	1	-	-	-	-
	2	-	-	-	-
	3	-	-	-	-

<u>LEGEND</u> Call level codes (MMP):

1 = calls can be counted; not simultaneous

2 = some simultaneous call; but distinguishable

Table 12. Summary of 2017 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

		Survey Station Number				
Species	Survey Visit #	Frog_1	Frog_2		Frog_4 (Jones Property	
	1	3	3	1	-	
Spring Pepper	2	-	-	-	-	
	3	-	-	-	1	
	1	-	2	-	-	
Wood Frog	2	-	-	-	-	
	3	-	-	-	-	
	1	-	-	-	-	
Green Frog	2		-	1	-	
	3	1	1	1	2	
	1	-	-	-	-	
Grey Tree Frog	2	3	3	2	-	
	3	-	-	-	-	
Northern	1	-	-	-	-	
Leopard Frog	2	-	-	-	-	
	3	-	-	1	-	
Bullfrog	1	-	-	-	-	
	2	-	-	-	-	
	3	-	-	-	-	

<u>LEGEND</u> <u>Call level codes (MMP):</u>

- 1 = calls can be counted; not simultaneous
- 2 = some simultaneous call; but distinguishable
- 3 = calls not distinguishable individually, overlapping

Table 13. Summary of 2016 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

		Survey Station Number				
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Frog_4 (Jones Property #6512 Roszell Road)	
	1	3	3	-	-	
Spring Pepper	2	1	1	-	-	
	3	-	-	-	-	
	1	3	3	1	-	
Wood Frog	2	-	-	-	-	
	3	-	-	-	-	
	1	-	-	-	-	
Green Frog	2	1	-	1	-	
	3	-	-	1	1	
	1	-	-	-	-	
Grey Tree Frog	2	2	1	-	-	
	3	1	1	1	-	
Northern	1	-	-	-	-	
Leopard Frog	2	-	-	-	-	
	3	-	-	-	-	
Bullfrog	1	-	-	-	-	
	2	-	-	-	-	
	3	-	-	-	1	

<u>LEGEND</u> <u>Call level codes (MMP):</u>

1 = calls can be counted; not simultaneous

2 = some simultaneous call; but distinguishable

Table 14. Summary of 2015 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

		Survey Station Number				
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Frog_4 (Jones Property #6512 Roszell Road)	
	1	3	3	2	-	
Spring Pepper	2	3	3	2	-	
	3	-	-	-	1	
	1	3	3	1	-	
Wood Frog	2	-	-	-	-	
	3	-	-	-	-	
	1	-	-	-	-	
Green Frog	2	-	-	-	-	
	3	1	3	3	-	
	1	-	-	-	-	
Grey Tree Frog	2	-	-	2	-	
	3	2	2	1	-	
Northern	1	-	-	-	-	
Leopard Frog	2	-	-	-	-	
	3	-	-	-	-	
Bullfrog	1	-	-	-	-	
	2	-	-	-	-	
	3	-	-	-		

LEGEND Call level codes (MMP):

1 = calls can be counted; not simultaneous

2 = some simultaneous call; but distinguishable

Table 15. Summary of 2014 Amphibian Call Surveys by Species, Call Level Code and Station Number, Roszell Pit, Puslinch.

The Station Name	Survey Station Number					
Species	Survey Visit #	Frog_1	Frog_2	Frog_3	Frog_4 (Jones Property	
	1	2	3	1	1	
Spring Pepper	2	1	1	1	-	
	3	-	-	-	-	
	1	-	1	-	-	
Wood Frog	2	-	-	-	-	
	3	-	-	-	-	
	1		-	-	-	
Green Frog	2	-	-	1	-	
	3	-	-	1	-	
	1	-	-	-	-	
Grey Tree Frog	2	3	3	2	-	
	3	-	1	-	-	
Bullfrog	1	-	-	-	-	
	2	-	-	-	-	
	3	-	-	-	1	

<u>LEGEND</u> <u>Call level codes (MMP):</u>

1 = calls can be counted; not simultaneous

2 = some simultaneous call; but distinguishable

4.5 Roszell Wetland Water Levels

The April 7, 2022 salamander egg mass survey initially identified that the water depths in the Roszell wetland were about half of what they had been during years prior to 2020 at the time of the surveys. The April 8th amphibian call surveys also identified some frog calling, but not at high call codes.

It was then requested by CBM that the water levels within the Roszell wetland should be monitored for change over the critical May and June period when salamander and frog eggs require surface water in order for successful breeding.

The following summarizes the May 5th to June 25th site visits to the Roszell Wetland, to the south of the exisitng pit, to confirm whether or not any surface water continued to be present within the wetland. The pond located to the south of the Roszell Wetland, where amphibian monitoring station FRG_3 is located, was also checked during each survey visit from May 13th on.

Surface water levels were recorded where present in the Roszell Wetland and then mapped. The presence of surface water in the Roszell Wetland was recorded in relation to the habitat types of the wetland, as shown on Figure 3 as Areas A, B and C. For consistency, the locations of the DP7 piezometer in Area A of the wetland and at the steel pipe in the Southwest end of Area "C" were where water measurements were taken. In Area "B" (Silver Maple Swamp) any areas with standing water were checked and the greatest water depth in the area was recorded. At the pond to the South, water was measured at the north end of the pond at the wooden stake placed in the pond in Spring 2021. Table 16 shows the details of surface water depths in centimetres for each area of the Roszell Wetland and the pond to the South over the monitoring period.

Table 16. Surface Water Levels at Roszell Wetland, 2022.

			1	Nater Dep	th (cm)			
Location	May 5, 2022	May 13, 2022	May 19, 2022	May 29, 2022	June 6, 2022	June 9, 2022	June 16, 2022	June 25, 2022
Area A	Ranged from 8- 14cm	8.5cm	4cm (one depression at 7.5cm max. depth)	0	0	0	0	0
Area B	5cm	0	0	0	0	0	0	0
Area C	0	0	0	0	0	0	0	0
Pond to South at Stake	-	14cm	4cm	0(35 cm out from stake)	0(102 cm out from stake)	0(101 cm from stake)	0 (127 cm from stake)	0 (202 cm from stake)

As Table 16 shows, there was no surface water in Area "C" of the Roszell Wetland when monitoring started on May 5th, and by May 13th surface water was no longer present in Area "B" of the wetland. Surface water was present in the western end of Area "A" at the steel peizometer in decreasing depths from May 5-19th, with surface

water no longer being present during the May 29th survey visit. From May 29th 2022 on, no surface water was present in the Roszell Wetland and soils in Area "A" were saturated, while Areas "B" and "C" were damp.

During the May 19, 2022 survey visit the pool of remaining water in Area "A" was checked carefully for any signs of frog tadpoles or salamander larvae as they were confirmed to be present on the May 13th survey visit. During the May 19th search, frog tadpoles were observed along with a few salamander larvae which had their front legs. Photo 1 shows one of the salamander larvae found in the remaining water near DP7. Based on the developental stage the salamander larve were found in they were not likely to mature enough to leave the pond before the water dried up, as it would have taken several more weeks from when they were observed, to reach the phase when they would leave the pond. Despite a large number of Blue-spotted Salamander egg masses being found in the wetland in 2022, successful production of young is not believed to have occured.





At the dug pond to the south of the Roszell wetland pond levels remained above the wooden stake at the pond edge from May 13-19th dropping from 14cm to 4cm and by May 29th had receded below the stake. The water level in the pond receded from 35 to 202cm out from the bottom of the stake towards the middle of the pond from May 29th to June 25th.

During these surveys Common Snapping Turtle was observed in Area A of the wetland on May 13th and one dead Common Snapping Turtle was found in the dug pond to the south. On May 19, 29 and June 6th two adult Common Snapping Turtles were observed in the dug pond to the south (June 9th only 1 Common Snapping Turtle was observed). Painted Turtles were also observed in the dug pond to the south on the May 29 and June 6 survey visits.

5.0 Discussion

Area "A" of the Roszell Wetland had historically continued to consistently be where the greatest number of salamander egg masses were found each year until 2021. In 2021 no confirmed salamander breeding was found for the first year since monitoring began in 2013. In 2015 no egg masses were found during the surveys but this was attributed to an earlier than typical Spring breeding resulting in the eggs already having developed into larvae. The 2022 surveys showed an improvement from 2021, with the second highest egg mass count of all years. In early May salamander larvae were confirmed in Area "A" but water levels were low and by May 29th had dried up completely, prior to larve becoming mature enough to leave the wetland as adults.

FR_1 and FR_2 improved in 2022 from 2021, when no frogs were heard at those stations. Call codes were still level1 or 2 but 2022 results indicate frogs were still present. The Jones Property in 2022 again showed potentially increasing use by different species of breeding amphibians, with 4 species recorded similar to 2021. The abundance of frogs at the Jones Property, however, still appears to be low. Overall the 2022 amphibian survey data continues to show the same species diversity being present. Spring Peepers were only recorded at call level code 3 in the original monitoring stations at FR_3. Wood Frog was also not heard at FR_1 and FR_2 in 2021 (historically had been heard at call level code 2 or 3) but in 2022 was heard at FR_1 at call code 1. The new monitoring station at FR_5 had frogs calling at the pit lake edge with 2 species calling at code 3. This shows a change in location from traditional breeding areas, and will be monitored in 2023 to see if this pattern continues.

The Fall vegetation plots showed some variation in percent cover of some species between 2013 and 2019 at vegetation Plots A and B, believed to be the result of grazing cattle where the vegetation plots are located. In 2021 and 2022 when there has appeared to be reduced cattle activity in the area of Plots A and B has resulted in species percent covers remaining mostly similar between years and less change occurring by several percent cover categories as was noted in years prior to 2019. Variations in the percent cover of certain species at the other vegetation plots sampled still typically show changes in only one percent cover category. In 2022 I was found at Plots C, D and E it was found that Bulblet Fern and/or Dwarf Scouring Rush (indicator species) increased at some subplots which is positive during another drought year. Overall limited changes were noted in the percent cover of vegetation species (including the wetland indicator species) in 2022, in both Spring and Fall, when compared to 2021.

The 2022 tree and shrub data at the six vegetation plots suggests there has again been minimal change in species presence or health between 2021 and 2022, beyond natural yearly changes, with periodically a few shrubs or trees becoming large enough to count on the transects. There continues to be standing water noted in plots where standing water had been recorded in previous years and at depths similar to what has been recorded historically at the plots since 2013. A reduced amount of cattle activity was noted in Spring 2022 at vegetation plots A and B, and by the Fall surveys no recent activity by cattle appeared to have taken place at these plots. Reduced cattle presence

should help stabilize the vegetation at those plots infuture years as disturbance is reduced.

The 2022 trout redd surveys indicate continued Brook Trout breeding in the tributaries adjacent to the Roszell Pit. The Main Creek which had trout redds found in 2012 has continued to have trout redds found every year and to have the most Brook Trout redds present in the study area. Tributary #7 in 2022 showed continued average levels of trout redds being present, despite the lower water levels noted.

The 2022 December trout redd surveys indicate a high level of Brook Trout spawning is continuing to take place, despite the past three years being drought years. There does not appear to be any significant impact on Brook Trout spawning in the coldwater creeks adjacent to the Roszell Pit based on comparison of historical data with the 2022 survey findings.

6.0 Recommendations

It is recommended that the FR_5 amphibian monitoring station continue to be monitored in future years in order to identify and assess the use of the south edge of the pit lake for frog breeding. It is also recommended that the pit lake edge around the FR_5 station be searched for frog eggs to confirm successful breeding is occurring. This is suggested to be undertaken between April and June during the other surveys being undertaken.

In 2023 it is recommended that again water levels within the Roszell Wetland be monitored on an approximately weekly basis during the months of May and June. Water levels should be recorded and mapped in the same way as they were in 2022.

7.0 BIBLIOGRAPHY

Argus, G.W., K.M. Pryer, D.J. White and C.J. Keddy. 1982-87. Atlas of Rare Vascular Plants of Ontario. Parts 1 to 4. National Museums of Canada. Ottawa.

Credit Valley Conservation (CVC). 2010. Monitoring Wetland Integrity within the Credit River Watershed: Chapter 3 wetland vegetation 2005-2009. Credit Valley Conservation. Meadowvale, ON.

Dance Environmental Inc. 2018. 2018 Ecological and Aquatic Monitoring Report Roszell Pit, Puslinch Township, ARA Licence #625189.

Dougan & Associates. 2009. Guelph Natural Heritage Strategy. Phase 2: Terrestrial Inventory and Natural Heritage System. VOLUME 2: TECHNICAL APPENDICES. Pp 46.

Marsh Monitoring Program Participants Handbook (1 of 3): Getting Started. 2008 edition. Published by Bird Studies Canada in cooperation with Environment Canada and the U.S. Environmental Protection Agency. Pp.14.

Lee, H. <u>et al</u>. 1998. Ecological Land Classification for Southern Ontario, First Approximation and Its Application. SCSS Field Guide FG-02.

Oldham, M.J., W.D. Bakowsky and D.A. Sutherland. 1995. Floristic Quality Assessment System for Southern Ontario. NHIC, MNR, Peterborough.

Riley, J.L. et al.. 1989. Distribution and Status of the Vascular Plants of Central Region, Ontario Ministry of Natural Resources. Ontario Ministry of Natural Resources. Pp.110.

The Waterloo Region Record. November 8, 2013. 2013 could be wettest year ever in region. Page B-2.

Report prepared by:

K.W. Dance, M.Sc.

President

Dance Environmental Inc.

K.S. Dance, M.E.S.

Terrestrial and Wetland Biologist

Dance Environmental Inc.

APPENDIX 1.

Example of a Completed

Herbaceous Vegetation Data Form

(for a Sub-plot, 2012):

Roszell Pit

Dance Environmental Inc.

Herbaceous Monitoring Plots SPECIES LIST

Site:	Ros	Roszell Pit		
Sampling Plot #:		Subplo	Subplot #: NW	3
UTM (centre of Plot):	Plot):			
Date:	Oct. 1/12		Time: Start	Start
Surveyor(s):	KSD, KWD			End
Weather:		Water Depth:	ф	

Species	Solitary	<1%	1-5%	6-15%	16-30%	31-50%	51-75%	Solitary <1% 1-5% 6-15% 16-30% 31-50% 51-75% 76-100%	Notes
Canada may flower		1					7		
Moss Sp.				7					
Glossy Buckthorn		7							seedlings
Sedge sp.		7							
Eastern White Cedar	7								seedling
dead wood		7							
liverwort sp.	7								
							2		-

APPENDIX 2.

Completed Tree and Shrub Inventory Data Form,

Example (Revised 2013 Data Form):

Roszell Pit

Dánce Environmental Inc. Tree Monitoring Inventory

- Page

Understorey: Tally stems Rot,or damage to Trunk, Roots Dead main branches, small branches/twigs Ø Condition: To assess condition look for. Sores, Soot Condition (good, fair, poor, dead) Lost/dead foliage Disease, Fungus 6000 East-West Glossy Buckthorn Species Transect Name: Shrubs ; wind = 0-2 (u/L ; 1002 cloud; light precip oftender In or taller Time: Start 11,05 **Understorey: Tally** 46 Shabs Condition (good, fair, poor, dead) Roszell Pit North -south Weather: Temp=22ª Surveyor(s): KSD UTM (centre of Plot): Transect Name: Species Shrubs Site:

Sept, 20/13 Pg. 2 of 2

tree health and numbers within entire 10x10 plot

Layers: 1=canopy 2=sub-canopy

Plot #: E

Trees: all trees >10 dbh

			CallOp Layer
Species	Condition	location	1 2
		Ŋ	
1000	6.5	띯	*
i.w. (edan		SW	
		Š	X
		뮏	
-/		SE	
	Taci	SW	I (uprocted and on ground) but alive still
		ΝN	
		H	
7 0		SE	
\$2.00 ×	roor)	SW	
9		Š	
		¥	
		SE	
7 2 2 0	الم	SW	
		NN	
		뮏	
		SE	
A #55	Š	SW	
		Š	
		岁	
		SE	
		MS	
		N N	
a		빙	
		SE	
		SW	
		ΝN	
		뮏	
		SE	
		SW	
		MΝ	
		빙	
		ЭS	
		ΝS	
		MN	
		Ŋ	
	V.	SE	
		SW	
		X	

Notes: (Note all deadfall in the plots!)

APPENDIX 3.

Summary of 2014 to 2022 Spring Herbaceous

Vegetation in each Sub-plot

Appendix 3. Summary of 2014 to 2022 Spring Herbaceous Vegetation in each Sub-plot.

			2014	2015	2016	2017	2018	2019	2020	2021	2022
Plot	Sub- plot	Dominant Taxa Species				Percent	Cover fo	r the Taxa			
	NE	Glyceria striata Creeping Buttercup Bitter Dock	31- 50% 1-5% 1-5%	6-15% 1-5% 1-5%	6-15% <1% solitary	16-30% 1-5% solitary	- 1-5% -	- 1-5% -	- 1-5% -	- <1% -	- <1% 1-5%
А	NW	Moss sp. Bulblet Fern <i>Glyceria striata</i>	16- 30% 1-5% 1-5%	16-30% 6-15% 1-5%	16-30% 6-15% 1-5%	31-50% 31-50% <1%	51-75% 6-15% -	51-75% 6-15% -	51-75% 6-15% -	51-75% 6-15% -	1-5% 16-30% 1-5%
	SW	E. White Cedar-seedling Field Horsetail Carex schweinitzii	- 6-15% 1-5%	- 16-30% 1-5%	Solitary 16-30% -	- 31-50% -	- 16-30% -	- 16-30% -	- 6-15% -	- 6-15% -	- 6-15% -
	SE	Moss sp. Agrostis stolonifera Watercress	6-15% 6-15% -	16-30% - -	6-15% - 16-30%	16-30% - 6-15%	16-30% - 6-15%	16-30% - 1-5%	6-15% - 1-5%	1-5% - <1%	- - -
	NE	Field Horsetail Carex Schweinitzii Carex flava	1-5% 16- 30% -	6-15% 16-30% -	16-30% 16-30% -	51-75% 6-15% -	31-50% - 1-5%	31-50% - 1-5%	6-15% - 1-5%	16-30% - 1-5%	1-5% - 1-5%
В	NW	E. White Cedar-seedling Moss sp. Bulblet Fern	6-15% 51- 75% 6-15%	- 31-50% 6-15%	- 51-75% <1%	- 76-100% 1-5%	<1% 31-50% 1-5%	<1% 51-75% <1%	- 51-75% -	31-50% <1%	<1% 31-50% -
	SW	Kentucky Bluegrass	1-5%	-	<1%	-	-	-	-	-	-
	SE	Ranunculus ripens Creeping Charlie Kentucky Bluegrass	16- 30% <1% 51- 75%	76-100% 1-5% 31-50%	51-75% <1% 31-50%	31-50% Solitary 51-75%	51-75% - 1-5%	51-75% - 31-50%	31-50% - 31-50%	31-50% - 51-75%	16-30% - 51-75%

Appendix 3. Summary of 2014 to 2022 Spring Herbaceous Vegetation in each Sub-plot Cont'd.

			2014	2015	2016	2017	2018	2019	2020	2021	2022
Plot	Sub- plot	Dominant Taxa Species				Percent	Cover fo	r the Taxa			
	NE	Carex pedunculata Bulblet Fern Field Horsetail	16-30% 1-5% 1-5%	6-15% 1-5% 1-5%	6-15% 1-5% 1-5%	16-30% 1-5% 1-5%	16-30% 1-5% 6-15%	16-30% - 1-5%	16-30% 1-5% 1-5%	31-50% <1% 1-5%	31-50% <1% 1-5%
	NW	Carex pedunculata Field horsetail Canada Mayflower	<1% <1% 1-5%	1-5% <1% 1-5%	1-5% - 1-5%	1-5% 1-5% 1-5%	6-15% <1% 1-5%	1-5% <1% 1-5%	1-5% <1% 1-5%	1-5% - 1-5%	1-5% - 6-15%
С	SW	Field Horsetail Three-leaved Solomon Seal Bulblet Fern	6-15% - 1-5%	16-30% 1-5% 1-5%	1-5% <1% <1%	1-5% 6-15% 1-5%	- 1-5% 6-15%	1-5% 1-5% 1-5%	1-5% 1-5% 1-5%	<1% 1-5% 1-5%	- 1-5% 1-5%
	SE	Field Horsetail Coltsfoot Bulblet Fern	1-5% 1-5% 6-15%	6-15% 6-15% 6-15%	16-30% 1-5% 6-15%	16-30% 1-5% 31-50%	6-15% 1-5% 31-50%	6-15% 1-5% 31-50%	6-15% 1-5% 31-50%	6-15% 1-5% 31-50%	1-5% - 16-30%
	NE	Bulblet Fern Dwarf Scouring Rush Carex leptalea	16-30% 16-30% -	16-30% 16-30% solitary	6-15% 16-30% <1%	31-50% 1-5% -	1-5% 6-15% <1%	6-15% 16-30% -	6-15% 16-30% -	16-30% 6-15% -	6-15% 6-15% -
D	NW	Bulblet Fern Field Horsetail Dwarf Scouring Rush	16-30% 1-5% 1-5%	31-50% 1-5% 1-5%	6-15% 1-5% 6-15%	6-15% - 16-30%	31-50% 6-15% 1-5%	16-30% 1-5% 6-15%	16-30% 1-5% 6-15%	31-50% 1-5% 6-15%	16-30% 1-5% 6-15%
	SW	Carex pedunculata Bulblet Fern Dwarf Scouring Rush	6-15% 1-5% <1%	1-5% 1-5% <1%	1-5% 1-5% <1%	6-15% 1-5% -	6-15% 1-5% -	16-30% 6-15% 6-15%	16-30% 6-15% 6-15%	- 6-15% 1-5%	- 6-15% 6-15%
	SE	Bulblet Fern Field horsetail Moss sp.	16-30% Solitary <1%	31-50% Solitary -	31-50% - 1-5%	51-75% - 1-5%	31-50% - 1-5%	31-50% - 1-5%	16-30% <1% -	16-30% <1% -	16-30% - -

Appendix 3. Summary of 2014 to 2021 Spring Herbaceous Vegetation in each Sub-plot Cont'd.

			2014	2015	2016	2017	2018	2019	2020	2021	2022
Plot	Sub- plot	Dominant Taxa Species				Percent C	over for t	he Taxa			
	NE	Cinnamon Fern Canada Mayflower Bulblet Fern	<1% 1-5% -	1-5% <1% <1%	1-5% <1% -	6-15% <1% solitary	6-15% <1% -	6-15% <1% <1%	6-15% <1% <1%	6-15% - <1%	6-15% <1% -
	NW	Moss sp. Agrostis stolinifera Common Toothwort	76- 100% - 16-30%	76- 100% - 6-15%	76-100% - 6-15%	31-50% - 6-15%	51-75% - 6-15%	16-30% - 1-5%	76- 100% - -	16-30% - 6-15%	16-30% - 6-15%
E	SW	Moss sp. Bulblet Fern Carex pedunculata Yellow Birch.	1-5% - 1-5% <1%	1-5% 1-5% 1-5% -	6-15% - <1% solitary	6-15% - 1-5% <1%	6-15% - <1% -	6-15% - 1-5% -	76- 100% 6-15% 1-5%	6-15% - 1-5% -	1-5% - 1-5% -
	SE	Carex leptalea Bulblet Fern Glossy Buckthorn	- <1% <1%	- <1% <1%	Solitary <1% <1%	- <1% <1%	- 1-5% <1%	- 1-5% <1%	- 1-5% <1%	- 1-5% <1%	- 1-5% 1-5%
	NE	Moss sp. Canada Mayflower Marsh Fern	16-30% <1% -	16-30% - -	6-15% <1% -	6-15% <1% -	6-15% <1% -	16-30% <1% -	6-15% <1% -	6-15% - -	6-15% - -
F	NW	Moss sp. Canada Mayflower Common Buckthorn	31-50% <1% <1%	16-30% 1-5% <1%	31-50% 1-5% <1%	16-30% <1% solitary	- <1% -	16-30% <1% <1%	6-15% 1-5% -	6-15% - <1%	6-15% <1% <1%
	SW	Moss sp. Dwarf Sc. Rush Carex leptalea	31-50% <1% -	31-50% <1% 1-5%	51-75% <1% <1%	16-30% - <1%	16-30% - <1%	16-30% 1-5% 1-5%	16-30% <1% <1%	6-15% <1% -	6-15% <1% -
	SE	Moss sp. Canada Mayflower Bulblet Fern	- - <1%	1-5% - <1%	<1% - -	- - <1%	1-5% - <1%	1-5% - 1-5%	- - <1%	- - <1%	- - 1-5%

APPENDIX 4.

Summary of 2014 to 2022 Fall Herbaceous

Vegetation in each Sub-plot

Appendix 4. Summary of 2014 to 2022 Fall Herbaceous Vegetation in each Sub-plot.

			2014	2015	2016	2017	2018	2019	2020	2021	2022
Plot	Sub- plot	Dominant Taxa Species				Percent	Cover for th	ne Taxa			
	NE	Fowl Mana Grass Juncus articulatus E. W. Cedar -seedling	1-5% 6-15% <1%	16-30% 1-5% 1-5%	31-50% - 1-5%	16-30% 6-15% 1-5%	- 6-15% 1-5%	16-30% - 16-30%	6-15% 6-15% 51-75%	- 6-15% -	1-5% 6-15% -
	NW	Moss sp. Fowl Mana Grass Bulblet Fern	51-75% 31-50% 6-15%	31-50% 1-5% 16-30%	51-75% <1% 6-15%	51-75% - 16-30%	51-75% - 1-5%	51-75% - 16-30%	51-75% - -	51-75% 1-5% <1%	51-75% <1% 6-15%
Α	SW	Coltsfoot Carex schweinitzii Bulblet Fern Field Horsetail	6-15% 1-5% 1-5% 6-15%	16-30% - 16-30% 31-50%	31-50% - 16-30% 16-30%	16-30% - 6-15% 31-50%	31-50% - 1-5% 16-30%	1-5% - 16-30% 1-5%	6-15% - 16-30% 1-5%	6-15% - 16-30% -	16-30% - 16-30% -
	SE	Bidens connata Watercress Fowl Manna Grass	- <1% 6-15%	Solitary 6-15% 1-5%	<1% 31-50% 1-5%	- 6-15% 6-15%	1-5% 16-30% -	- - -	- 1-5% -	- - -	- - -
	NE	Carex schweinitzii Purple Stemmed Aster Field Horsetail	16-30% 16-30% 6-15%	1-5% 16-30% 16-30%	6-15% 6-15% 6-15%	16-30% 6-15% 16-30%	- 1-5% 1-5%	1-5% <1% 6-15%	1-5% 1-5% 6-15%	1-5% <1% 16-30%	- 1-5% 16-30%
	NW	Moss sp. E. W. Cedar -seedling Bulblet Fern	51-75% 1-5% 1-5%	51-75 % 1-5% 6-15%	51-75% - -	76-100% <1% -	51-75% - -	51-75% - <1%	51-75% - <1	51-75% - <1%	51-75% - -
В	SW	Agrostis stolonifera Tall Buttercup Fowl Mana Grass Pilea fontana Common Plantain Spotted Jewelweed	- - - 6-15% 6-15% 1-5%	- - - 1-5% 6-15%	- - - <1% - -	- - - 1-5% - -	- - - - 1-5%	- - - <1% - -	- - - -	- - - -	- - - -
	SE	Tall Buttercup Agrostis stolonifera Pilea fontana Poa compressa	31-50% - Solitary 16-30%	51-75% - <1% 6-15%	31-50% - <1% 16-30%	76-100% - 1-5% 16-30%	76-100% - 1-5% 6-15%	76-100% - <1% -	16-30% - -51-75%	31-50% - - -	16-30% - - -

Appendix 4. Summary of 2014 to 2022 Fall Herbaceous Vegetation in each Sub-plot Cont'd.

			2014	2015	2016	2017	2018	2019	2020	2021	2022
Plot	Sub- plot	Dominant Taxa Species				Percent	Cover for	the Taxa			
	NE	Carex flava Bulblet Fern Field Horsetail	31-50% 6-15% 1-5%	16-30% 1-5% 6-15%	- 1-5% 6-15%	- 1-5% 16-30%	- 1-5% 31-50%	- 1-5% 1-5%	- 6-15% -	- 1-5% <1%	- 1-5% -
	NW	Carex flava Dwarf Scouring Rush Common Buckthorn	6-15% 1-5% 1-5%	6-15% 1-5% <1%	- 6-15% <1%	- 1-5% -	- 6-15% -	- 1-5% <1%	- 1-5% <1%	- 1-5% <1%	- 6-15% <1%
С	SW	Field Horsetail Moss sp. Bulblet Fern <i>Carex flava</i>	6-15% 1-5% 1-5% 6-15%	16-30% 1-5% 1-5% <1%	6-15% 1-5% 1-5% <1%	16-30% 6-15% 1-5% -	<1% 6-15% 6-15% -	1-5% 16-30% 6-15% -	- 6-15% 6-15% -	- 6-15% 1-5% -	- 6-15% 1-5% -
	SE	Field Horsetail Coltsfoot Bulblet Fern	Solitary 6-15% 6-15%	1-5% 6-15% 6-15%	1-5% 1-5% 6-15%	16-30% 1-5% 16-30%	6-15% 6-15% 31-50%	6-15% 16-30% 16-30%	1-5% 16-30% 16-30%	1-5% - 6-15%	1-5% - 16-30%
	NE	Dwarf Scouring Rush Bulblet Fern	16-30% 6-15%	31-50% 16-30%	51-75% 6-15%	51-75% 6-15%	31-50% 6-15%	6-15% 6-15%	16-30% 6-15%	31-50% 6-15%	31-50% 6-15%
D	NW	Bulblet Fern Field Horsetail Dwarf Scouring Rush	31-50% 1-5% 6-15%	16-30% 6-15% 6-15%	31-50% 6-15% 16-30%	31-50% 6-15% 1-5%	51-75% 6-15% <1%	51-75% 1-5% 6-15%	51-75% 1-5% 6-15%	51-75% <1% 6-15%	31-50% <1% 6-15%
D	SW	Carex pedunculata Bulblet Fern Dwarf Scouring Rush	6-15% 6-15% 1-5%	6-15% 1-5% 1-5%	16-30% 6-15% <1%	6-15% 1-5% 1-5%	6-15% 16-30% 1-5%	6-15% 6-15% 1-5%	16-30% 6-15% 1-5%	16-30% 6-15% 1-5%	16-30% 6-15% 6-15%
	SE	Bulblet Fern Glossy Buckthorn Moss sp.	31-50% Solitary 1-5%	16-30% - 1-5%	31-50% - 1-5%	31-50% - -	31-50% - <1%	31-50% - -	16-30% - <1%	16-30% - 16-30%	16-30% - 16-30%

Appendix 4. Summary of 2014 to 2022 Fall Herbaceous Vegetation in each Sub-plot Cont'd.

			2014	2015	2016	2017	2018	2019	2020	2021	2022
Plot	Sub- plot	Dominant Taxa Species				Percent C	over for th	e Taxa			
	NE	Cinnamon Fern Moss sp. Bulblet Fern	6-15% 1-5% -	6-15% 1-5% -	6-15% 1-5% -	6-15% 1-5% -	6-15% 1-5% 1-5%	6-15% 1-5% <1%	6-15% 1-5% -	6-15% 1-5% <1%	6-15% 1-5% -
	NW	Moss sp. <i>Agrostis stolinifera</i> Dwarf Raspberry	76-100% 6-15% 1-5%	76-100% - 1-5%	76-100% 1-5% solitary	76-100% 1-5% 1-5%	76-100% 6-15% <1%	16-30% - 1-5%	16-30% - 1-5%	31-50% 6-15% 1-5%	31-50% 6-15% 1-5%
E	SW	Moss sp. Bulblet Fern Carex pedunculata Glossy Buckthorn	1-5% <1% 1-5% 1-5%	6-15% Solitary - 1-5%	1-5% - 1-5% 1-5%	16-30% - 1-5% 1-5%	6-15% - 1-5% 1-5%	1-5% - 1-5% 1-5%	1-5% - 1-5% 1-5%	1-5% - 1-5% 1-5%	1-5% - 1-5% 1-5%
	SE	Moss sp. Bulblet Fern Glossy Buckthorn	16-30% <1% <1%	16-30% <1% <1%	16-30% <1% <1%	16-30% - <1%	16-30% 1-5% 1-5%	6-15% <1% 1-5%	6-15% - 1-5%	6-15% <1% -	16-30% 1-5% 1-5%
	NE	Moss sp. Marsh Fern Glossy Buckthorn	6-15% - <1%	6-15% - <1%	16-30% - solitary	6-15% 1-5% -	16-30% 1-5% <1%	6-15% - -	6-15% - -	6-15% - -	6-15% - <1%
F	NW	Moss sp. Glossy. Buckthorn Canada Mayflower	31-50% 1-5% <1%	16-30% 1-5% 1-5%	16-30% <1% <1%	16-30% - <1%	6-15% <1% <1%	16-30% 1-5% <1%	16-30% 1-5% <1%	16-30% <1% <1%	6-15% <1% <1%
	SW	Moss sp. Dwarf Sc. Rush Glossy Buckthorn Showy Ladyslipper	31-50% <1% <1% 1-5%	31-50% 1-5% <1% 1-5%	31-50% 1-5% 1-5% 1-5%	16-30% <1% <1% Solitary	6-15% 1-5% - -	1-5% 1-5% 1-5% -	6-15% 1-5% 1-5% -	6-15% <1% <1% -	16-30% <1% <1%
	SE	Glossy Buckthorn Bulblet Fern	1-5% <1%	Solitary <1%	- <1%	-	1-5% <1%	<1% -	<1% <1%	<1% <1%	<1% <1%

APPENDIX 5.

Photos of Spring Vegetation Monitoring Plots A-F, 2022

Spring 2022



Photo 1. Vegetation Plot A, facing N from Steel T-bar.



Photo 2. Vegetation Plot B, facing E from Steel T-bar.



Photo 3. Vegetation Plot C, facing S from Steel T-bar.



Photo 4. Vegetation Plot D, facing E from Steel T-bar.



Photo 5. Vegetation Plot E, facing E from Steel T-bar.



Photo 6. Vegetation Plot F, facing S from Steel T-bar.

APPENDIX 6.

Photos of Fall Vegetation Monitoring Plots A-F, 2022

Fall 2022



Photo 1.Vegetation Plot A, facing N from Steel T-bar.



Photo 2. Vegetation Plot B, facing E from Steel T-bar.



Photo 3. Vegetation Plot C, facing E from Steel T-bar.



Photo 4. Vegetation Plot D, facing E from Steel T-bar.



Photo 5. Vegetation Plot E, facing E from Steel T-bar.



Photo 6. Vegetation Plot F, facing E from Steel T-bar.

APPENDIX 7.

C.V.s of Report Authors.

K.W. Dance, M.Sc.

K.S. Dance, M.E.S.



KEN DANCE CONSULTING BIOLOGIST

EDUCATION

- M.Sc., Biology, 1977; University of Waterloo
- B.Sc., Honours Biology, 1975; University of Waterloo

COURSES

- Butternut Health Assessment Workshop & Update OMNR, 2010 & 2013
- Preparation of E.I.S. Reports OMNR, 1995
- Bioassessments & Biological Criteria for Warmwater Streams AFS 1993
- Ontario Wetland Evaluation System, 3rd Edition OMNR, 1993
- Creating and Using Wetlands University of Wisconsin, 1992
- Fluvial Geomorphology University of Guelph and AFS, 1992

PROFESSIONAL EXPERIENCE

1991 to date. Consulting Biologist and President, Dance Environmental Inc. The firm has completed over 440 assignments.

Mr. Dance has been consulting for 42 years and has gained extensive experience on the following types of studies: ecological inventory, biological monitoring, environmental planning, Species at Risk Overall Benefit Plans, watershed management, no net loss of fish habitat, tree saving plans, vegetation management, wetland Environmental Impact Studies, non-game wildlife and environmental assessments.

He also has experience in biological resource inventory, impact prediction, management option development and comparison, attendance at public information centres and as an expert witness before boards and tribunals.

1988-1991	Senior Biologist, Ecologistics Limited. As Senior Biologist, Ken was
	responsible for review of all biological projects. He consulted to private
	and public sector clients on management of fish, vegetation, and wildlife
	resources.

- 1985-1988 Associate and Manager of Biological Services, Gartner Lee Limited.
 Mr. Dance consulted to industrial and government clients.
- 1982-1985 Senior Biologist and Project Manager, Gartner Lee Limited.
- 1977-1982 Biologist and Project Manager, Ecologistics Limited.
- 1975-1976 Research Technician, University of Waterloo. Mr. Dance acted as a research technician on a PLUARG contract study of two streams.

PROJECT EXAMPLES

E.I.S. Reports

Undertook inventory, site assessments and reporting for over one thousand sites relating to residential, industrial, aggregate and waste management proposals.

Highways and Roads

Examples of Environmental Assessment and highway construction projects, which Mr. Dance has worked on follow.

- Parkhill Road and Bridge, Cambridge inspection of in-water construction to minimize erosion and sedimentation and construction of fish pool habitat.
- Gordon Street Bridge, Guelph inspection of in-water construction and placement of fish habitat rock, 2000-2002.
- Highway 60 at Huntsville inspection of in-water work during replacement of 4 culverts, including trout habitat; inspection of tree and shrub plantings.
- Highway 35 Minden inspection of stream habitat restoration construction and inspection of tree and shrub plantings.
- Wellington County Roads fisheries assessments for 3 culvert replacements.

Wastewater Management

- Etobicoke and Mimico Creek Watersheds: Toronto Wet Weather Flow Management Master Plan – ecological consultant addressing fish, wildlife, forests, wetlands and Lake Ontario near shore habitat.
- Thunder Bay Water Pollution Prevention Study biological consultant addressing fish, wildlife, forests, wetlands and Lake Superior near shore habitat.
- Cincinnati and Cleveland, Ohio CSO Review Studies: biological consultant addressing existing impacts on aquatic ecosystems and advice regarding solution options.
- Wastewater Treatment Plant Class E.A.s: biological consultant for Ayr, Flesherton, Ingersoll, Keswick, Lambeth, Tavistock and Wellesley plant upgrades/expansions.

Water Supply

Fisheries/biological assessments regarding water taking and/or facility siting for projects in Elmira, Georgetown, Acton, Cambridge, Caledon and Brampton.

Publications

Published chapters in three books. Over forty papers on fish, wildlife, wetland and vegetation management, as well as water quality and fisheries. Articles in publications such as Ontario Birds, Ontario Field Biologist, Newsletter of the Field Botanists of Ontario, Recreation Canada, Landscape Architectural Review and the Water Research Journal of Canada.



KEVIN DANCE, M.E.S. TERRESTRIAL BIOLOGIST AND PARTNER

EDUCATION

- M.E.S., Masters of Environment and Resource Studies, 2011; University of Waterloo.
 Thesis Title: "Raptor Mortality and Behavior at Wind Turbines Along the North Shore of Lake Erie During Autumn Migration 2006-2007"
- B.E.S., Honours Bachelor of Environment and Resource Studies with Parks Option, 2006;
 University of Waterloo.

CERTIFICATIONS & PROFESSIONAL ASSOCIATIONS

Workshops/Certifications:

- Wildlife Acoustics: Kaleidoscope In-depth Seminar for Bat Research. Royal Ontario Museum, Toronto, Ontario. March 29, 2019. Instructor: Ian Agranat (creator of Kaleidoscope Pro).
- Wildlife Acoustics: Kaleidoscope In-depth Seminar for Non Bat Research. Royal Ontario Museum, Toronto, Ontario. March 28, 2019. Ian Agranat (creator of Kaleidoscope Pro).
- Ontario Bat Working Group, Spring 2017, Toronto Zoo.
- Bat Survey Solutions LLC. Bat Acoustic Fieldwork and Data Management Workshop.
 Instructors: Janet D. Tyburec and Joseph M. Szewezak (creator of SonoBat and Professor at Humbolt State University, California). February 2016, Punta Gorda, Florida.
- Wildlife Acoustics: Bat Acoustics Training with Dr. Lori Lausen, February 2015, Miami, Florida
- Butternut Health Assessment Workshop, BHA #486, July 16, 2014, re-certified in 2019.
- Dragonfly and Damselfly Identification Workshop, 2013, Guelph Arboretum.
- OMNR, Ontario Wetland Evaluation System, Northern Manual and Southern Manual. North Bay, 2012
- OMNR Ecological Land Classification for Southern Ontario, Lindsay, 2010
- Diploma of Environmental Assessment, University of Waterloo, 2006
- Member, Ontario Field Ornithologists (OFO)
- Member, Waterloo Region Nature
- Member, Canadian Herpetological Society
- Member, The Orianne Society –Reptile and Amphibian Conservation
- Member, North American Society for Bat Research (NASBR)
- Member, Bat Conservation International (BCI)
- Member, Northeast Naturalist
- Member, Canadian Field Naturalist

AREAS OF PROFESSIONAL EXPERIENCE

Kevin Dance has over 10 years of consulting experience on a wide range of projects throughout Ontario. Kevin specializes in inventories, evaluations, research, and impact studies of natural resources. He is experienced in identifying important natural features and evaluating the significance and sensitivity of these features. Kevin regularly works with multidisciplinary study teams focusing on the management of terrestrial and wetland ecosystems.

Terrestrial Vegetation and Wildlife Studies

Kevin has worked on various studies investigating a variety of wildlife habitats, determining wildlife populations including numbers and seasonal trends and monitoring of long-term impacts of

Address: #807566 Oxford Rd. 29, R.R. #1 Drumbo, ON N0J 1G0 Tel. (519) 463-6156 Email: kevin_dancenv@rogers.com

developments on species. Kevin has conducted a wide range of monitoring surveys and inventories to identify the presence of wildlife on study sites as well as species specific guided surveys for Species at Risk and Species of Conservation Concern including:

Bobolink, Barn Swallow, Bank Swallow, Eastern Meadowlark, American Badger, Milksnake, Blanding's Turtle, Wood Turtle, Jefferson Salamander, Common Nighthawk, Whip-poor-will, Henslow's Sparrow, Short-eared Owl, Least Bittern, and all Endangered *Myotis* bat species.

He has completed numerous detailed vegetation community mapping inventories and conducted vegetation monitoring at permanent sample plots, as well as transects and random sample quadrats to assess short-term and long-term impacts of developments on vegetation. Kevin is trained and experienced in applying the Ecological Land Classification System in projects in Southern Ontario to delineate, describe and map vegetation communities.

Kevin's specific terrestrial expertise includes:

- wildlife and vegetation habitat mapping, evaluations, and research.
- surveys of plants, birds, mammals: including bats, reptiles, amphibians, dragonflies and butterflies.
- identification of rare and sensitive species and habitats.
- bat acoustic monitoring and data analysis for Ontario bat species
- development of monitoring methodologies for Species at Risk
- preparing Overall Benefit Plans and Management Plans for Species at Risk
- obtaining permitting from MNR to conduct Jefferson Salamander trapping surveys, and snake coverboard surveys
- over 15 years of bird identification experience
- identification and analysis of potential wildlife corridors.
- short-term and long-term monitoring techniques for flora and fauna

Wetland Studies

Kevin is certified to conduct Ontario Wetland Evaluations and has worked in habitats throughout Ontario using the Ontario Wetland Evaluation System for Wetlands in Southern and Northern Ontario. Kevin has also participated in numerous studies focusing on the impact of development on wetland ecology and function.

Kevin's specific wetland expertise includes:

- inventories and mapping of wetland flora and fauna.
- wetland evaluations using the Ontario Wetland Evaluation System (OWES).
- wetland boundary delineation, and regularly working with relevant Conservation Authority staff to obtain approval of boundaries
- wetland Environmental Impact Studies (EISs).

Aquatic Studies

Kevin has assisted with numerous long-term fish monitoring programs using electrofishing to sample reaches of streams to assess and monitor development impacts to cold water streams. Kevin has experience collecting fish during electrofishing sampling, fish identification, marking and measuring. He also has experience identifying aquatic and wetland vegetation as well as collection of aquatic habitat data including stream depth, temperature, stream bed composition, flow speed and invertebrate sampling. Kevin has assisted with electrofishing surveys and aquatic habitat assessments within Wellington County and the Region of Waterloo.

Renewable Energy Projects:

Kevin has extensive experience conducting and organizing both pre-construction and post-construction studies at wind farms in Ontario, Manitoba and Alberta. Kevin has been developed monitoring methodologies for mortality searches, scavenger removal trials and searcher efficiency studies. Kevin has been involved in post-construction studies at four large scale wind farms and has conducted pre-construction studies at over a fifteen wind farms throughout Ontario, Manitoba

Address: #807566 Oxford Rd. 29, R.R. #1 Drumbo, ON N0J 1G0 Tel. (519) 463-6156 Email: kevin dancenv@rogers.com

and Alberta.

Kevin's specific renewable energy expertise includes:

- development of mortality search methodologies and conducting mortality searches, organizing and conducting scavenger removal studies and searcher efficiency trials
- identification of bird and bat fatalities
- developing study methods for pre-construction wind farm studies, including: migration surveys (dawn and dusk), daytime soaring surveys, waterfowl surveys, shorebird surveys, winter raptor and diurnal owl surveys, walking transect surveys, and driving transect surveys.

EMPLOYMENT HISTORY

Terrestrial Biologist and Project Manager

Dance Environmental Inc., Drumbo, Ontario.

2011 to present

Terrestrial and Wetland Biologist

Natural Resource Solutions Inc., Waterloo, Ontario.

2008 to 2011

Environmental Scientist

Stantec Ltd., Guelph, Ontario.

2006 to 2007

Avian Field Technician –Breeding ecology and impacts of urban development on Wood Thrush in the Region of Waterloo. Bird banding crew leader, nest searcher, nest monitoring.

Canadian Wildlife Service and University of Waterloo, Waterloo, Ontario

2003 to 2005

Terrestrial Biologist

Dance Environmental Inc., Drumbo, Ontario

2001 to 2003

PUBLICATIONS, PRESENTATIONS, AWARDS

- Dance, K.S. 2019. Finding Bats Based on Their Calls (Pittock Reservoir, Woodstock). Outing for the Woodstock Field Naturalist Club. Outing leader.
- Dance, K.S. 2017. Bats in Urban Natural Areas: A case Study of Kitchener Natural Areas. Oral Presentation. Nature in the City Speaker Series, Kitchener Public Library. November 15, 2017.
- Dance, K.W., K.S. Dance, & M.B. Dance. 2012. Giant Ragweed (*Ambrosia trifida*) as a Food Source for Autumn Migrants and Winter Birds in the Grand River Basin. Ontario Birds 30(3):148-164.
- Dance, K.S. 2012. Manipulation of Caterpillars for Consumption by Eastern Bluebirds. Ontario Birds 30(2):102-108.
- Dance, K.W., K.S. Dance. 2012. Wetlands: What are they Good For? Oral Presentation. Princeton Historical Society. Princeton, Ontario. September 24, 2012.
- Dance, K.S. 2011. "Raptors and Wind Farms". Oral Presentation. Ruthven Park 2nd Annual For The Birds Festival. September 17, 2011.
- Dance, K. S. 2010. On the Wind: A Discussion of Raptors and the Wind Industry. Oral Presentation. Owen Sound Field Naturalist Club (OSFN). September 9, 2010.
- Dance, K. S., Dance, K. W. 2010. "Raptors on the Wind". Oral Presentation. Kitchener-Waterloo Field Naturalist Club (KWFN). March 22, 2010.
- Dance, K. S., Dance, K. W. 2010. Review of Raptor and Turbine Interaction Literature: the Case of the Erie Shores Wind Farm. Oral Presentation. RARE Charitable Research Reserve, Cambridge, ON. January 23,

Address: #807566 Oxford Rd. 29, R.R. #1 Drumbo, ON N0J 1G0 Tel. (519) 463-6156 Email: kevin dancenv@rogers.com

Kevin Dance, M.E.S.

Page 4 February 2020

2010.

- Dance, K. S., R. James, L. Friesen, S. Murphy. 2009. "Raptor Behavior and Mortality (Erie Shores Wind Farm)".

 Poster Presentation. Canadian Wind Energy Association Annual Conference & Exhibition. September 20-23, 2009.
- Dance, K. S., R. James, L. Friesen, S. Murphy. 2009. "Migrant Raptor Behavior and Mortality (at the Erie Shores Wind Farm)". Poster Presentation, 3rd place winner. A.D. Latornell Conservation Symposium. Nottawasaga, Ontario.

Address: #807566 Oxford Rd. 29, R.R. #1 Drumbo, ON N0J 1G0 Tel. (519) 463-6156 Email: kevin dancenv@rogers.com



Phone: 519-621-2761 Toll free: 1-866-900-4722 Fax: 519-621-4844 www.grandriver.ca

February 6, 2023 Via email

Courtenay Hoytfox, Municipal Clerk Township of Puslinch 7404 Wellington Road 34 Puslinch, ON, N0B 2J0

Dear Ms. Hoytfox,

Re: 2022 Ecological and Aquatic Monitoring Report

Roszell Pit, ARA Licence No. 625189

CBM Aggregates

Grand River Conservation Authority (GRCA) staff has reviewed the above-noted 2022 Monitoring Report for the Roszell aggregate pit in the Township of Puslinch and offer the following comments.

For municipal consideration

Please be advised that on January 1, 2023, a new Minister's regulation (Ontario Regulation 596/22: Prescribed Acts – Subsections 21.1.1 (1.1) and 21.1.2 (1.1) of the Conservation Authorities Act) came into effect. As a result, non-mandatory technical review services that the GRCA formerly provided under agreement with municipalities (e.g., technical reviews related to natural heritage and select aspects of stormwater management) will no longer be provided beyond a transition period.

To assist our municipalities, we will continue to provide our advisory services for up to 6 months (July 1, 2023) for files under review prior to January 1, 2023 to minimize disruptions to approval processes. On this basis, we offer the following comments for municipal consideration:

- 1. The 2022 biological monitoring report submitted by Dance Environmental (December 2022) is acceptable and the recommendation for continued monitoring within natural wetlands and newly created wetlands within the below water extraction area is supported.
- 2. Monitoring has been conducted since 2013 in order to assess the impact of below water extraction on adjacent wetlands and watercourse features and their functions. The monitoring program has documented some variation in wetland plant cover (e.g. a rare sedge species was not recorded in 2022) and an overall decline in salamander breeding activity as a result of recent droughts, which have led to a reduction in suitable breeding habitat within the Roszell Wetland. This wetland is relatively small and is isolated from the larger swamp area along the Speed River corridor to the immediate west. Although the depth and extent of ponding within the smaller wetland has been limited in recent years, there is no indication that the wetland has become smaller. By contrast, hydrologic conditions within the core swamp area to the west appears to have remained the same since extraction began in 2013.

- 3. Artificial wetlands have established within the below water extraction area and are considered suitable breeding habitat for amphibians (i.e. anurans). It is the GRCA's understanding that these areas will be monitored and assessed moving forward.
- 4. Trout spawning (i.e. redd) surveys have been conducted within the main channel and 2 tributaries between 2013 and 2022. No change in brook trout spawning activity has been detected.
- 5. The 2022 ground water monitoring report should be circulated to the GRCA for comment once available. This report will confirm whether or not groundwater levels have remained above seasonal thresholds established through the completion of baseline studies.

Should you have any questions, please contact me at 519-621-2763 x 2236 or by email at clorenz@grandriver.ca.

Sincerely,

Chris Lorenz, M.Sc. Resource Planner

Grand River Conservation Authority

Copy: Dance Environmental (via email)

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

BY-LAW NO 009-2023

A by-law to adopt the Budget for the Corporation of the Township of Puslinch for the year 2023.

WHEREAS Section 290(1) of the Municipal Act, S.O. 2001, c. 25 as amended provides that a local municipality shall in the year or immediately preceding the year, prepare and adopt a budget including estimates of all sums required during the year for the purposes of the municipality; and

WHEREAS the budget of the Corporation of the Township of Puslinch for 2023 is described in detail in Schedule "A" and Schedule "B" of this By-law.

NOW THEREFORE the Council of the Corporation of the Township of Puslinch enacts as follows:

- 1. That the total estimated operating expenditures for the purposes of the Corporation of the Township of Puslinch ("the Township") for the year 2023 be adopted in the amount of \$6,033,604.
- 2. That the total estimated operating revenues for the purposes of the Township for the year 2023 be adopted in the amount of \$2,698,748.
- 3. That the total estimated capital expenditures for the purpose of the Township for the year 2023 be adopted in the amount of \$4,704,792.
- 4. That the general operating taxation levy to be raised on all rateable property in the Township for the year 2023 be adopted in the amount of \$3,687,530.
- 5. That the general capital taxation levy to be raised on all rateable property in the Township for the year 2023 be adopted in the amount of \$1,311,000.
- 6. That the Treasurer be authorized to withdraw funds from and contribute funds to the Township's discretionary reserves and restricted reserves as outlined in Schedule "A" and Schedule "B" of this By-law.
- 7. That any Canada Community Building funds not required for those projects that identify the use of Canada Community Building funds be directed to other qualified projects identified in Schedule "A" of this By-law.
- 8. That Schedules "A" and "B", annexed hereto, form part of this By-law.
- 9. If any section or portion of this by-law is found by a court of competent jurisdiction to be invalid, it is the intent of Council for the Township that all remaining sections and portions of this by-law continue in force and effect.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 8th DAY OF FEBRUARY 2023.

Lawrence Constant Manager
James Seeley, Mayor
Courtenay Hoytfox, Clerk

Project Cos	st			Funding Type					
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re	Restricted_Rese	Debenture	Grand Total
						serves	rves		
Building									
	Building		S: 1 /D!	44.506					Å4 = 0.0
		Septic Reinspections	Study/Plan	\$1,526					\$1,526
Fire and									
Rescue									
	Fire and								
	Rescue								
		Structural Firefighter Gear	Asset Management			\$14,805			\$14,805
		Community Risk Assessment -	Study/Plan		\$10,000		\$15,000		\$25,000
		Ontario Regulation 378/18							
General									
Governme									
nt	Corporate								
	corporate	Asset Management	Reserve Contribution		\$955,792				\$955,792
		Corporate Information Technology	Reserve Contribution		\$10,000				\$10,000
		, , , , , , , , , , , , , , , , , , ,			, ,,,,,,,				, ,,,,,,
		401 and Highway 6 Project Review	Study/Plan		\$10,000				\$10,000
		of Hotspots							
		Computer Equipment	Asset Management			\$9,692			\$9,692
		Gravel Extraction Study	Study/Plan		\$25,000				\$25,000
	Finance	Douglapment Charges By Jaw	Ctudy/Dlan		\$741		¢6.073		\$7,413
		Development Charges By-law Amendment	Study/Plan		\$741		\$6,672		\$7,413
		Parkland Dedication By-law	Study/Plan		\$21,166				\$21,166
		Amendment	Study/Fluit		Ų21,100				Ψ 2 2,200
		Community Improvement Plan	Study/Plan	\$25,000					\$25,000
		Amendment and Financial	•						
		Incentives							
	Municipal O								
		Municipal Administration and	Asset Management			\$0		\$0	\$0
		Operations Facility							

Project Cost				Funding Type					
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re	Restricted_Rese	Debenture	Grand Total
						serves	rves		
Parks and									
Recreation									
	ORC								
		Convert Lighting to LED	Asset Management				\$8,701		\$8,701
		Pickleball Line Painting and Floor	New Asset				\$6,934		\$6,934
		Refinishing							
	Parks			4		4			
		Parking Lot & Associated	Asset Management	\$51,000		\$249,000			\$300,000
		Enhancements (curbing, entrance,							
		and additional lighting) at the front							
		of the Puslinch Community Centre							
		Playground area at Boreham Park	Asset Management	\$150,000		\$20,000	\$72,933		\$242,933
		(also known as Arkell Park)							
		Landscape Trailer	Asset Management	\$2,000			\$8,000		\$10,000
		Kubota Lawn Tractor	New Asset				\$23,843		\$23,843
		Replacement of Old Morriston 2	Asset Management				\$15,000		\$15,000
		Sets of Bleachers							
	PCC						4		
		Convert Lighting to LED	Asset Management				\$4,767		\$4,767
		Replacement of Ceiling	Asset Management				\$35,000		\$35,000
		Components							
D. I.I.									
Public									
Works	Public								
	Works								
	WUIKS	Bridge and Culvert Inspections-2023	Study/Plan		\$7,500				\$7,500
		bridge and curvert inspections-2023	Study/Flair		77,500				77,500
		Gravel Roads Improvement	Reserve Contribution		\$270,800				\$270,800
		Kerr Crescent - Stormwater	Asset Management		7270,800	\$50,000			\$50,000
		Management Facility	. Soci management			\$50,000			750,000
		Puslinch Lake Pedestrian Access and	l New Asset				\$10,000		\$10,000
		Signage	111000 / 13300				710,000		910,000
		Leslie Road West - Watson Road	Asset Management	\$380,951		\$85,609	\$373,440		\$840,000
		South to Bridge 5 (Mountsberg)	7.03ct Widningeriicht	\$300,331		703,003	7575,770		γυ-10,000

Project Co	st			Funding Type					
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re	$Restricted_Rese$	Debenture	Grand Total
						serves	rves		
		Leslie Road West - Mountsberg	Asset Management			\$119,823	\$18,861		\$138,684
		Bridge to Curve at Highway 401							
		Leslie Road West - Curve at	Asset Management			\$99,563	\$15,672		\$115,235
		Highway 401 to Puslinch-							
		Flamborough Townline							
		Little's Bridge	Asset Management			\$332,640	\$52,360		\$385,000
		Concession 7- Concession 2A to	Asset Management			\$138,240	\$21,760		\$160,000
		Mason Road							
		Maltby Road East - Victoria Road	Asset Management			\$224,640	\$35,360		\$260,000
		South to Watson Road South							
		Roszell Road - Forestell Road to	Asset Management			\$259,200	\$40,800		\$300,000
		Townline Road							
		Tandem Dump Truck	Asset Management			\$400,000			\$400,000
By-law									
	By-law								
		Cloudpermit - By-law Enforcement	Information			\$5,100			\$5,100
			Technology						
			Enhancement						
Disconing									
Planning	Planning								
		Cloudpermit - Planning	Information			\$9,900			\$9,900
			Technology			<i>+2,300</i>			72,300
			Enhancement						
Grand				\$610,477	\$1,311,000	\$2,018,213	\$765,103	\$0	\$4,704,792
Total									

Project Cost Service	Department	Capital Project	Classification	Funding Type Grant	Levy	Discretionary_Res erves	Restricted_Res erves	Grand Total
Fire and Rescue	Fire and Rescue							
	rife alla Rescue							
		Structural Firefighter Gear	Asset Management			\$17,766		\$17,766
		Pickup Truck - Mid-Size	Asset Management			\$20,000		\$20,000
		Pickup Truck - Mid-Size	Asset Management	\$3,000				\$3,000
General Government								
	Corporate							
		Asset Management	Reserve Contribution		\$1,054,324			\$1,054,324
		Corporate Information Technology	Reserve Contribution		\$10,000			\$10,000
		401 and Highway 6 Project Review of Hotspots	Study/Plan		\$10,000			\$10,000
		Compensation and Benefits Review	Study/Plan		\$17,500	\$7,500		\$25,000
		Computer Equipment	Asset Management			\$10,000		\$10,000
		Server Replacement	Asset Management			\$47,000		\$47,000
	Finance							
		2024 Development Charges Background Study	Study/Plan		\$2,100		\$18,900	\$21,000
		Asset Management Plan and Policy Updates	Study/Plan		\$8,776		\$1,224	\$10,000
	Municipal Office							
		Gas Fired Infra-Red Heaters in Public Works Area	Asset Management			\$6,000		\$6,000
		Replacement of UV Pure Water Treatment System	Asset Management			\$10,000		\$10,000

Project Cost Service	Department	Capital Project	Classification	Funding Type Grant	Levy	Discretionary_Res erves	Restricted_Res erves	Grand Total
Parks and Recreation								
	ORC							
		Rinkboard Replacement (Interior and	Asset				\$100,000	\$100,000
		Exterior)	Management					
	PCC							
		Emergency Generator	Asset Management				\$100,000	\$100,000
		Replacement of UV Pure Water Treatment System	Asset Management				\$7,500	\$7,500
		Replacement of Sanitary Pumps and Control System	Asset Management				\$5,000	\$5,000
		Window and Door Replacement Program	Asset Management				\$100,000	\$100,000
Public Works								
	Public Works							
		Bridge and Culvert Inspections-2025	Study/Plan		\$7,500			\$7,500
		Gravel Roads Improvement	Reserve Contribution		\$270,800			\$270,800
		Winer Road - McLean Road to dead end	Asset Management			\$210,053	\$33,064	\$243,117
		Sideroad 10 North - Forestell Road to Laird Road West	Asset Management			\$101,637	\$15,998	\$117,635
		Leslie Road West Culvert	Asset Management			\$100,000		\$100,000
		Bridlepath - Bridle Path Split to Brock Road South	Asset Management			\$58,101		\$58,101
		Bridlepath - Bridle Path Split to Brock Road South	Asset Management				\$9,146	\$9,146
		Bridlepath	Asset Management			\$145,374	\$22,883	\$168,258
		Concession 2- Sideroad 20 South to Concession 7	Asset Management	\$380,951		\$2,502	\$60,358	\$443,811
		Watson Road South - County Road 37 (Arkell Road) to Maltby Road East	Asset Management			\$100,000	\$318,080	\$418,080

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Res	Restricted_Res	Grand Total
						erves	erves	
		Maple Leaf Lane - County Road 46 to	Asset			\$80,697		\$80,697
		dead end	Management					
		Maddaugh Road - Highway 6 to Gore	Asset	\$25,594		\$25,594		\$51,188
		Road	Management					
		Maddaugh Road - 14th Concession East	Asset	\$26,658		\$26,658		\$53,316
		to Highway 6	Management					
		Maddaugh Road - Puslinch-Flamborough	Asset	\$24,785		\$24,785		\$49,569
		Townline to 14th Concession East	Management					
		Sideroad 20 North - County Road 34 to	Asset			\$358,181		\$358,181
		Forestell Road	Management					
		Victoria Street And Church Street -	Asset			\$42,618		\$42,618
		Calfass Road to Queen Street (Highway	Management					
		6)						
		Concession 1 - Leslie Road West to	Asset			\$52,316		\$52,316
		Highway 6	Management					
		Concession 1/Leslie Rd W - Concession 7	Asset			\$238,564	\$37,552	\$276,116
		to Highway 6	Management					
		Nassagaweya-Puslinch Townline -	Asset	\$54,921		\$54,921		\$109,842
		County Road 34 to Maltby Road East	Management					
		Nassagaweya-Puslinch Townline - Hume	Asset	\$28,974		\$28,974		\$57,948
		Road to Maltby Road East	Management					
		Nassagaweya-Puslinch Townline - Hume	Asset	\$21,613		\$21,613		\$43,225
		Road to Arkell Road (County Road 37)	Management					
Grand Total				\$566,495	\$1,381,00	\$1,790,853	\$829,705	\$4,568,053

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Res erves	Restricted_Res erves	Grand Total
Fire and Rescue								
	Fire and Rescue							
		Fire Master Plan	Study/Plan		\$24,000		\$36,000	\$60,000
		Structural Firefighter Gear	Asset Management			\$17,766		\$17,766
		Defibrillators Fire & Rescue Service Trucks	Asset Management			\$15,000		\$15,000
		Defibrillators - Municipal Buildings	Asset Management			\$4,500		\$4,500
		Pump 31 Truck	Asset Management	\$20,000		\$930,000		\$950,000
General Government								
	Corporate							
		Asset Management	Reserve Contribution		\$940,460			\$940,460
		Corporate Information Technology	Reserve Contribution		\$10,000			\$10,000
		Computer Equipment	Asset Management			\$10,000		\$10,000
Parks and								
Recreation								
	PCC							
		Bar Counter, Bar Door, Cosmetic Upgrades	Asset Management	\$10,000			\$90,000	\$100,000
		Electronic Sign Replacement	Asset Management	\$37,500				\$37,500
Public Works								
Fublic Works	Public Works							
	WOTKS	Bridge and Culvert Inspections-2025	Study/Plan		\$7,500			\$7,500
		Storm Sewers - Geolocation of catch basins	• • • • • • • • • • • • • • • • • • • •		\$5,000			\$5,000
		Street Lights - Pole and Arm Inspections	Study/Plan		\$20,000			\$20,000
		Gravel Roads Improvement	Reserve Contribution		\$270,800			\$270,800
		Storm Water Management Pond Inspections	Study/Plan		\$5,000			\$5,000
		Puslinch-Flamborough Townline - Leslie Road West to Township Limits	Asset Management			\$29,519	\$4,647	\$34,166

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Res erves	Restricted_Res erves	Grand Total
		McRae Station Road - Watson Road South	Asset Management			\$33,029	\$5,199	\$38,228
		to Concession 14 East						
		Roadside Safety Allowances - Bridges and	New Asset		\$138,240		\$21,760	\$160,000
		Culverts						
		Daymond Drive - Stormwater Management	Asset Management			\$300,000		\$300,000
		Facility						
		Pickup truck - 3/4 ton - Crew Cab	Asset Management	\$6,655		\$47,345		\$54,000
		Laird Road West - Country Road 32 - dead	Asset Management	\$45,360				\$45,360
		end						
		Old Brock Road - County Road 46 to dead	Asset Management	\$43,446			\$6,839	\$50,285
		end						
		Gore Road - Valens Road to Concession 7	Asset Management	\$86,528			\$86,528	\$173,056
		Gore Road - Sideroad 20 South to Valens Road	Asset Management	\$147,745			\$147,745	\$295,490
		Gore Road - Concession 7 to Lennon Road	Asset Management	\$100,674				\$100,674
		Gore Road- Maddaugh Road to Lennon	Asset Management	\$112,260			\$17,670	\$129,930
		Road						
		Aberfoyle Business Park Block 6 -	Asset Management			\$200,000		\$200,000
		Stormwater Management Facility						
Grand Total				\$610,167	\$1,421,000	\$1,587,160	\$416,388	\$4,034,715

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_ Reserves	Restricted_Re serves	Grand Total
Building								
	Building							
		Tablets	Information			\$5,000		\$5,000
			Technology					
			Enhancement					
Fire and Rescue								
The dia nesede	Fire and Rescue							
		Structural Firefighter Gear	Asset			\$11,844		\$11,844
			Management					
		Portable Pumps	Asset			\$15,000		\$15,000
			Management					
General Government								
	Corporate							
		Website Redesign	Information	\$25,000				\$25,000
			Technology					
			Enhancement					
		Asset Management	Reserve		\$1,175,700			\$1,175,700
			Contribution					
		Corporate Information Technology	Reserve		\$10,000			\$10,000
			Contribution					
		Computer Equipment	Asset			\$10,000		\$10,000
			Management					
		Computer Equipment - New Term of Council				\$10,000		\$10,000
			Management					
Parks and Recreation								
	Parks							
		Pickup Truck - Trsfr from Public Works	Asset				\$0	\$0
-			Management					
		Light Poles Replacement at the Puslinch	Asset				\$5,200	\$5,200
		Community Centre Grounds	Management					

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_ Reserves	Restricted_Re serves	Grand Total
		Fencing Replacement at the Badenoch	Asset				\$14,934	\$14,934
		Soccer Field (East Side)	Management					
Public Works								
	Public Works							
		Bridge and Culvert Inspections-2027	Study/Plan		\$7,500			\$7,500
		Gravel Roads Improvement	Reserve		\$270,800			\$270,800
			Contribution					
		Pickup truck - 3/4 ton - Single Cab	Asset			\$42,000		\$42,000
			Management					
		Mason Road - Concession 7 to dead end	Asset			\$25,238		\$25,238
			Management					
		Concession 4 - Sideroad 20 North to curve in	Asset			\$50,656		\$50,656
		road	Management					
		Concession 4 - Curve in Road to Highway 6	Asset			\$38,310		\$38,310
			Management					
		Concession 4 - County Road 35 to Sideroad	Asset	\$202,578			\$31,887	\$234,465
		20 North	Management					
		Concession 1 - Sideroad 10 South to County	Asset	\$202,616			\$31,893	\$234,509
		Road 35	Management					
		Leslie Road West - Victoria Road South to	Asset				\$228,495	\$228,495
		Watson Road South	Management					
		Gilmour Road - County Road 46 (Brock	Asset			\$37,404		\$37,404
		Road) to Subdivision Entrance	Management					
		Smith Road - Concession 7 to County Road	Asset			\$37,631		\$37,631
		34	Management					
		Deer View Ridge - Hammersley Drive to Fox	Asset			\$100,350		\$100,350
		Run Drive	Management					
		Grader Unit 502	Asset			\$70,000		\$70,000
			Management					
		Carroll Pond & Lesic Jassal Municipal Drain -	Study/Plan		\$7,000			\$7,000
		Sediment Survey						
Grand Total				\$430,194	\$1,471,000	\$453,433	\$312,410	\$2,667,037

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re serves	Restricted_Re serves	Grand Total
Building								
	Building							
		SUV	Asset			\$18,012		\$18,012
			Management					
Fire and Rescue								
	Fire and Rescue							
		Structural Firefighter Gear	Asset			\$14,805		\$14,805
			Management					
		Washer/Extractor	Asset			\$10,000		\$10,000
			Management					
		Gear Dryer	Asset			\$6,000		\$6,000
			Management					
		Thermal Imaging Camera	Asset			\$6,000		\$6,000
			Management					
General Government								
	Corporate							
		Community Based Strategic Plan	Study/Plan	\$25,000			\$5,000	\$30,000
		Asset Management	Reserve		\$1,232,700			\$1,232,700
			Contribution					
		Corporate Information Technology	Reserve		\$10,000			\$10,000
			Contribution					_
		Computer Equipment	Asset			\$10,000		\$10,000
			Management					
Parks and Recreation								
	PCC							
		Rebalancing of HVAC system	Asset				\$5,000	\$5,000
			Management					
D. L.P. Mark								
Public Works	Dublic Martin							
	Public Works	Dridge and Cultiont Inspections 2027	Ctudu/Dlas		ć7 F00			67.500
		Bridge and Culvert Inspections-2027	Study/Plan		\$7,500			\$7,500

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re serves	Restricted_Re serves	Grand Total
		Gravel Roads Improvement	Reserve		\$270,800			\$270,800
			Contribution					
		Concession 2 - Country Road 35 to Side	Asset				\$237,573	\$237,573
		Road 20	Management					
		Galt Creek Bridge Gore Road Lot 2	Asset			\$160,000		\$160,000
			Management					
		Cooks Bridge	Asset			\$423,360	\$66,640	\$490,000
			Management					
		Victoria Road Culvert Over Galt Creek	Asset			\$140,000		\$140,000
			Management					
		Victoria Road Culvert North of Leslie	Asset			\$160,000		\$160,000
			Management					
		Ellis Road Culvert Over Puslinch Lake Irish	Asset			\$328,320	\$51,680	\$380,000
		Creek	Management					
		Concession 2 Culvert	Asset			\$120,000		\$120,000
			Management					
		Fox Run Drive - Deer View Ridge to Fox Run	Asset			\$62,153		\$62,153
		Drive transition to curb	Management					
		Fox Run Drive to Fox Run Drive	Asset			\$98,630		\$98,630
			Management					
		Fox Run Drive - transition to curb to County	Asset			\$54,254		\$54,254
		Road 46	Management					
		Tandem Dump Truck - 304	Asset	\$25,000		\$375,000		\$400,000
		·	Management					. ,
By-law								
	By-law							
	•	SUV	Asset	\$5,000		\$12,988		\$17,988
			Management			. ,		
			<u> </u>					
Grand Total				\$55,000	\$1,521,000	\$1,999,521	\$365,893	\$3,941,414

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re serves	Restricted_Res erves	Grand Total
Building								
	Building							
		Septic Reinspections	Study/Plan	\$16,526				\$16,526
Fire and Decoue								
Fire and Rescue	Fire and Rescue							
	rife and Rescue	•						
		Structural Firefighter Gear	Asset			\$8,883		\$8,883
		0	Management					, , , , , ,
		Aerial 33 Truck	Asset			\$1,490,000		\$1,490,000
			Management					
		Aerial 33 Truck	Asset	\$10,000				\$10,000
			Management					
General								
Government	Corporato							
	Corporate	Asset Management	Reserve		\$1,125,800			\$1,125,800
		Asset ividilagement	Contribution		\$1,123,600			\$1,123,800
		Corporate Information Technology	Reserve		\$10,000			\$10,000
		corporate information recimology	Contribution		710,000			710,000
		Compensation and Benefits Review	Study/Plan		\$17,500	\$7,500		\$25,000
-		Computer Equipment	Asset		, ,	\$10,000		\$10,000
			Management			, ,		. ,
	Municipal Offic	e						
		Building Condition Assessment, Arc Flash	Study/Plan		\$20,000			\$20,000
		Study, Infra-red Scanning of Equipment						
		Emergency Generator	Asset			\$100,000		\$100,000
			Management					
		Replacement of metal roofing panels	Asset			\$125,000		\$125,000
		Book Characa B. Mallar Book Ball 1999 19	Management			645.000		645.000
		Roads Storage Building Roof Rehabilitation				\$15,000		\$15,000
		Municipal Complex: Parking Lot	Management Asset			\$162,750		\$162,750
		iviunicipal complex. Parking Lot	Management Management			\$102,/50		\$102,/50
			ivialiageillelit					

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re serves	Restricted_Res erves	Grand Total
Parks and Recreation								
Recreation	ORC							
	Onc	Building Condition Assessment, Arc Flash Study, Infra-red Scanning of Equipment	Study/Plan		\$7,500			\$7,500
	Parks							
	rains	Replacement of metal roofing panels in Blue Storage Building Behind PCC	Asset Management				\$30,000	\$30,000
		Kabota Lawnmower	Asset Management	\$4,933			\$25,067	\$30,000
		Gravel Road Rehabilitation at Old Morriston Park	Asset Management				\$7,740	\$7,740
	PCC							
		Building Condition Assessment, Arc Flash Study, Infra-red Scanning of Equipment	Study/Plan		\$7,500			\$7,500
		Replacement of metal roofing panels	Asset Management				\$100,000	\$100,000
Public Works								
	Public Works							
		Traffic Count Study	Study/Plan		\$12,000		\$18,000	\$30,000
		Traffic Calming - Streetscaping Morriston - Phase 2	New Asset	\$25,000	\$61,400		\$13,600	\$100,000
		Bridge and Culvert Inspections-2029	Study/Plan		\$7,500			\$7,500
		Storm Sewer Inspections and Cleaning	Study/Plan		\$10,000			\$10,000
		Gravel Roads Improvement	Reserve Contribution		\$270,800			\$270,800
		Roads Condition Index Updates	Study/Plan		\$16,000		\$24,000	\$40,000
		Storm Water Management Pond Inspections	Study/Plan		\$5,000			\$5,000

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Reserves	Restricted_Res erves	Grand Total
		Puslinch-Flamborough Townline - Victoria	Asset			\$61,288		\$61,288
		Road South to Maddaugh Road	Management					
		Puslinch-Flamborough Townline - 14th	Asset			\$75,390		\$75,390
		Concession East to Victoria Road South	Management					
		Concession 1 - Transition to Transition	Asset Management				\$49,016	\$49,016
-		Concession 1 - Transition to Transition	Asset Management				\$311,397	\$311,397
		Beiber Road - Nicholas Beaver Road to private property	Asset Management			\$25,593		\$25,593
		Niska Road - Bailey Bridge to Whitelaw Road	Asset Management			\$68,844		\$68,844
		Telfer Glen - Queen Street (Highway 6) to dead end	Asset Management			\$105,215		\$105,215
		Main Street - Back Street to Morriston Ball				\$29,021		\$29,021
		Main Street and Back Street	Asset Management			\$39,165		\$39,165
		Victoria Road South - County Road 34 to Maltby Road East	Asset Management			\$203,145	\$31,977	\$235,122
		·				\$113,400		\$113,400
		Tandem Roll-Off Dump Truck- 302	Asset Management			\$375,000		\$375,000
		Tandem Roll-Off Dump Truck- 302	Asset Management	\$25,000				\$25,000
Grand Total				\$81,459	\$1,571,000	\$3,015,194	\$610,797	\$5,278,450

Project Cost				Funding				
Service	Department	Capital Project	Classification	Type Grant	Levy	Discretionary_Re	Restricted Res	Grand Total
						serves	erves	
Fire and Rescue	Fire and Rescue							
	The did nesade							
		Structural Firefighter Gear	Asset Management			\$14,805		\$14,805
		Thermal Imaging Camera	Asset			\$6,000		\$6,000
			Management					
General								
Government								
	Corporate	Asset Management	Reserve		\$1,321,824			\$1,321,824
		Asset Management	Contribution		31,321,024			31,321,624
		Corporate Information Technology	Reserve		\$10,000			\$10,000
		Computer Equipment	Contribution Asset			\$10,000		\$10,000
		Computer Equipment	Management			310,000		\$10,000
		Server Replacement	Asset			\$47,000		\$47,000
			Management					
	Finance							
		Asset Management Plan and Policy Updates	Study/Plan		\$8,776		\$1,224	\$10,000
		2029 Development Charges Background Study	Study/Plan		\$2,100		\$18,900	\$21,000
	Municipal Office							
	Widilicipal Office	Exterior wall rehabilitation	Asset			\$25,000		\$25,000
			Management					
		Replacement of furnaces - Fire area	Asset Management			\$20,000		\$20,000
		Replacement of fire alarm system (fire	Asset			\$15,000		\$15,000
		extinguishers, panels, bells, pullstations, heat &	Management					
		smoke detectors)						
Parks and								
Recreation	ODC							
	ORC	Floor Scrubber	Asset				\$15,000	\$15,000
			Management					
	PCC							
	1.00	Exterior wall rehabilitation	Asset				\$35,000	\$35,000
			Management					
		Replacement of fire alarm system (fire extinguishers, panels, bells, pullstations, heat &	Asset Management				\$5,000	\$5,000
		smoke detectors)	wanagement					
Dublic W.								
Public Works	Public Works							
		Bridge and Culvert Inspections-2029	Study/Plan		\$7,500			\$7,500
		Gravel Roads Improvement	Reserve		\$270,800			\$270,800
		Nicholas Beaver Road - Brock Road South to	Contribution Asset			\$144,449		\$144,449
		Winer Road	Management					
		Ellis Road - Sideroad 10 North to 6725 Ellis Road				\$57,964		\$57,964
		Ellis Road - transition to County Road 32	Management Asset			\$176,667	\$27,809	\$204,475
			Management					
		Boreham Drive - County Road 37 (Arkell Road) to County Road 41 (Watson Road South)	Asset Management			\$66,683		\$66,683
		to County Road 41 (watson Road South)	ivialiagement					

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Re serves	Restricted_Res erves	Grand Total
		Hume Road - Nassagaweya-Puslinch Townline to Watson Road South	Asset Management			\$229,625	\$36,145	\$265,769
		Sideroad 10 North - County Road 34 to transition	Asset Management			\$8,732		\$8,732
		Sideroad 10 North - Wellington Road 34 to Ellis Road					\$226,800	\$226,800
		Tandem Dump Truck- 301	Asset Management	\$25,000		\$375,000		\$400,000
Grand Total			<u> </u>	\$25,000	\$1,621,000	\$1,196,925	\$365,877	\$3,208,802

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_R	Restricted_Reser	Grand Total
						eserves	ves	
Fire and Rescue								
	Fire and Rescu							
		Structural Firefighter Gear	Asset			\$5,922		\$5,92
			Management	4		4		
		Tanker 37 Truck	Asset	\$20,000		\$730,000		\$750,00
			Management					
General Governme	nt							
General Governmen	Corporate							
	co. porate	Asset Management	Reserve		\$1,362,700			\$1,362,70
		, usee management	Contribution		ψ1,502,700			ψ=,00=,70
		Corporate Information Technology	Reserve		\$10,000			\$10,00
		,	Contribution					
		Computer Equipment	Asset			\$10,000		\$10,00
			Management					
		Computer Equipment - New Term of	Asset			\$10,000		\$10,00
		Council	Management					
Public Works	D 11: 14: 1							
	Public Works	Charattishta Dala and Amalaga sticas	Ct. d. /Dl		¢20.000			ć20.00
		Street Lights - Pole and Arm Inspections	Study/Plan		\$20,000			\$20,00
		Gravel Roads Improvement	Reserve	+	\$270,800			\$270,80
		Graver Roda's improvement	Contribution		\$270,000			7270,00
		Bridge and Culvert Inspections-2031	Study/Plan		\$7,500			\$7,50
		Victoria Road South - Leslie Road West to	Asset		7.,555	\$69,302		\$69,30
		Flamborough Puslinch Townline	Management			,,		,,
		Victoria Road South - Leslie Road West to	Asset				\$10,909	\$10,90
		Flamborough Puslinch Townline	Management					
		Victoria Road South - Leslie Road West to	Asset				\$253,169	\$253,16
		County Road 36	Management					
		Cockburn Street - County Road 46 to Old	Asset			\$18,616		\$18,61
		Brock Road	Management					
		Concession 4 - Roszell Road to County	Asset			\$121,349	\$19,101	\$140,45
		Road 32	Management					
		Cooks Mill Road - Bridge to County Road	Asset			\$41,938	\$6,601	\$48,54
		41	Management					

Service				Funding Type				
Sel Vice	Department	Capital Project	Classification	Grant	Levy		Restricted_Reser	Grand Total
Decilations						_Reserves	ves	
Building	Building							
	bullullig	Tablets	Information			\$5,000		\$5,000
		Tablets	Technology			\$3,000		ψ5,000
			Enhancement					
Fire and Rescue								
	Fire and							
	Rescue							*
		Structural Firefighter Gear	Asset			\$11,844		\$11,844
		Pickup Truck - Mid-Size	Management Asset	\$3,000		\$20,000		\$23,000
		Pickup Truck - Miu-Size	Management	\$3,000		\$20,000		\$23,000
			Wanagement					
General Governme	ent							
	Corporate							
		Website Redesign	Information	\$25,000				\$25,000
			Technology					
			Enhancement					
		Asset Management	Reserve		\$1,427,700			\$1,427,700
		Cornerate Information Technology	Contribution Reserve		¢10.000			¢10.000
		Corporate Information Technology	Contribution		\$10,000			\$10,000
		Computer Equipment	Asset			\$10,000		\$10,000
		compater Equipment	Management			710,000		710,000
Parks and								
Recreation								
	ORC							
		Drinking Fountain	Asset				\$5,000	\$5,000
			Management					
	Parks							
	raiks	Pickup Truck - Trsfr from Public Works	Asset				\$0	\$0
		Herap Hack Hall Holli Fublic Works	Management				, ,,,	30
			Management					
Public Works								

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary	Restricted_Reser	Grand Total
						_Reserves	ves	
	Public Works							
		Croval Boods Improvement	Decembe		¢270.800			ć270.000
		Gravel Roads Improvement	Reserve Contribution		\$270,800			\$270,800
		Duides and Colorest Insertations 2021			Ć7 F00			67.500
		Bridge and Culvert Inspections-2031	Study/Plan		\$7,500			\$7,500
		Storm Water Management Pond Inspections	Study/Plan		\$5,000			\$5,000
		Pickup truck - 3/4 ton - Single Cab	Asset			\$42,000		\$42,000
			Management					
-		Settler's Road - Calfass Road to Telfer Glen	Asset			\$41,546	\$6,540	\$48,085
			Management					
		Kerr Crescent - McLean Road West to McLean	Asset				\$125,843	\$125,843
		Road West	Management					
-		Carriage Lane - Bridle Path to deadend	Asset				\$96,132	\$96,132
			Management					
-		Carriage Lane - Bridle Path to deadend	Asset				\$15,132	\$15,132
			Management					
-		Cassin Court - Daymond Drive to deadend	Asset			\$36,972		\$36,972
			Management					
-		Cassin Court - Daymond Drive to deadend	Asset				\$5,820	\$5,820
			Management					
		Tandem Dump Truck	Asset	\$25,000		\$375,000		\$400,000
			Management					
Grand Total				\$53,000	\$1,721,000	\$542,361	\$254,466	\$2,570,827

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Res erves	Restricted_R eserves	Grand Total
Building								
	Building							
		SUV	Asset			\$18,012		\$18,012
			Management					
Fire and Rescue								
	Fire and Rescue							
		Structural Firefighter Gear	Asset			\$8,883		\$8,883
			Management					
		Pumper 32 Truck	Asset Management	\$10,000		\$290,000		\$300,000
		Tanker 38 Truck	Asset	\$20,000		\$730,000		\$750,000
			Management					
General Govern	ment							
	Corporate							
		Asset Management	Reserve Contribution		\$1,442,200			\$1,442,200
		Corporate Information Technology	Reserve Contribution		\$10,000			\$10,000
-		Compensation and Benefits Review	Study/Plan		\$17,500	\$7,500)	\$25,000
		Computer Equipment	Asset		7	\$10,000		\$10,000
			Management					
Parks and								
Recreation								
	PCC		0: 1 /01		400		407.055	*==
		Recreation and Parks Master Plan	Study/Plan		\$23,000		\$27,000	\$50,000
Public Works								
	Public Works							
		Gravel Roads Improvement	Reserve Contribution		\$270,800			\$270,800
		Bridge and Culvert Inspections-2033	Study/Plan		\$7,500			\$7,500
		Backhoe	Asset	\$53,700	. ,	\$101,300		\$155,000
			Management					
		Daymond Drive - County Road 46 to dead end	Asset				\$49,144	\$49,144
			Management					

Project Cost				Funding Type				
Service	Department	Capital Project	Classification	Grant	Levy	Discretionary_Res erves	Restricted_R eserves	Grand Total
		Tawse Place - Nicholas Beaver Road to Crown	Asset				\$23,234	\$23,234
		Cemetery	Management					
By-law								
	By-law							
		SUV	Asset	\$5,000		\$12,988		\$17,988
			Management					
Grand Total				\$88,700	\$1,771,000	\$1,178,683	\$99,378	\$3,137,761

Back to Index

Department	Account Type	<i>I</i> Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Administration							
	Expenditures						
		FT Wages	\$258,474	\$369,656	\$413,430	\$421,832	\$436,610
		PT Wages	\$0	\$2,828	\$6,532	\$8,432	\$8,440
		OT Wages	\$0	\$0	\$0	\$500	\$500
		FT Wage Related Expenses	\$44,587	\$66,192	\$73,849	\$75,381	\$78,658
		PT Wage Related Expenses	\$0	\$210	\$518	\$832	\$1,619
		Group Benefits	\$14,280	\$22,857	\$37,859	\$37,646	\$40,701
		WSIB	\$6,290	\$9,628	\$7,871	\$11,392	\$12,998
		Office Supplies & Equipment	\$1,027	\$1,479	\$1,310	\$1,200	\$1,300
		Communication (phone, fax, internet)	\$1,136	\$1,371	\$1,647	\$1,616	\$754
		Professional Fees - Legal	\$25,573	\$53,572	\$83,146	\$19,500	\$28,500
		Professional Fees - Engineering	\$12,471	\$50,736	\$44,239	\$44,423	\$44,423
		Events and Other	\$2,403	\$3,020	\$11,153	\$11,075	\$11,598
		Mileage	\$36		\$154	\$1,000	\$200
		Professional Development	\$4,886	\$6,725	\$2,674	\$25,540	\$12,300
		Membership and Subscription Fees	\$6,652	\$10,736	\$16,348	\$16,133	\$17,025
		Travel - Meals	\$0	\$0	\$0	\$100	\$100
		Travel - Accomodations & Parking	\$0	\$458	\$0	\$800	\$500
		Travel - Air Fare	\$0	\$0	\$0	\$500	•
		Insurance	\$42,084	\$15,801	\$37,794	\$43,956	\$48,711
		Advertising	\$2,176	\$2,695	\$2,032	\$2,510	\$13,510
		Professional Fees - Ground Water					
		Monitoring	\$3,810		\$4,803	\$4,000	
		Contract Services	\$7,486	\$28,525	\$37,911	\$51,258	\$57,790
		Clothing, Safety Allowance	\$0	\$777	\$207	\$750	
	Expenditures Total		\$433,370	\$652,979	\$783,478	\$780,375	\$821,237
	_						
	ReserveTransfers		,				
		Contribution to Legal Contingency	\$50,000	\$50,000	\$0	\$0	\$0
		Transfer from Legal Contingency	\$0	\$0	\$0	\$0	\$0
		Transfer from Insurance Contingency	-\$5,000	\$0	\$0		-\$10,000
		Contribution to Insurance Contingency	\$25,000	\$25,000	\$10,000	\$10,000	\$25,000

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
	ReserveTransfers						
Administration	Total		\$70,000	\$75,000	\$10,000	\$0	\$15,000
	Revenues						
		Agreement, Commissioner, FOI, Photocopy	-\$404	-\$6,876	-\$2,212	-\$6,000	-\$2,156
		Eng., Env., and Legal Recoveries	-\$4,965	-\$29,591	-\$12,535	-\$10,000	-\$10,000
		Recoveries from Staff Events	-\$16	\$0	-\$995	-\$1,300	-\$1,300
		Nestle Agreement	-\$500	-\$500	-\$500	-\$500	-\$500
		Other recoveries	-\$9	-\$20	\$0	-\$500	-\$500
		Ontario Cannabis Legalization					
		Implementation Fund	\$0	-\$5,000	\$0	\$0	\$0
	Revenues Total		-\$5,893	-\$41,987	-\$16,241	-\$18,300	-\$14,456

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Building							
	Expenditures						
		FT Wages	\$183,415	\$270,967	\$301,015	\$313,637	\$324,944
		PT Wages	\$1,043	\$0	\$0	\$0	\$0
		OT Wages	\$321	\$0	\$737	\$500	\$500
		FT Wage Related Expenses	\$32,835	\$48,852	\$53,980	\$56,856	\$59,457
		PT Wage Related Expenses	\$87	\$0	\$0	\$0	\$0
		Group Benefits	\$20,700	\$31,823	\$33,637	\$31,376	\$36,805
		WSIB	\$5,734	\$7,958	\$6,998	\$8,956	\$10,136
		Computer Software & Hardware	\$741	\$131	\$61	\$1,000	\$300
		Office Supplies & Equipment	\$1,585	\$1,871	\$927	\$3,000	\$1,500
		Fuel	\$780	\$2,237	\$0	\$1,613	\$2,016
		Vehicle Maintenance	\$0	\$322	\$868	\$500	\$1,000
		Postage	\$1,889	\$539	\$547	\$2,000	\$1,000
		Communication (phone, fax, internet)	\$1,559	\$2,960	\$3,592	\$4,574	\$3,196
		Professional Fees - Legal	\$11,993	\$32,964	\$7,871	\$20,000	\$20,000
		Professional Fees - Audit	\$6,411	\$7,767	\$6,374	\$6,600	\$6,600
		Professional Fees - Engineering	\$212,874	\$54,273	\$3,730	\$70,000	\$40,000
		Mileage	\$0	\$133	\$186		\$500
		Professional Development	\$3,762	\$3,123	\$4,508	\$17,850	
		Membership and Subscription Fees	\$442	\$3,250	\$3,784	\$4,701	\$4,711
		Travel - Meals	\$0			·	\$250
		Travel - Accomodations & Parking	\$0	· ·			
		Insurance	\$11,889			\$9,278	4
		Advertising	\$1,688		\$418		
		Vehicle Plates	\$0		\$125		
		Contract Services	\$23,583	\$49,254	\$51,073	\$54,438	\$72,503
		Clothing, Safety Allowance	\$108	·	\$519		
		Emergency Management	\$460	\$467	\$508	\$457	\$530
		Municipal Office Costs Recovered from					
		Building Department	\$17,876	· · ·	\$21,676		
		Bank Service Charges	\$5,370		\$5,402		
	Expenditures Total		\$547,144	\$552,280	\$520,014	\$638,417	\$643,150
	ReserveTransfers						
		Contribution to Building Surplus RF	\$0	\$80,971	\$70,037	\$0	\$0

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Building	ReserveTransfers	Transfer from Building Surplus RF	-\$51,041	\$0	\$0	-\$146,528	-\$103,910
	ReserveTransfers						
	Total		-\$51,041	\$80,971	\$70,037	-\$146,528	-\$103,910
	Revenues						
		Online Service Fee	-\$2,831	-\$2,571	-\$4,447	-\$3,000	-\$4,300
		Reproduction of Digital Drawings	-\$255	-\$676	-\$371	-\$292	-\$350
		Other recoveries	\$0	-\$3,000	\$0	-\$500	-\$500
		Designated Structures Permit	-\$848	-\$3,010	-\$2,265	-\$1,756	-\$2,000
		Tent or Marquee Application Fee	-\$852	-\$1,512	-\$3,520	-\$1,320	-\$3,500
		Transfer of Permit	\$0	-\$161	-\$984	-\$164	-\$500
		Revision to Approved Plans	-\$6,042	-\$5,653	-\$2,796	-\$6,580	-\$4,700
		Alternative Solution Application	\$0	-\$518	-\$528	-\$528	-\$569
		Residential Building Permits	-\$394,324	-\$500,059	-\$488,750	-\$380,000	-\$420,000
		Institutional, Commercial & Industrial					
		Building Permits	-\$24,052	-\$14,273	-\$9,355	-\$31,080	-\$31,080
		Farm Building Permits	-\$16,939	-\$28,223	-\$27,898	-\$17,730	-\$24,000
		Demolition Permits	-\$954	-\$1,288	-\$2,624	-\$1,968	-\$1,500
		Occupancy Permits	-\$8,778	-\$10,465	-\$5,658	-\$7,708	-\$5,700
		Sign Permits	-\$1,590	-\$1,614	-\$548	-\$1,096	-\$1,250
		Septic System Permit - New	-\$35,616	-\$52,316	-\$35,203	-\$32,900	-\$34,000
		Septic System Permit - Alter	-\$2,862	-\$7,752	-\$4,940	-\$4,940	-\$4,940
		Inspection of works not ready	-\$159	-\$161	-\$164	-\$328	-\$352
	Revenues Total		-\$496,102	-\$633,251	-\$590,051	-\$491,890	-\$539,241

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
By-law							
	Expenditures						
		FT Wages	\$0	\$0	\$31,728	\$48,721	\$63,243
		PT Wages	\$9,146	\$105	\$0	\$700	\$700
		OT Wages	\$0	\$0	\$0	\$500	\$500
		FT Wage Related Expenses	\$0	\$0	\$5,813	\$9,012	\$11,803
		PT Wage Related Expenses	\$771	\$0	\$0	\$0	\$0
		Group Benefits	\$0	\$0	\$1,328	\$5,820	\$5,139
		WSIB	\$292	\$0	\$471	\$1,482	\$2,084
		Office Supplies & Equipment	\$199	\$40	\$107	\$150	\$150
		Fuel	\$0	\$0	\$0	\$0	\$2,016
		Signage - 911 Signs	\$7,234	\$1,836	\$1,673		\$1,800
		Vehicle Maintenance	\$0	\$0	\$107	\$0	\$500
		Communication (phone, fax, internet)	\$291	\$1,583	\$1,287	\$1,292	\$752
		Professional Fees - Legal	\$41,900		\$55,950		\$30,000
		Professional Fees - Engineering	\$10,459	\$19,417	\$22,194		\$18,000
		Mileage	\$0		\$784		\$500
		Professional Development	\$0		\$3,723		\$1,900
		Travel - Meals	\$0		\$120	· ·	\$50
		Travel - Accomodations & Parking	\$0		\$1,577	\$250	\$250
		Insurance	\$0		\$0		\$10,653
		Advertising	\$0		\$1,351	\$1,500	\$1,500
		Vehicle Plates	\$0		\$0		\$125
		Contract Services	\$23,679		\$38,067		\$17,928
		Clothing, Safety Allowance	\$798		\$1,385		\$260
		Livestock Loss	\$280	·	\$0	. ,	\$353
		Membership and Subscription Fees	\$0		\$240		\$240
	Expenditures Total		\$95,049	\$121,721	\$167,904	\$142,895	\$170,446
	ReserveTransfers		1-	444	1.	1 -	4 -
	5	Transfer from Capital Carry-forward	\$0	-\$11,494	\$0	\$0	\$0
	ReserveTransfers			4			
	Total		\$0	-\$11,494	\$0	\$0	\$0
	Davie in						
	Revenues	I attamatica mana	40-0	1.0	400	4	4400
		Lottery Licences	-\$278	\$0	-\$30	-\$500	-\$100

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
By-law	Revenues	Sign Permits	\$0	-\$269	\$0	-\$105	-\$113
		Fence Viewer's Application	\$0	\$0	\$0	\$0	\$0
		Engineering, Environmental and Legal Fees					
		Recovered	-\$13,607	-\$19,891	-\$19,667	-\$10,000	-\$13,000
		Site Alteration Agreement	-\$3,900	-\$9,717	-\$2,056	-\$4,000	-\$4,000
		Other recoveries	\$0	-\$370	-\$400	-\$500	-\$257
		Ontario Wildlife Damage Compensation	-\$310	-\$810	\$0	-\$1,500	-\$353
		Dog Tags and Kennel Licences	-\$8,457	-\$12,948	-\$12,797	-\$10,500	-\$13,876
		Municipal addressing signs and posts	-\$1,591	-\$3,211	-\$1,264	-\$2,175	-\$2,180
		Septic Compliance Letter	-\$993	-\$1,320	-\$794	-\$1,120	-\$1,117
		Special Events Permit	\$0	\$0	\$0	-\$79	-\$1,711
		Swimming Pool Enclosure Permit	-\$5,957	-\$8,874	-\$7,925	-\$5,661	-\$8,177
		Liquor License Letter	\$0	\$0	\$0	-\$164	-\$177
		Filming Permit Fee	\$0	-\$518	-\$528	-\$528	-\$570
		Property Standards Appeal Fee	\$0	-\$528	\$0	-\$269	-\$290
		Publicized Display Fees	\$0	\$0	\$0	\$0	-\$300
		Reinspection Fee	\$0	\$0	\$0	\$0	-\$375
		Animal Control Services Fees Recovered	-\$61	\$0	\$0	\$0	\$0
	Revenues Total		-\$35,153	-\$58,457	-\$45,461	-\$37,102	-\$46,596

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Corporate							
	Expenditures						
		Taxes written off (Twp share only)	\$40,511	\$125,149	\$24,928	\$25,000	\$32,000
		Conservation Authorities Levy Payment	\$169,281	\$174,553			\$184,294
	Expenditures Total		\$209,792	\$299,702	\$202,733	\$202,805	\$216,294
	ReserveTransfers						
		Transfer from Capital Carry-forward	\$0	-\$87,616	\$0	\$0	-\$27,056
		Transfer from Operating Carryforward	\$0	-\$24,400	-\$41,500	-\$44,019	\$0
	ReserveTransfers						
	Total		\$0	-\$112,016	-\$41,500	-\$44,019	-\$27,056
	Revenues						
		Supplemental Billings	-\$116,791	-\$112,591	-\$180,076	-\$100,000	-\$137,000
		Donations	\$0	\$0	\$0	\$0	·
		Mun Tax Assistance	-\$26,131	-\$27,173	-\$27,717	-\$27,717	-\$28,726
		Host Kilmer (Service Ontario)	-\$30,312	-\$30,599	-\$31,771	-\$31,771	-\$34,078
		Ontario Hydro	-\$12,147	-\$12,147	-\$12,147	-\$12,147	-\$12,147
		Metrolinx	-\$11,157	-\$11,261	-\$11,692	-\$11,692	-\$12,118
		Hydro One	-\$8,963	-\$6,310	-\$6,310	-\$6,310	-\$6,310
		Grant Guelph Junction Railway	-\$5,330	-\$5,330	-\$824	-\$5,330	-\$824
		Puslinch Landfill/Wellington County	-\$8,494	-\$8,511	-\$8,581	-\$8,262	-\$8,651
		City of Guelph	-\$36,657	-\$36,731	-\$37,035	-\$35,656	-\$37,334
		University of Guelph	-\$716	-\$723	-\$750	-\$750	-\$778
		CN Railway	-\$1,316	-\$1,316	-\$356	-\$1,316	-\$356
		CP Railway	-\$7,854	-\$7,804	-\$1,206	-\$7,804	-\$1,206
		OMPF	-\$417,400				-\$423,100
		Penalties - Property Taxes	-\$94,449	-\$120,797	-\$58,816		-\$90,000
		Interest - Tax Arrears	-\$106,237	-\$100,960			-\$120,000
		Interest on General	-\$98,558				-\$97,000
		Other Revenues	-\$194		-\$356		\$0
	Revenues Total		-\$982,704	-\$965,228	-\$1,121,983	-\$961,392	-\$1,009,627

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Council							
	Expenditures						
		PT Wages	\$103,120	\$101,461	\$103,485	\$105,231	\$109,440
		PT Wage Related Expenses	\$6,258	\$5,732	\$6,090	\$8,050	\$8,646
		Group Benefits	\$22,536	\$24,576	\$22,945	\$22,182	\$24,659
		Office Supplies & Equipment	\$70	\$0	\$76	\$200	\$200
		Mileage	\$165	\$0	\$229	\$800	\$800
		Professional Development	\$1,425	\$180	\$1,425	\$3,200	\$3,200
		Membership and Subscription Fees	\$0	\$0	\$0	\$150	\$0
		Travel - Meals	\$0	\$0	\$0	\$200	\$200
		Travel - Accomodations & Parking	\$860	\$0	\$1,673	\$3,500	\$3,500
		Travel - Air Fare	\$0	\$0	\$0	\$500	\$500
	Expenditures Total		\$134,433	\$131,950	\$135,923	\$144,013	\$151,145

Department Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Elections						
Expenditures						
	Per Diems	\$0	\$0	\$2,350	\$1,845	
	Office Supplies & Equipment	\$0	\$0	\$2,561	\$2,500	\$0
	Signage	\$0	\$0	\$80	\$100	
	Postage	\$0	\$0	\$3,109	\$2,500	\$0
	Professional Fees - Audit	\$0	\$0	\$0	\$0	\$1,550
	Professional Development	\$0		\$948	\$750	
	Advertising	\$0	\$0	\$9,593	\$8,237	\$0
	Contract Services	\$1,476	\$1,476	\$42,080	\$45,682	\$1,476
Expenditures Total		\$1,476	\$1,476	\$60,722	\$61,614	\$3,026
ReserveTransfer						
	Contribution to Elections	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750
	Transfer From Elections	\$0	\$0	-\$55,000	-\$55,000	\$0
ReserveTransfers						
Total		\$13,750	\$13,750	-\$41,250	-\$41,250	\$13,750
Revenues						
	Election - Other Recoveries	\$0		\$0		
	Nomination Fees	\$0		-\$900		
Revenues Total		\$0	\$0	-\$900	\$0	\$0

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Finance							
	Expenditures						
		FT Wages	\$312,873	\$335,392	\$361,619	\$385,894	\$405,233
		PT Wages	\$0	\$0	\$0	\$0	\$0
		OT Wages	\$3,003	\$2,944	\$3,235	\$500	\$500
		FT Wage Related Expenses	\$50,562	\$59,215	\$62,148	\$69,739	\$73,987
		PT Wage Related Expenses	\$0	\$0	\$0	\$0	\$0
		Group Benefits	\$42,497	\$40,939	\$44,498	\$41,437	\$48,136
		WSIB	\$8,968	\$9,278	\$7,562	\$10,906	\$12,622
		Computer Software & Hardware	\$1,729	\$536	\$884	\$500	\$1,000
		Office Supplies & Equipment	\$5,785	\$4,001	\$5,354	\$5,000	\$5,000
		Postage	\$11,420	\$13,729	\$13,011	\$11,000	\$12,200
		Communication (phone, fax, internet)	\$2,466	\$4,627	\$4,536	\$5,536	\$5,518
		Professional Fees - Audit	\$14,959	\$18,122	\$14,873	\$15,400	\$15,400
		Mileage	\$27	\$32	\$151	\$1,000	-
		Professional Development	\$880	\$2,109	\$2,848	\$12,643	\$4,559
		Membership and Subscription Fees	\$2,004	\$3,002	\$3,020	\$3,411	\$3,114
		Travel - Meals	\$0	\$0	\$62	\$50	\$100
		Travel - Accomodations & Parking	\$0	\$0	\$920		
		Advertising and Tax Sale Expenses	\$12,251	\$25,371	\$13,887	\$12,994	\$12,994
		Contract Services	\$37,434	\$65,659	\$69,521	\$43,773	\$64,667
		Emergency Management	\$1,072	\$1,089	\$1,185	\$1,067	\$1,236
		Environmental Service - Garbage Bags	\$6,644	\$0	\$4,176		
		COVID-19 Incremental Expenses	\$18,503	\$16,850	\$11,483		·
		Bank Service Charges	\$7,733	\$15,379	\$12,056		
		Other written off (non collectible inv's)	\$759	\$11,886	\$10,725	\$0	
		Debt Interest Repayment	\$0		\$0		
		Community Grants	\$37,540	\$34,180	\$22,029		
	Expenditures Total		\$579,110	\$664,339	\$669,785	\$669,179	\$694,582
	Povonuos						
	Revenues	Advertising, Legal, and Realtax Fees					
		Recovered	-\$6,669	-\$23,929	¢10 17F	-\$10,000	\$14,000
		NSF Fees	-\$6,669 -\$360	-\$23,929 -\$600	-\$12,175 -\$560		
		Online Service Fee	-\$1,019	•	-\$2,133	-\$300 -\$2,000	
		Tax Certificates					
		Tax Certificates	-\$9,180	-\$10,260	-\$8,640	-\$8,940	-\$8,940

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Finance	Revenues	Other Recoveries	-\$3,249	-\$7,104	-\$1,191	-\$6,500	-\$1,500
		Provincial Safe Restart - COVID-19					
		Operating Grant	-\$190,500	-\$159,882	\$0	\$0	\$0
		Garbage bags	-\$4,975	\$0	-\$4,213	-\$17,500	-\$4,000
	Revenues Total		-\$215,952	-\$208,417	-\$28,911	-\$45,440	-\$31,044

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Fire and Rescue							
	Expenditures						
		PT Wages	\$414,511	\$450,424	\$472,828	\$439,945	\$380,151
		PT Wage Related Expenses	\$30,823	\$35,290	\$38,380	\$37,241	\$33,958
		Group Benefits	\$17,706	\$18,762	\$19,657	\$18,903	\$18,903
		WSIB	\$12,020	\$12,553	\$9 <i>,</i> 759	\$13,242	\$12,431
		Office Supplies & Equipment	\$1,990	\$1,310	\$1,039	\$2,500	\$1,500
		Fuel	\$8,717	\$12,684	\$0	\$15,480	\$19,350
		Equipment Maintenance & Supplies	\$25,158	\$30,345	\$12,375	\$25,000	\$25,000
		Oxygen & Medical Supplies	\$1,804	\$2,003	\$5,375	\$3,100	\$3,100
		Public Education	\$2,279	\$693	\$816	\$3,000	\$3,000
		Vehicle Maintenance	\$19,464	\$44,691	\$63,687	\$26,000	\$40,000
		Communication (phone, fax, internet)	\$7,922	\$10,381	\$10,068	\$7,277	\$6,117
		Mileage	\$290	\$735	\$929	\$4,000	\$2,000
		Professional Development	\$16,926	\$23,389	\$13,086	\$23,785	
		Membership and Subscription Fees	\$3,092	\$3,100	\$2,206	\$5,482	\$3,585
		Travel - Meals	\$399	\$479	\$715	\$1,000	
		Travel - Accomodations & Parking	\$0	\$189	\$36	\$4,220	
		Insurance	\$21,411	\$13,724	\$37,967	\$35,447	\$53,264
		Advertising	\$1,337	\$219	\$0	\$1,000	\$1,000
		Vehicle Plates	\$0	\$165	\$390	\$265	\$265
		Permits	\$481	\$490	\$507	\$490	
		Contract Services	\$91,210	\$89,919	\$142,070	\$95,238	
		Clothing, Safety Allowance	\$16,288		\$20,443	\$24,752	\$21,252
	Expenditures Total		\$693,829	\$764,515	\$852,331	\$787,367	\$846,988
	Daviania						
	Revenues	Information/Eiro Por outs	6453	¢coo.	Ċ74.4	6476	ĆE42
		Information/Fire Reports Other recoveries	-\$152	-\$699	-\$714	-\$476	
		Open Burning Permit and Inspection	-\$529		-\$1,972	-\$9,437	-\$9,437
		Burning Permit Violations	-\$15,992	-\$14,661 -\$977	-\$13,423 \$0	-\$15,840	
		Fire Extinguisher Training	-\$966 \$0		-\$190	-\$1,465 -\$522	-\$1,086 -\$563
		Water Tank Locks	\$0		-\$190		
		Fireworks Permits	-\$102	-\$103	-\$105	-\$19 -\$210	
		Occupancy Load	\$0		-\$105 \$0		
		Fire Safety Plan Review	\$0		\$0 \$0		
		True Salety Plan Review	\$0	-\$124) \$0	-\$253	-\$4/3

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Fire and Rescue	Revenues	Post Fire Watch	\$0	\$0	\$0	\$0	\$0
		Boarding up or Barricading	\$0	\$0	\$0	\$0	\$0
		Key Boxes	-\$102	-\$460	\$0	-\$469	-\$505
		Inspections	\$0	\$0	\$0	\$0	\$0
		Carbon Monoxide Alarms and Smoke					
		Alarms	\$0	\$0	\$0	-\$253	\$0
		Motor Vehicle Emergency Responses	-\$35,595	-\$70,323	-\$80,652	-\$93,361	-\$93,361
		Fire Alarm False Alarm Calls	\$0	\$0	\$0	\$0	\$0
		Office of the Fire Marshal Grants	\$0	-\$6,400	\$0	\$0	\$0
	Revenues Total		-\$53,437	-\$96,927	-\$97,056	-\$122,304	-\$120,871

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Library							
	Expenditures						
		Library Water Monitoring	\$2,097	\$2,357	\$2,656	\$1,975	\$2,250
		Library Rent for Historical society	\$4,503	\$5,117	\$4,819	\$4,800	\$5,440
	Expenditures Total		\$6,600	\$7,474	\$7,475	\$6,775	\$7,690
	Revenues						
		Library Costs Recovered from County	-\$3,005	-\$3,632	-\$3,313	-\$3,000	-\$3,300
	Revenues Total		-\$3,005	-\$3,632	-\$3,313	-\$3,000	-\$3,300

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Municipal Office							
	Expenditures						
		Hydro	\$13,584	\$14,285	\$16,584	\$18,000	\$15,000
		Heat	\$10,532	\$12,249	\$13,352	\$11,500	\$11,500
		Water Protection	\$712	\$895	\$1,073	\$750	\$1,000
		Cleaning, Maint & supplies for Bldg	\$20,441	\$28,482	\$25,278	\$25,946	\$25,946
		Kitchen Supplies and Equipment	\$3,832	\$4,904	\$5,421	\$4,000	\$4,500
		Waste Removal	\$2,026	\$2,585	\$3,035	\$2,712	\$2,712
		Outdoor Maintenance of Building	\$5,100	\$2,191	\$238	\$1,300	\$1,300
		Contract Services	\$3,360	\$4,151	\$7,275	\$4,552	\$6,000
	Expenditures Total		\$59,587	\$69,741	\$72,255	\$68,760	\$67,958
	Revenues						
		Municipal Office Costs Recovered from					
		Building Department	-\$17,876	-\$20,922	-\$21,676	-\$20,628	-\$20,387
	Revenues Total		-\$17,876	-\$20,922	-\$21,676	-\$20,628	-\$20,387

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
ORC							
	Expenditures						
		FT Wages	\$62,189	\$45,131	\$45,903	\$63,706	\$58,906
		PT Wages	\$7,924	\$20,160	\$35,413	\$32,188	\$33,272
		OT Wages	\$751	\$368	\$4,597	\$2,000	\$4,000
		FT Wage Related Expenses	\$11,013	\$9,401	\$8,722	\$12,007	\$11,707
		PT Wage Related Expenses	\$381	\$907	\$2,107	\$3,174	\$6,382
		Group Benefits	\$4,336	\$7,168	\$2,218	\$6,565	\$5,350
		WSIB	\$2,226	\$1,969	\$1,973	\$2,947	\$3,145
		Office Supplies & Equipment	\$69	\$223	\$81	\$300	\$150
		Hydro	\$22,339	\$21,484	\$21,936	\$27,000	\$25,000
		Heat	\$4,867	\$4,932	\$6,362	\$5,500	\$6,000
		Water Protection	\$1,114	\$833	\$1,278	\$700	\$1,000
		Equipment Maintenance & Supplies	\$4,134	\$4,065	\$11,273	\$6,870	\$6,870
		Bldg-Cleaning, Maint, Supplies Interior	\$5,148	\$2,928	\$8,563	\$5,800	\$5,800
		Waste Removal	\$1,789	\$2,038	\$2,389	\$2,135	\$2,135
		Bldg-Cleaning, Maint, Supplies Exterior	\$3,590	\$5,014	\$19,900	\$8,000	\$8,000
		Communication (phone, fax, internet)	\$3,405	\$2,851	\$2,583	\$3,035	\$2,616
		Mileage	\$0	\$0	\$0		\$100
		Professional Development	\$0	\$0	\$0		\$1,000
		Membership and Subscription Fees	\$0	\$0	\$0		\$150
		Travel - Meals	\$0	\$0	\$0		\$50
		Insurance	\$7,918	\$3,321	\$8,432	\$8,862	\$10,653
		Advertising	\$0	\$175	\$1,323	\$2,100	\$2,100
		Contract Services	\$630	\$791	\$1,118	\$1,480	\$1,615
		Clothing, Safety Allowance	\$158	\$0	\$452	\$515	\$600
	Expenditures Total		\$143,979	\$133,759	\$186,620	\$196,185	\$196,600
	Revenues						
		Ice Rental - Prime	-\$23,295	\$0	-\$36,021	-\$22,033	-\$38,808
		Ice Rental - Non-Prime	-\$506	\$0	-\$583	-\$506	-\$628
		Arena Summer Rentals	-\$1,583	-\$12,850	-\$10,991	-\$13,750	
		Gymnasium Rental	-\$6,390	-\$3,948	-\$19,116		-\$25,000
		Rink Board and Ball Diamond Advertising	-\$357	\$0	-\$1,518	-\$370	-\$1,617
		Other Recoveries					
			-\$412	\$0	-\$369	-\$500	-\$400

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
ORC	Revenues Total		-\$32,542	-\$16,797	-\$68,599	-\$62,159	-\$79,453
Parks							
	Expenditures						
		FT Wages	\$0	\$30,311	\$42,624	\$38,224	\$110,523
		PT Wages	\$0	\$0	\$0		\$0
		OT Wages	\$0	\$255	\$2,486		
		FT Wage Related Expenses	\$0	\$5,480	\$8,001	\$7,086	\$21,124
		PT Wage Related Expenses	\$0	\$0	\$0	\$0	\$0
		Group Benefits	\$0	\$439	\$6,377	\$4,840	\$15,218
		WSIB	\$0	\$920	\$852	\$1,151	\$3,647
		Hydro	\$2,128	\$2,618	\$2,843	\$2,700	
		Fuel	\$2,290	\$5,687	\$0		\$3,534
		Water Protection	\$0	\$0	\$0		
		Equipment Maintenance and Supplies	\$1,159	\$2,332	\$1,831	\$1,555	\$1,800
		Vehicle Maintenance	\$527	\$263	\$46	\$500	\$0
		Maintenance Grounds	\$6,100	\$7,689	\$12,369	\$10,000	\$13,000
		Insurance	\$7,540	\$3,385	\$8,432	\$8,862	\$10,653
		Advertising	\$0	\$0	\$1,440		
		Contract Services	\$3,979	\$684	\$728	\$794	\$2,294
	Expenditures Total		\$23,723	\$60,063	\$88,029	\$81,338	\$188,092
	Revenues						
		Horse Paddock Rental	\$0	\$0	-\$53	-\$212	-\$57
		Picnic Shelter	\$0	-\$518		-\$507	-\$1,159
		Ball Diamond Rentals	-\$4,277	-\$7,387	-\$7,879		-\$8,475
		Soccer Field Rentals	-\$1,603	-\$4,232	-\$4,103	-\$4,000	-\$4,423
		Tennis Courts	\$0	\$0	\$0		-\$800
		Other recoveries	-\$100	\$100	-\$350		\$0
	Revenues Total		-\$5,979	-\$12,037	-\$13,459	-\$11,261	-\$14,914

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
PCC							
	Expenditures						
		FT Wages	\$57,524	\$59,255	\$64,193	\$63,706	\$70,429
		PT Wages	\$10,976	\$0	\$0	\$21,491	\$31,637
		OT Wages	\$19	\$1,184	\$1,322	\$1,000	\$500
		FT Wage Related Expenses	\$9,570	\$10,756	\$11,859	\$11,809	\$13,135
		PT Wage Related Expenses	\$501	\$0	\$0	\$2,218	\$6,069
		Group Benefits	\$7,573	\$8,381	\$8,513	\$7,383	\$9,409
		WSIB	\$2,145	\$1,822	\$1,545	\$2,595	\$3,354
		Office Supplies & Equipment	\$104	\$0	\$102	\$150	\$150
		Hydro	\$6,800	\$7,085	\$11,116	\$12,000	\$12,000
		Heat	\$3,914	\$4,549	\$3,782	\$4,300	\$4,300
		Water Protection	\$3,007	\$4,096	\$3,551	\$4,500	\$4,500
		Bldg-Cleaning, Maint, Supplies Interior	\$3,959	\$3,607	\$6,366	\$13,670	\$10,000
		Kitchen Supplies and Equipment	\$0		\$1,697	\$1,500	\$1,500
		Waste Removal	\$7,075	\$8,100	\$9,453	\$8,541	\$8,541
		Outdoor Maintenance of Building	\$6,557	\$5,360	\$3,753	\$4,000	\$4,000
		Communication (phone, fax, internet)	\$3,179	\$2,682	\$2,790	\$2,856	\$2,616
		Mileage	\$0		\$0		\$0
		Professional Development	\$0		\$0		\$0
		Membership and Subscription Fees	\$0		\$0		\$500
		Travel - Meals	\$0	\$0	\$0		\$0
		Travel - Accomodations & Parking	\$0		\$0		•
		Insurance	\$7,746	` '	\$8,432	\$8,862	\$10,653
		Advertising	\$0		\$1,507	\$2,100	\$2,100
		Contract Services	\$2,918	` '	\$3,630		\$4,502
		Clothing, Safety Allowance	\$0		\$172	\$260	
	Expenditures Total		\$133,565	\$125,048	\$143,782	\$177,933	\$200,154
	Revenues						
		Hall - Prime	-\$3,892	\$26	-\$15,587	-\$13,623	-\$29,365
		Hall - Non-Prime	-\$2,052	\$26	-\$14,975		-\$19,969
		Meeting Room	-\$1,308		-\$4,143	-\$5,975	-\$13,427
		Projector and Microphone Rental Fee	\$0		-\$26		
		Licensed Events Using Patio	\$0		-\$181	-\$121	-\$285
		Hall - Commercial Rentals	\$0	\$0	\$0	-\$330	-\$1,547

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
PCC	Revenues	Bartenders	-\$1,430	\$0	-\$234	-\$4,331	\$0
		Kitchen Facilities - Non-Prime	-\$1,078	\$0	-\$686	-\$1,900	-\$3,143
		Advertising Sign	-\$34	-\$34	\$0	-\$53	\$0
		Other Recoveries	-\$283	\$0	-\$2,101	-\$1,000	-\$5,000
		Recreation Conditional Grants	-\$4,468	\$0	-\$1,804	-\$5,167	-\$5,167
	Revenues Total		-\$14,544	\$18	-\$39,737	-\$42,166	-\$77,903

Department	Account Type	<i>I</i> Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
PDAC							
	Expenditures						
		Per Diems	\$3,319	\$4,362	\$4,240	\$4,733	\$4,923
		Office Supplies & Equipment	\$70	\$0	\$0	\$100	\$100
		Mileage	\$0	\$0	\$0	\$150	\$150
		Professional Development	\$0	\$0	\$0	\$500	\$500
		Travel - Meals	\$0	\$0	\$0	\$50	\$50
		Travel - Accomodations & Parking	\$0	\$0	\$0	\$500	\$500
	Expenditures Total		\$3,389	\$4,362	\$4,240	\$6,033	\$6,223

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Planning							
	Expenditures						
		FT Wages	\$61,842	\$68,699	\$72,569	\$75,996	\$79,061
		OT Wages	\$0	\$0	\$0	\$500	\$500
		FT Wage Related Expenses	\$10,879	\$12,333	\$13,209	\$13,826	\$14,564
		Group Benefits	\$4,514	\$5,459	\$5,620	\$4,837	\$6,112
		WSIB	\$1,925	\$2,074	\$1,708	\$2,303	\$2,602
		Office Supplies & Equipment	\$401	\$142	\$0	\$750	\$200
		Communication (phone, fax, internet)	\$155	\$28	\$0	\$100	\$100
		Professional Fees - Legal	\$46,145	\$4,821	\$25,843	\$17,000	\$17,000
		Professional Fees - Engineering	\$53,692	\$80,075	\$105,250	\$57,849	\$70,549
		Mileage	\$0	\$0	\$0	\$100	\$100
		Professional Development	\$371	\$371	\$0	\$1,330	\$800
		Membership and Subscription Fees	\$0		\$305	\$385	\$305
		Travel - Meals	\$0		\$0	·	
		Travel - Accomodations & Parking	\$0	\$0	\$0	\$250	\$250
		Advertising	\$6,695	\$2,691	\$7,054		
		Professional Fees - Water Monitoring	\$1,714	\$2,153	\$1,054	\$2,500	\$2,500
		Contract Services	\$22,980		\$74,115		
		CIP Grants	\$0	· ·	\$9,024		
	Expenditures Total		\$211,313	\$217,472	\$315,752	\$235,174	\$250,183
	ReserveTransfers						
		Transfer from Operating Carryforward	\$0	\$0	-\$7,500	-\$7,500	\$0
	ReserveTransfers						
	Total		\$0	\$0	-\$7,500	-\$7,500	\$0
	_						
	Revenues						
		Engineering, Environmental, Legal, and		4		4	4
		Advertising Fees Recovered	-\$45,618				
		Minor Variance	-\$19,134	-\$28,142	-\$12,759		-\$14,573
		Agreements	-\$250	\$0	-\$769		-\$872
		Part Lot Control Exemption By-law	\$0	· ·	\$0		
		Site Plan Control	-\$84,860		-\$111,315		
		Consent Review and Clearance	-\$2,740		-\$1,833		
		Ownership List Confirmation	-\$1,400	-\$1,846	-\$1,656	-\$1,460	-\$1,463

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Planning	Revenues	Pre-Consultation	-\$6,150	-\$18,125	-\$11,466	-\$637	-\$10,976
		Zoning By-law Amendment	-\$14,842	-\$74,845	-\$45,261	-\$30,792	-\$7,500
		Telecommunication Tower Proposals	\$0	-\$543	\$0	-\$700	-\$903
		Lifting of Holding Designation Fee (Zoning)	-\$598	-\$1,824	\$0	-\$620	-\$668
		Zoning By-law Amendment - Aggregate	-\$15,300	\$0	\$0	-\$15,872	-\$17,111
		Garden Suites and Renewals (Zoning)	-\$1,200	\$0	\$0	-\$1,245	\$0
		Compliance Letter	-\$3,057	-\$3,925	-\$2,888	-\$3,086	-\$3,022
	Revenues Total		-\$195,149	-\$246,290	-\$216,547	-\$186,129	-\$186,521

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Public Works							
	Expenditures						
		FT Wages	\$352,167	\$409,925	\$472,164	\$484,968	\$502,682
		PT Wages	\$101,378	\$41,231	\$36,863	\$43,320	\$19,258
		OT Wages	\$57,199	\$22,250	\$41,649	\$27,795	\$27,795
		FT Wage Related Expenses	\$64,866	\$73,974	\$86,038	\$90,832	\$95,004
		PT Wage Related Expenses	\$10,966	\$3,970	\$5,556	\$8,171	\$3,694
		Group Benefits	\$38,898	\$49,418	\$54,703	\$52,256	\$58,241
		WSIB	\$15,215	\$13,828	\$13,197	\$16,261	\$17,460
		Office Supplies & Equipment	\$161	\$202	\$0		\$100
		Hydro	\$597	\$594	\$679	\$750	\$750
		Fuel	\$61,667	\$74,050		\$75,250	
		Equipment Maintenance & Supplies	\$1,770	\$2,028	\$2,204	\$2,050	\$2,050
		Signage	\$9,732	\$25,497	\$12,295		
		Pavement Markings	\$33,499				
		Railway Maintenance and Upgrades	\$0				
		Municipal Street Naming	\$0	· ·			
		Maintenance Gravel	\$78,965	\$75,422	\$79,098		
		Calcium	\$66,152	\$68,488			
		Winter Maintenance	\$273,616				
		Waste Removal	\$203		\$1,279		
		Shop Overhead	\$6,768		\$12,206		. ,
		Road Maintenance supplies	\$46,538		\$30,999		
		Vehicle Maintenance	\$53,992	\$27,517	\$65,034		1
		Speed Monitor	\$0				
		Tree Maintenance Program	\$18,443	\$23,356			
		Sidewalk Repairs	\$0				
		Communication (phone, fax, internet)	\$4,293	\$2,832	\$3,761		\$2,040
		Professional Fees - Engineering	\$5,424	\$994	\$877	\$2,000	
		Mileage	\$0				
		Professional Development	\$0	· ·			\$1,420
		Membership and Subscription Fees	\$706		\$559		
		Travel - Meals	\$0	· ·			
		Insurance	\$46,875				
		Advertising	\$525				
		Vehicle Plates	\$0	\$5,547	\$11,813	\$7,255	\$6,595

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Public Works	Expenditures	Permits	\$50	\$65	\$111	\$100	
		Contract Services	\$33,903	\$31,156	\$24,319	\$38,504	\$49,807
		Clothing, Safety Allowance	\$2,410	\$2,021	\$2,279	\$2,400	\$2,800
		Street Lights: Repairs and Hydro Bills	\$19,367	\$20,528	\$11,999	\$14,850	\$14,850
	Expenditures Total		\$1,406,347	\$1,352,892	\$1,636,582	\$1,472,938	\$1,538,737
	ReserveTransfers						
		Transfer from Asset Management					
		Discretionary Reserve	\$0		-\$1,975	-\$10,000	-\$10,000
		Transfer from Operating Carryforward	\$0	\$0	\$0	\$0	-\$27,110
		Contribution to Aggregate Levy					
		Discretionary Reserve	\$240,000	\$240,000			\$492,000
		Contribution from Winter Maintenance	\$0	\$0	-\$39,257	\$0	\$0
		Contribution to Winter Maintenance	\$0	\$14,457	\$0	\$0	\$0
	ReserveTransfers						
	Total		\$240,000	\$254,457	\$230,668	\$261,900	\$454,890
	Revenues						
		Oversize-Overweight Load Permits	\$0		-\$420		-\$453
		Third Party Cost Recovery	\$0	-\$16,370	-\$1,319	\$0	\$0
		Entrance Permit	-\$6,755	-\$5,832	-\$1,647	-\$5,000	-\$4,745
		Municipal Street Naming	\$0	\$0	-\$3,080		-\$1,000
		Public Works Other Recoveries	-\$1,340				-\$26,704
		Provincial Aggregate Levy	-\$524,189		-\$599,394		
	Revenues Total		-\$532,285	-\$632,791	-\$634,376	-\$506,156	-\$524,902

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Source Water							
Protection							
	Expenditures						
		Contract Services	\$8,531	\$8,885	\$6,681	\$9,448	\$9,682
	Expenditures Total		\$8,531	\$8,885	\$6,681	\$9,448	\$9,682
	Revenues						
		Source Water Protection Other Recoveries	\$0	\$0	-\$24,351	\$0	-\$19,585
	Revenues Total		\$0	\$0	-\$24,351	\$0	-\$19,585

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Heritage Advisory							
Committee							
	Expenditures						
		PT Wages	\$1,083	\$2,262	\$8,379	\$1,634	\$9,766
		PT Wage Related Expenses	\$0	\$0	\$600	\$0	\$1,283
		WSIB	\$0	\$0	-\$13	\$0	\$219
		Office Supplies & Equipment	\$47	\$1,801	\$0	\$100	\$1,833
		Mileage	\$0	\$0	\$298	\$250	\$760
		Professional Development	\$0	\$0	\$330	\$500	\$1,490
		Membership and Subscription Fees	\$0	\$110	\$75	\$212	\$177
		Travel - Meals	\$0	\$0	\$36	\$50	\$150
		Travel - Accomodations & Parking	\$0	\$0	\$305	\$500	\$2,260
		Group Benefits	\$0	\$0	\$0	\$0	\$38
	Expenditures Total		\$1,130	\$4,173	\$10,008	\$3,246	\$17,977
	Revenues						
		Federal Young Canada Works Operating					
		Grant	\$0	\$0	-\$5,700	\$0	-\$5,700
		Doors of Puslinch Posters	\$0				
	Revenues Total		\$0				

Department	Account Type	Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Recreation Advisory							
Committee							
	Expenditures						
		Per Diems	\$2,221	\$2,709	\$1,211	\$2,817	\$1,641
		Office Supplies & Equipment	\$0	\$0	\$0	\$100	\$100
		Mileage	\$0	\$0	\$0	\$150	\$150
		Professional Development	\$0	\$0	\$400	\$500	\$500
		Travel - Meals	\$0	\$0	\$0	\$50	\$50
		Travel - Accomodations & Parking	\$0	\$0	\$0	\$500	\$500
	Expenditures Total		\$2,221	\$2,709	\$1,611	\$4,117	\$2,941

Department	Account Type	/ Description	2020 Actuals	2021 Actuals	2022 YTD	2022 Budget	2023 Budget
Youth Advisory							
Committee							
	Expenditures						
		Office Supplies & Equipment	\$0	\$0	\$0	\$0	\$500
	Expenditures Total		\$0	\$0	\$0	\$0	\$500
Grand Total			\$2,376,672	\$2,539,487	\$3,158,020	\$3,203,289	\$3,687,530

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH BY-LAW NUMBER 2023-010

Being a By-Law to appoint a Deputy Clerk

WHEREAS the *Municipal Act, S.O. 2001, c. 25*, as amended provides that Council of a municipality may appoint a Deputy Clerk who has all the powers and duties of the Clerk under the *Municipal Act* and any other Act;

AND WHEREAS it is deemed expedient to appoint a Deputy Clerk;

NOW THEREFORE the Council of the Corporation of the Township of Puslinch enacts as follows:

- 1. That Justine Brotherston be and is hereby appointed Deputy Clerk for the Township of Puslinch.
- 2. That this By-law shall come into effect on February 9, 2023

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 8th DAY OF FEBRUARY 2023.

James Seeley, Mayor	
Courtenay Hoytfox, Clerk	

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

BY-LAW NUMBER 011-2023

Being a by-law to appoint Fence-viewers

WHEREAS Section 2 of the Line Fences Act, R.S.O. 1990, c.L.17, authorizes a Council to pass a by-law to appoint Fence-viewers;

AND WHEREAS Council of the Corporation of the Township of Puslinch deems it appropriate to appoint Fence-viewers;

NOW THEREFORE Council of the Corporation of the Township of Puslinch here by enacts as follows:

- 1. That the following persons are hereby appointed as Fence-viewers to carry out the provisions of the Line Fences Act within the Township of Puslinch:
 - i. Paul Sadhra;
 - ii. Jeffrey Born;
 - iii. Dennis O'Connor; and
 - iv. James Christopher Pickard;
- 2. That the remuneration to be paid to the fence-viewers shall be as set out in the Township of Puslinch Council Compensation, Benefits and Expense Policy By-Law;
- 3. That the appointments shall be for the term of February 8, 2023 to February 8, 2027, or until successors are appointed;
- 4. That where the provisions of any other by-laws are inconsistent with the provisions of this by-law, the provisions of this by-law shall prevail.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 8TH DAY OF FEBRUARY, 2023.

James Seeley, Mayor
Courtenay Hoytfox, Clerk

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

BY-LAW NUMBER 012-2023

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 February 8, 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 February 8, 2023 be confirmed and adopted by Bylaw;

NOW THEREFORE the Council of the Corporation of the Township of Puslinch hereby enacts as follows:

- 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 8 DAY OF FEBRUARY, 2023.