

99 Christie Lake Road, Perth, ON K7H 3C6

Dayna Edwards
Senior Planner, Q9 Planning + Design
24 Kirkstall Ave
Ottawa ON, K2G 3M5

March 31, 2026
Via Email Only - dayna@q9planning.com

Status Letter #1 for a Draft Plan of Subdivision – Easton
Part of Lots 16, Concession 6 in the Geographic Township of Lanark, Township of Lanark Highlands, County of Lanark
County File No. 09-T-25004

Dear Dayna,

An application for a Draft Plan of Subdivision, Easton Subdivision, also known as, Part of Lots 16, Concession 6 in the Geographic Township of Lanark, Township of Lanark Highlands, County of Lanark, has been submitted by Owner, 1126432 Ontario Inc.

The subject property is approximately 10.5 hectares (26.02 acres), currently vacant and is located in the Middleville Settlement & Hamlet Area. The proposed development includes thirteen (13) single-detached residential lots on private well and septic, one (1) block for Stormwater Management Pond, four (4) blocks for road widening purposes, and an internal street with 2 accesses from Galbraith Road.

The following is the application timeline:

- The application was deemed complete on December 15, 2025
- The County provided the Notice of Application on December 18, 2025 and followed statutory processes for agency and public circulation
- Interested agencies and members of public were given until March 31, 2026 to provide comments.

A summary of agency and stakeholder comments are included below. The comments are attached and should be reviewed in their entirety.



99 Christie Lake Road, Perth, ON K7H 3C6

Agency Name	Date Received	Comments
Lanark County Planning Department	March 31, 2026	Comments related to draft plan, planning rationale, Stormwater Management and public comments
Mississippi Valley Conservation Authority (MVCA) General and Technical Comments	March 3, 2026	Comments related to Stormwater Management
Mississippi Rideau Septic System Office (MRSSO)	March 4, 2026	Comments related to hydrogeological and terrain analysis, septic and well
Municipal EIS Peer Reviewer, LGL	March 5, 2026	Comments related to Environmental Impact Study Report
Municipal Hydrogeological Peer Reviewer, Blumetric	February 13, 2025	Comments related to Hydrogeological and Terrain Analysis Report
Municipal SWM Peer Reviewer, Jewell	March 3, 2026 March 4, 2026	Comments related to Stormwater Management Report and Public Comments
Algonquins of Pikwaganagan	December 19, 2025	Comments related to consultation
Alderville First Nation	January 7, 2026	Comments related to consultation
Enbridge	December 31, 2026	Comments related to reserving the right to amend conditions
Hydro One	January 26, 2026 March 25, 2026	Comments related to hydro easements present on site, applicant should contact Hydro One



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Agency Name	Date Received	Comments
		Subdivision group for co-ordination
Bell Canada	N/A	N/A
Public (3)	September 12, 2025 December 22, 2025 January 19, 2025 February 22, 2025	Comments related to general notification, Environmental Impact Study and Stormwater Management & Drainage

Outstanding comments from County Public Works department will follow in a supplemental letter and the Township has advised they will bring forward this application to local council in April 2026. All other comments are received as of March 31st, 2026 and are attached to this letter for convenience. For ease of reference to expedite the review, the submission back to the County in response to this Status Letter shall include a cover letter that:

- includes the date the updated submission is made
- includes an index of all documents, drawings and reports included in the submission; and
- any updated contact information for the file, including changed or new agents or firms.

The submission shall also include:

- a table that itemizes the full scope of identified issues and comments and grouped by agency or stakeholder, and details how the updated submission addresses them, including document, section and page number references, where applicable.
- the associated documents, drawings and updated reports
- a link to a location where the documents can be reviewed and retrieved, valid for a minimum of 15 days.

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





LANARK COUNTY

lanarkcounty.ca

99 Christie Lake Road, Perth, ON K7H 3C6

Sincerely,

Koren Lam
Senior Planner
Lanark County

CC: Brent & Cyndi Easton, Owners
Forbes Symon, Jp2g, Township of Lanark Highlands
Mike Dwyer, Lanark County



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Dayna Edwards
Senior Planner, Q9 Planning + Design
24 Kirkstall Ave
Ottawa ON
K2G 3M5

March 31, 2026
Via Email Only - dayna@q9planning.com

Lanark County Planning Preliminary Comments
Draft Plan of Subdivision - Easton
Part of Lots 16, Concession 6 in the Geographic Township of Lanark, Township of Lanark Highlands, County of Lanark
County File No. 09-T-25004

Dear Dayna,

Lanark County has received the first submission for Easton Subdivision in the Township of Lanark Highlands. County Planning Department staff have undertaken a preliminary review of the submission and provide the following comments:

Draft Plan of Subdivision

1. The Concept Plan and Conceptual Site Plan (Figure 5 of the Hydrogeological & Terrain Assessment Report prepared by GEMTEC) do not align. As outlined in the recommendations of the GEMTEC report, septic systems should be in front yards /side yards of each lot to reduce the potential for insufficient setbacks between lots. Well locations should also be indicated. Please update the Concept Plan and ensure it reflects the technical recommendations on all reports and demonstrates necessary setbacks can be achieved for wells and septic systems within lot, between lots, and to existing adjacent lots/systems/wells
2. The Schedule of Areas and Lot Frontage Table should break down the lots/blocks and identify proposed uses (Stormwater Management Pond, Open Space). Please add a column to the table to include this information.

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Planning Rationale

3. The Hydrogeological & Terrain Analysis Report prepared by GEMTEC, dated November 13, 2025, references the proposed 13 lot Subdivision is unable to support Additional Residential Units (ARU) based on the septic impact assessment. Notwithstanding By-law 2023-1841, additional Hydrogeological Assessments are required if septic loading is proposed. Please advise how this will be addressed/implemented (see comment 5).
4. Please explain how the Environmental Development Envelopes will be implemented and enforced during site build-out, and how compliance will be maintained over time, including future homeowner alterations. This should be addressed comprehensively within the Planning Rationale (see comment 5).
5. The Planning Rationale (or supplemental document) should include a table that consolidates all technical and mitigation recommendations resulting from the final/approved technical reports and agency and/or peer review comments. The implementation pathway/details should also be proved in a column. This will ensure all measures that must be taken to ensure policy conformity and protect human health and welfare are consolidated and clearly documented and implementation tools and pathways are understood.
6. Further to the comment above, it is recommended that all long-term mitigation measures and development restrictions stemming from technical studies should be captured in a 'Homeowner Manual' supplied to future residential property owners and forming part of the Subdivision Agreement. The use of this tool is subject to local municipal support, and its development can be a condition of Draft Approval.

Hydrogeological

7. The GEMTEC report notes that groundwater is hard and water softening treatment systems will be required. Please assess expected volumes of wash water from these systems and the proposed methodology for disposal of the wash water in

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light of potential impacts to, and limitations of, proposed septic systems and any related sizing or design considerations.

Stormwater Management & Drainage

8. The County has received a public comment regarding drainage concerns affecting a neighbouring property. It is recommended that the Applicant consult with both the County and Township Roads Authorities to assess and determine the scope of any potential issues and roles and responsibilities related to addressing any insufficient outlets and/or conveyance pathways. This should include dialogue with the neighbour, a water balance assessment, and confirmation of sufficiency of the outlet and legal entitlements to convey, as deemed necessary/applicable.

Thank you for providing us with an opportunity to comment on this updated submission. The next submission should address every one of the comments or issues noted above, to ensure the effectiveness and consistency of the next review. A cover letter must be included that states how each agency comment was addressed. We have provided further instructions on updated submissions on the covering status letter.

Please let me know if you have any questions.

Thanks,

Koren Lam
Senior Planner
Lanark County

Cc: Forbes Symon, Jp2g, Planning Consultant for Township of Lanark Highlands
Mike Dwyer, Lanark County

Conservation Partners Partenaires en conservation



25-LH-SB

March 3, 2026

Koren Lam
County of Lanark
99 Christie Lake Rd.
Perth, Ontario K7H 3C6

Dear Ms. Lam:

**Re: 09-T-25004 – Easton’s Subdivision
Lot 16, Con 6, Township of Lanark Highlands (Lanark)
GALBRAITH RD
1126432 Ontario Inc**

The Mississippi Valley Conservation Authority (MVCA) has been in receipt of the following documents for review:

- *Draft Plan of Subdivision* (Callon Dietz Inc., no date);
- *Environmental Impact Statement (EIS)* (Gemtec, Sept 11, 2024)
- *Servicing Options & Preliminary Stormwater Management Report* (Tatham Eng, Nov 18, 2025)
- *Geotechnical Investigation* (Gemtec, Apr 3, 2024)
- *Hydrogeological Investigation & Terrain Analysis Report* (Gemtec, Nov 13, 2025)

We have reviewed the above reports in the context of the following:

- *Section 3.6 Sewage, Water and Stormwater, & Section 5.2 Natural Hazards of the Provincial Planning Statement (PPS, 2024) under Section 3 of the Planning Act;*
- *The Conservation Authority “Prohibited Activities, Exemptions and Permits” regulation 41/24, Section 28 of the Conservation Authorities Act;*
- *The Mississippi-Rideau Source Protection Plan (2014, revised 2022)*

PROPOSAL

According to the information provided, the application proposes a plan of subdivision to develop the 10.5 ha site with 13 single detached dwelling units.

PROPERTY CHARACTERISTICS

It is our understanding that stormwater is ultimately discharged to the Clyde River more than 2 km west of the subject property. A review of available mapping did not identify any on-site features within the scope of MVCA's review.

REVIEW

Environmental Impact Statement (EIS)

The EIS did not identify any on-site features within the scope of MVCA's review.

Stormwater Management Plan

The conceptual SWMP has been reviewed by MVCA's Engineering team, with a focus on stormwater quantity management and any potential flooding and erosion impacts on receiving watercourse(s), and ultimately the Clyde River.

The stormwater management criteria for the subject site includes controlling the post-development peak flows to the pre-development rates for all storms up to and including 100-year storm events. Stormwater runoff, from most of the site, will be directed to the dry SWM facility through the road and driveway ditches, then conveyed to the existing storm sewer on Galbraith Road before ultimately discharging to the Clyde River.

Refer to the attached technical review memo for MVCA's review of the SWMP.

Mississippi-Rideau Sourcewater Protection

No areas or matters of significance under the Mississippi-Rideau Source Protection Plan have been identified.

MVCA ONTARIO REGULATION 41/24 (Regulatory)

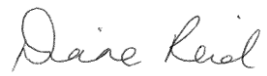
At this stage in the process, we are not aware of any works that require written permission from MVCA.

RECOMMENDATIONS AND CONCLUSIONS

Prior to moving forward, MVCA recommends that the proponent address all recommendations in MVCA's review of the Stormwater Management Plan, attached.

If you have any questions, please contact the undersigned.

Yours truly,

A handwritten signature in cursive script that reads "Diane Reid".

Diane Reid
Environmental Planner

cc. Forbes Symon, Township of Lanark Highlands, email
Dayna Edwards, Agent, email

To:	Diane Reid, Environmental Planner
From:	Jane Cho, Water Resources Engineering Intern Alana Perez, Water Resources Engineer Rikke Brown, Water Resources Engineer
RE:	SWM Engineering Review of the Draft Plan of Subdivision Application for Middleville Subdivision, Township of Lanark Highlands, Lanark County
MVCA File No.:	PLHSB-2
Munic. Ref. ID.:	09-T-25004
Date:	February 13, 2026

Mississippi Valley Conservation Authority (MVCA) was circulated the following reports regarding the above Draft Plan of Subdivision application:

- Middleville Subdivision Servicing Options and Preliminary Stormwater Management Report, prepared by Tatham Engineering Limited, dated November 18, 2025,
- Geotechnical Investigation, Proposed Easton Subdivision, Village of Middleville, prepared by GEMTEC, dated April 3, 2024, and
- Hydrogeological Investigation & Terrain Analysis, Proposed Subdivision – Galbraith Road, Lot 16, Concession 6, and Part of Lot 42 & 37 – 40 Reg. Plan 1490, prepared by GEMTEC, dated November 13, 2025.

The above documents were reviewed with a focus on risks associated with natural hazards and any potential impact on the receiving watercourse—the Clyde River. This memorandum highlights key observations and comments for consideration by the approval authority.

Location

The site is approximately 10.5 ha in size and is located east of Concession Road 6D Lanark and west of Galbraith Road in the Township of Middleville. The proposed development includes 13 residential dwellings, a new internal local road with two new entrances from Galbraith Road, and a dry stormwater management facility.

Stormwater Control Criteria

The stormwater management criteria, as discussed during a pre-consultation meeting with the Township of Lanark Highlands and Lanark County, require control of post-development flow rates up to and including the 100-year storm event to pre-development levels.

During the pre-consultation, the County confirmed that a water balance is not required for the

development but requested a closed-circuit television (CCTV) inspection of the existing storm sewers on Galbraith Road. As followed by the CCTV inspection, the existing storm sewer is generally in good condition and a maximum discharge flow rate of 25 L/s from the subdivision is recommended during the 100-year storm event.

Servicing and Stormwater Management Report Summary

Existing conditions: The site consists of existing pasture lands. Runoff from the site sheet drains north to south discharging into a tributary of Clyde River and a series of private man-made ponds on the southwest side of Concession Road 6D Lanark, north of Wolf Grove Road. There are two existing outlets based on the existing condition catchment areas:

- **Outlet 1:** Runoff from Catchment 101 (7.69 ha), which is located in the east portion of the site, drains overland into an existing cattle pond in the southeast corner of the site and flows through the neighboring site to a 450 mm diameter CSP road crossing culvert on Concession Road 6D Lanark and eventually to a tributary of Clyde River. Runoff from the site does not drain to the existing storm sewer under existing conditions. Runoff within the Galbraith Road west ditch captured by DICB1 drains to a storm sewer on Galbraith Road into a tributary of Clyde River.
- **Outlet 2:** Runoff from Catchment 102 (2.31 ha), which is located in the southwest portion of the site, drains overland to the west and the southwest boundary of the site, and across Concession Road 6D Lanark via a 300 mm diameter CSP culvert and a 300 mm diameter HDPE culvert, eventually discharging into Clyde River.

An external drainage area (approximately 7.6 ha) along Galbraith Road was reviewed to understand the design flow and hydraulic capacity of the existing storm sewer on Galbraith Road.

Proposed stormwater management: The site is proposed to be serviced by the proposed internal road and ditches directed to the dry SWM facility.

- **Outlet 1:** The proposed roadside ditches (0.5 m flat bottom grassed swales) and a 10.0 m wide drainage easement extending from the internal road will convey runoff from Catchment 201 (7.69 ha) to the dry SWM facility. The recommended controlled flow rate from the site to the existing storm sewer on Galbraith Road is 25 L/s during the 100-year storm event based on an analysis of the existing storm sewer system. The dry SWM facility will be designed with an impermeable liner. Overflow will be directed to Galbraith Road.
- **Outlet 2:** Storm Catchment 102 (2.31 ha) will remain unchanged.

Post-development conditions: The proposal for the site includes the development of 13 residential lots. Under post-development conditions, stormwater runoff from most of the site will be conveyed to the dry SWM facility via the road and driveway ditches and connected to the existing storm sewer on Galbraith Road, ultimately discharging into Clyde River.

- **Outlet 1:** The dry SWM facility can attenuate the 2-year through 100-year post-development peak flows below the existing peak flows, as well as below 25 L/s, the available capacity in the existing storm sewer.

- Outlet 2: Unchanged.

Observations

The following matters are noted from review of the submission:

1. Proponent drawing(s) show:
 - a. Two pre-development drainage areas: Catchment Area 101 and Catchment Area 102.
 - b. Two post-development drainage areas: Catchment Area 201 and Catchment Area 102.
 - c. External drainage areas: Runoff from EXT1 to EXT5 conveyed to the existing storm sewer system along Galbraith Road.
 - d. Block 14 is designated for a stormwater pond.
2. Proponent pre-development flows at Outlets 1 and 2 are 0.267 m³/s and 0.110 m³/s for the 100-year 24-hr SCS Type II storm event.
3. Preliminary post-development peak flows using Visual OTTHYMO model at Outlets 1 and 2 are 0.344 m³/s and 0.110 m³/s for the 100-year 24-hr SCS Type II storm event, respectively.
4. To achieve the target flow release rate at Outlet 1, an approximate storage of 1,997 m³ is required on-site in the dry pond during the 100-year storm event.
5. The proponent proposes to provide 2,139 m³ of available storage plus 0.3 m freeboard in the dry SWM facility.

Comments

1. Section 7 in the Servicing Options and Preliminary Stormwater Management Report (SWM Report) mentions a pre-consultation meeting with the Township and the County on April 9, 2025, during which the approach to drainage and SWM and the need for a water balance was discussed. Please provide the meeting minutes from this discussion.
2. The SWM Report and the Hydrogeological Investigation & Terrain Analysis both mention the recommendation for an impermeable liner for the SWM facility (Section 7.6.3 of the SWM Report, Section 6.3 and others of the Hydrogeological Report). However, it is not clear the origin or rationale of this recommendation. It is thought that infiltration benefits could be provided by installing an unlined SWM facility. Please provide further discussion about the rationale for including a liner.
3. The Geotechnical Investigation describes the site as a layer of silty sand/sand and silt below the topsoil, based on the subsurface conditions encountered in 13 test pits on-site. Appendix A of the SWM Report describes Catchments 101 and 102 as sand loam, based on Detailed Soil Survey Reports for Ontario and the MTO Drainage Manual (1997), leading to a Curve Number

(CN) of 49 for the pasture area. It should be assumed that the on-site collected samples would be more accurate compared to soils maps. Were the geotechnical results considered when selecting the CN for the catchment areas? How would this impact the CNs and the subsequent calculations and results, including the size of the SWM pond?

Comments to Consider in Detailed Design

1. Low Impact Development (LID) measures should be considered where bedrock elevations and groundwater clearance allow, considering the soil types found on-site allow for good infiltration. This recommendation is included in the SWM Report in Section 2, point 3.6.8c) *minimize erosion and changes in water balance including through the use of green infrastructure* and point 3.6.8f) *promote best practices, including stormwater attenuation and re-use, water conservation and efficiency, and low impact development.*
2. Provide an erosion and sediment control (ESC) plan that includes the frequency of inspections during normal and storm events, timelines for repairs, and that the contractor should have materials on-site to make updates to the ESC measures as needed. The ESC plan should be a living document that can be updated as conditions change.

Review completed by:

Jane Cho, EIT
Water Resources Engineering Intern

Alana Perez, P.Eng.
Water Resources Engineer

Rikke Brown, P.Eng.
Water Resources Engineer



MRSSO comment for 09-T-25004 Easton's Subdivision

From Eric Kohlsmith <eric.kohlsmith@rvca.ca>

Date Wed 2026-03-04 6:49 AM

To Lanark County Planning <planning@lanarkcounty.ca>

Cc Koren Lam <klam@lanarkcounty.ca>; 'Brent Easton' <brent.easton13@gmail.com>; 'dayna@q9planning.com' <dayna@q9planning.com>; 'planningadm@lanarkhighlands.ca' <planningadm@lanarkhighlands.ca>

1 attachment (144 KB)

26LH001L_MRSSO comment_09-T-25004.pdf;

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

Please find attached our comment for application 09-T-25004.

Regards,

Eric

Eric Kohlsmith | Regulations Inspector | Mississippi Rideau Septic System Office
10970 Highway 7 | Carleton Place | Ontario K7C 3P1
t. 613 253 0006 ext. 256 | m. 613 913-7570 | eric.kohlsmith@rvca.ca



File: 26LH001L
Application: 09-T-25004

March 4, 2026

Planner
Lanark County
99 Christie Lake Road
Perth, ON K7H 3C6

Dear Planner:

Re: 09-T-25004 – Easton’s Subdivision, Plan of Subdivision for Lot 16, Concession 6, Township of Lanark Highlands, 2236 Gailbraith Road.

The Mississippi Rideau Septic System Office (MRSSO), as requested, reviewed the report entitled “Hydrogeological Investigation & Terrain Analysis Proposed Subdivision – Galbraith Road, Lot 16, Concession 6, and Part of Lot 42 & 37- 40 Reg. Plan 1490, Geographic Township of Middleville, Lanark County, Ontario” project number 100227.111, dated November 13, 2025, prepared by GEMTEC.

The proposed residential subdivision is 10.5-heactares consisting of 13 residential lots serviced with on-site sewage systems and water supply wells. The impact of on-site sewage systems on the ground water aquifer was considered using the provincial guideline “D-5-4:Technical Guideline for Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment and the Ottawa “Hydrogeological and Terrain Analysis Guidelines” dated March 2021”. This Guideline uses the Ontario Drinking Water Objective (ODWO) of 10mg/L of nitrate-nitrogen as an indicator of groundwater impact potential. Based on the assessment completed, the proposed 13 lot residential subdivision yields a nitrate-nitrogen concentration of 9.92 mg/L.

Given the proposed development and site conditions, our office provides the following comments/advice that may be considered:

- Individual water supplies (i.e. wells) and sewage disposal systems are owned, operated and managed by the owner of the property upon which the system is located.
- MRSSO supports the general layout of sewage systems located in the front or side yard, opposite of wells proposed in the rear or side yards. This orientation places wells generally upgradient from sewage systems or cross gradient.
- Sewage system designs shall be based on site specific investigations to evaluate the suitability of local conditions on each lot. All sewage systems shall be designed, constructed and operated according to Part 8 of the Ontario Building Code (OBC) and applicable law.
- Based on the results of the D-5-4 impact assessment, GEMTEC identifies that “additional hydrogeological assessments are recommended if adding septic loading is proposed, e.g., addition of secondary dwelling units”. Given the increase in secondary dwelling units within the region, considerations should be given to notifying homeowners of the potential limitation or restriction to additional residential dwelling development on individual lots.



- Homeowners must be advised that onsite sewage systems installed using a Level IV (formerly tertiary) treatment system or Building Materials Evaluation Committee (BMEC) system require mandatory maintenance agreements and sampling.
- Level IV treatment systems may benefit the homeowner, depending on site-specific conditions, as the overall amount of fill and area is reduced compared to conventional Class 4 sewage systems (Absorption Trench and Filter Media). This reduction is permissible as the effluent is pre-treated before entering the soil.
- Sewage system approvals are required prior to the issuance of Building Permits

Implementation of recommendations from the Hydrogeological Assessment and Terrain analysis report, that exceed the OBC minimum requirement for sewage systems (30 m setback from drilled wells) could be enforced if they are considered applicable law as provided in *Division A, 1.4.1.3 of the Ontario Building Code*.

In conclusion, based on the "Hydrogeological Investigation & Terrain Analysis Proposed Subdivision – Galbraith Road, Lot 16, Concession 6, and Part of Lot 42 & 37- 40 Reg. Plan 1490, Geographic Township of Middleville, Lanark County, Ontario" project number 100227.111, dated November 13, 2025, prepared by GEMTEC, site conditions are such that, the proposed lots can be serviced by on-site sewage systems meeting the requirements of D-5-4, the Ontario Building Code and applicable law.

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

Yours truly,

A handwritten signature in black ink, appearing to read "E. Kohlsmith".

Eric Kohlsmith | Septic Inspector | Mississippi-Rideau Septic System Office | 613 253-0006 |
eric.kohlsmith@rvca.ca

cc. Township of Lanark Highlands
Owner – 1126432 Ontario Ltd.
Agent/Applicant – Dayna Edwards Q9 Planning + Design

Environmental Impact Study Peer Review

Item: Peer Review of Environmental Impact Study
Lanark County Plan of Subdivision File: 09-T-25004
LGL File TA9443-04

Location: Part of Lots 16, Concession 6
Township of Lanark Highlands, Lanark County

Author: Beverly Saunders
Heather Polan
Madhupreeta Muralidhar

Date of Review: March 5, 2026

Documents Reviewed

- Environmental Impact Study (EIS) by GEMTEC Consulting Engineers and Scientists Limited dated September 11, 2024
- Planning Justification Report (PJR) by Q9 Planning + Design Inc., dated November 14, 2025.
- Provincial Planning Statement, 2024
- Lanark County Sustainable Communities Official Plan and Schedules, 2012
- Township of Lanark Highlands Consolidated Official Plan and Schedules, 2024
- Township of Lanark Highlands Zoning By-Law No. 2003-451 and Schedules

Project Understanding

It is our understanding the landowner is proposing a plan of subdivision consisting of 13 lots on the subject parcel and that the subject property is currently vacant. We further understand no Official Plan Amendment or Zoning By-Law Amendment has been requested at this time. The below noted comments reflect this understanding.

Natural Heritage Feature Review

The Subject Property is located within or directly adjacent to the following:

- Significant Woodlands within Canadian Shield (west of the subject property, as identified on Schedule C of Lanark County Sustainable Communities Official Plan)
- Confirmed (Eastern Meadowlark and Bobolink) and potential habitat (Species at Risk bats) for Endangered and Threatened species and species regulated under the *Endangered Species Act* and the *Migratory Birds Act*
- Significant Wildlife Habitat for Deer Yarding Areas and Cervid Movement Corridors

Recommendations

Based on the peer reviewers' assessment of the submitted EIS and our understanding of the policy context (see Background Information below), we would have no objection to the approval of the application from a natural heritage perspective, subject to the incorporation of the following Draft Plan conditions:

1. Submission of an EIS addendum addressing the technical comments within this review to the satisfaction Lanark County and Township of Lanark Highlands
2. Submission of all required MECP permit requirements (bobolink, meadowlark, and potential bat habitat) and the implementation of these requirements via detailed design drawings, construction management plans, and/or the subdivision agreement to the satisfaction of the County, Township, and MECP.
3. Submission of a compensation plan which includes a planting, management, and monitoring plan and schedule for grassland breeding bird habitat compensation to the satisfaction of MECP, Lanark County, and Township of Lanark Highlands.
4. The registration of a conservation easement over the proposed compensation site to ensure it's management and protection in perpetuity or an equivalent protection measure to the satisfaction of Lanark County and the Township of Lanark Highlands.

Technical Comments

The peer reviewers have identified technical comments related to the submitted EIS which must be addressed to ensure accuracy and policy consistency/conformity. Key recommendations and requirements which are anticipated to have an impact on the development plan are noted first, followed by technical comments to ensure the EIS accurately references up to date requirements and policy conformity obligations.

Key Commentary:

1. The EIS must evaluate the study area (i.e., the subject property and 120m area around it) for natural features such as Significant Wildlife Habitat and endangered and threatened species and their habitat. Please update Section 4.0 Natural Heritage Features of the EIS to include the full study area (including adjacent lands) for all Significant Wildlife Habitat and endangered and threatened species habitat assessments and not just the subject property. Please confirm whether additional mitigation measures are recommended for the protection of adjacent features.
2. The trees on-site may represent habitat for SAR bat species and additional surveys to characterize the habitat may be necessary prior to their removal to meet the current legislative obligations under the Endangered Species Act and/or the future Species Conservation Act. The authors recommend confirmation of legislative obligations with MECP with respect to bats and that these correspondences be communicated with the next submission to ensure their implementation.
3. Given the limited size of the proposed lots (appr. 1-1.5 acres or less) and the limited controls available/proposed for the management of the proposed lots, it is the peer reviewers' opinion that habitat for Bobolink and Eastern Meadowlark on the subject lands are unlikely to be maintained post construction of residential units and the road. As such, it is recommended that the EIS mitigation recommendations be updated to account for/consider complete habitat losses (not just building envelopes). This will likely result in re calculation of compensation requirements and updates to proposed mitigation measures.
4. Please update the EIS to remove the option for payment for compensation in accordance with Bill 5 transitional policies (<https://ero.ontario.ca/notice/025-0380>). Please further clarify the compensation requirements for the project in accordance with these rules (or the legislation applicable at the time of the EIS addendum submission, if the Species Conservation Act has passed at that time).
5. Please note, if the Species Conservation Act ultimately removes Bobolink and Eastern Meadowlark from the regulated species list, the peer review team would still recommend the protection of the breeding bird habitat as Significant Wildlife Habitat (given the amount of lands adjacent to the property which may serve the same function and the prevalence of nests on the site). Under these circumstances, a compensation plan is still recommended to ensure no negative impact from the development. We recommend the EIS be updated to clarify what the compensation should look like in this scenario, in accordance with up to date research on the habitat and species being protected.

Technical Commentary (ensuring EIS accuracy):

6. The EIS references Provincial Policy Statement 2020. Please update it to reference Provincial Planning Statement 2024.
7. Please be advised that Section 8.4.5.4 of the Township of Lanark Highland Official Plan provides policies for a full EIS. In consideration these policies and the PJR, which includes findings from the Geotechnical Study, Hydrogeological Investigation & Terrain Analysis and Preliminary Stormwater Management Report, it is recommended that the EIS be updated to summarize the full development plans (to the level known) and to include language confirming the development plans with applicable policy and legislative requirements.
8. Please update the EIS to include currently listed species within the SAR list and confirm if additional mitigation measures are required to address these additional species.
9. Please include recommendations in the EIS around rescreening the property for SAR prior to site development, to confirm compliance with legislative obligations at the time of construction.
10. The characterization of the Bobolink/Easern Meadowlark Habitat must consider adjacent lands to confirm it's overall size. Please update the EIS to consider this in the overall habitat size calculations.
11. Please update section Section 3.3 of the EIS to include relevant information for groundwater features within the study area and potential impacts to natural features as a result (if any).

The peer reviewers are of the opinion that the above comments will not affect the lot configuration, subject to the location of an appropriate site for compensation to meet compensation recommendations and requirements. As such, it is our opinion these comments can be addressed through the recommended condition of draft plan approval.

Background information (for information purposes only)

Policy Context Review

Below represents our understanding of the policy context applicable to the subject Plan of Subdivision application:

- The PPS requires no negative impact to the feature or its ecological function be demonstrated for development of lands within and adjacent (within 120 metres) to significant wildlife habitat and significant woodlands within ecoregions 6E and 7E (Section 4.1.5 and 4.1.8).
- The PPS prohibits development in threatened and endangered species habitat except in accordance with applicable provincial and federal legislation (section 4.1.7).
- Bill 5 has removed the ability to pay into a conservation fund for compensation under the ESA. The Species Conservation Act is pending but has not yet passed.
- The Significant Wildlife Mitigation Tool indicates that Eastern Meadowlark and Bobolink habitat are excluded from the indicator species for Open County Brid Breeding Habitat (#32) as they are protected and listed under the ESA. If they were delisted, it is the peer reviewers opinion these species should and would need to be incorporated into these criteria and that the site would therefore be considered Significant Wildlife Habitat and protected accordingly.
- Section 5 of the Lanark County Sustainable Communities Official Plan 2025 Consolidation includes policies on natural heritage features. Section 5.5.2 outlines policies for Endangered or Threatened Species Habitat. These policies state that development and/or site alteration within significant habitat is prohibited but may be permitted within 120 metres if an EIS demonstrates that there will be no negative impacts.
- Policy 5.5.2.2 of the Lanark County Sustainable Communities Official Plan states that approval authorities shall, subject to federal or provincial legislation, refuse development applications where the development review process, which can include an Ecological Site Assessment, confirms the existence of

significant habitat of endangered or threatened species as approved by the Ministry of Natural Resources.

- Section 5.5.4 and 5.5.5 provides policies on development and/or site alteration within 120m of Significant Woodlands and Significant Wildlife Habitat. These policies do not require an EIS for development and site alteration provided the Significant Woodlands are located on the Canadian Shield but require an assessment of no negative impact for Significant Wildlife Habitat.
- Schedule C of the Township of Lanark Highlands Official Plan Site Plan identifies Significant Woodland adjacent to the subject property on the west side;
- The Township of Lanark Highlands Official Plan (Section 5.3.1) includes policies for development within and adjacent to Habitat for Endangered or Threatened Species. These policies prohibit development and/or site alteration within the identified habitat unless an environmental impact statement demonstrates no negative impacts on the natural features or associated ecological function. Development of adjacent lands that are within 120m will require an EIS to determine no adverse impact.
- The Township of Lanark Highlands Official Plan (Section 5.3.4) includes policies for development within and on adjacent lands within 120m of Significant Wildlife Habitat. These policies require an EIS to assess the impact of development and site alteration and to demonstrate no negative impact on the natural features or ecological functions within the identified habitat.
- Section 8.4.5.4 of the Township of Lanark Highlands Official Plan sets out policies for a full Environmental Impact Statement.



February 13, 2025

Project Number: 220484-73

Alison Merkley

Lanark County

99 Christie Lake Road

Perth, ON K7H 3C6

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Technical Review Memorandum

**Hydrogeological Investigation and Terrain Analysis
Lot 16, Con 6, and Part of Lot 42 & 37-40 Reg Plan 1490
Township of Middleville, Lanark County, Ontario
GEMTEC dated: November 13th, 2025**

At the request of Lanark County, BluMetric Environmental Inc. (BluMetric®) has prepared the following peer review comments for the above referenced report regarding the general requirements set out in the *Scoped Hydrogeological Report Requirements for Development by Consent* and the *Consultant's Screening Checklist for Hydrogeological Reports* (MVCA & RVCA, 2013, 2015), MECP Procedures D-5-4 and D-5-5 (1996a, 1996b), and the *Ontario Drinking Water Quality Standards* (O. Reg. 169/03).

Based on the documentation provided, it is understood that the proposed development involves the creation of thirteen (13) lots ranging in size from 0.6 to 1.6 hectares

The intended land use for the subdivision is residential, with single-family dwellings planned. The new proposed residential development will be serviced by an onsite well water supply and wastewater sewage system as municipal servicing is not available.

BluMetric held a pre-consultation meeting with GEMTEC on August 29, 2024.



Hydrologic Setting

- Ground surface at the Site is described as gently sloping to the south-east, with topography ranging from 200 to 195 metres above mean sea level (m a.s.l.).
- Shallow, local groundwater and surface water is expected to flow towards the southeast and post development into a designed stormwater pond.

Hydrogeology and Aquifer Sensitivity

- Geological mapping indicates indicate that the Site is underlain by glacial till (Silty Sand) and shallow bedrock to the south-east, as listed by the Ontario Geological Survey (OGS).
- The site is not located in an area of known or inferred karst.
- A review of the MECP Water Well Information System (WWIS) identified 55 drilled bedrock wells within approximately 500 m of the proposed severance lots.
 - Overburden thickness ranges from 0 m to 28.3 m.
 - Well yields range from about 3.8 to 113.6 L/min.
- Two (2) nearby properties were interviewed and sampled.
- 13 test pits were completed. The overburden is described as relatively thin with the bedrock encountered at depths varying from between 0.6 and 2.6 metres. The test pits generally encountered a thin layer of topsoil (all test pit locations), underlain by a layer of silty sand/sand and silt (test pits 24-01, 24-04 to 24-06, and 24-08 to 24-11 and 24-13), which overlies the bedrock surface. A layer of clayey silt was encountered at test pits 24-01 and 24-08 in between the silty sand layer and bedrock.
- GEMTEC identifies the site as **hydrogeologically sensitive**.
- Background nitrates were measured in the targeted aquifer, GEMTEC monitored the nitrate levels for more than a year and in general was fairly stable with some spatial variation.
 - Data suggests that the source of nitrate in groundwater is likely related to both on-site and off-site agricultural land use, and that spatial variability is related to groundwater flow as well as nitrate loading and dilution. Long-term water level records from on-site test wells and private well PW 2148 does not show a rapid response suggesting that there is not a direct connection between the ground surface and the bedrock supply aquifer, which is interpreted as providing a reduced potential for rapid nitrate or bacteria transport to the aquifer.
 - The background nitrates were carried forward into the impact concentrations.

- Calculations met the D-5-4 guidelines.
- ***BluMetric agrees with this conclusion***
- All test wells and carried recommendations include additional protective measures, including increased setbacks between wells and septic systems (30 m) and the installed extended well casing of 24.4 m.
 - ***BluMetric agrees with this conclusion and supports the implementation of the recommended protective measures.***

D-5-4 Individual on-site Sewage Systems

- Thirteen (13) lot subdivision do not meet the lot size criteria in MECP Procedure D-5-4 (Step 1).
- The site has been assessed using Step 3 in MECP Procedure D-5-4 (Nitrate Dilution Calculations).
- Nitrate attenuation calculation, in general is considered conservative, additionally the inclusion of background concentrations is considered a conservative approach.
- A conceptual lot development plan is provided in Figure 5 includes proposed 30 m setback from drilled wells.
 - ***BluMetric concurs with the methodology and satisfactory results employed for impact assessment.***
 - ***BluMetric concurs with the proposed placement of the private well and septic beds.***

D-5-5 Well Water Quantity

- A 6-hour pumping tests or equivalent were conducted at all three test wells (TW24-01, TW24-02 and TW24-03).
- Pumping rates ranged from 15-68 l/min.
- Each of the test wells had casings extended into bedrock to a depth of 24.4 m BGS.
 - **The extended casing recommendation of 24.4 mbgs is carried forward for all future well installation.**
 - **All newly constructed drinking water wells should be drilled to a final depth of 109 metres below ground surface to provide additional wellbore storage, particularly where low well yields are encountered.**

- Even though significant drawdowns occurred during each pumping test, recovery of each test was fairly rapid and based on all of the observations and calculations GEMTEC states "It is GEMTEC's opinion that the long term safe well yield of the onsite test wells, and future wells constructed in accordance with the well construction recommendations, is greater than the demand of the proposed development. Accordingly, GEMTEC has no concerns with long term sustainability of the proposed water supply aquifer or interference with neighbouring private wells, based on the available data."
 - ***These results meet MECP Procedure D-5-5 requirements for individual domestic supply wells.***

D-5-5 Well Water Quality

- Two (2) water quality samples were collected, one after half and one at the end of the three tests. The sampled groundwater was odourless and clear. Water quality was consistent between all samples.
- No health-related exceedances were observed under the Ontario Drinking Water Standards, Objectives and Guidelines (ODWSOG). Operational guideline exceedances were noted for hardness.
- Bacteria (total coliforms) was detected in samples collected from TW24-01, and chlorine residual was 0 mg/L at the time of collection.
 - Re-chlorination was completed and bacteriological parameters analyzed were non-detectable, although it is noted that laboratory qualifiers were applied to total coliform and e.coli indicating "*Greater than 200 CFU background flora present. This may interfere with target colony growth and ability of analyst to count discreet colonies. The target colonies may be under-represented.*"
 - Chlorination procedure appears to be non-typical.
 - All other wells show no detections of any total coliform and e.coli and it is GEMTECS opinion that based on the water quality sampling completed, the groundwater quality is considered to be acceptable from a bacteriological perspective.
 - ***BluMetric concurs with this assessment***
- Overall, groundwater quality was good, with parameters compared against the Ontario Drinking Water Standards, Objectives, and Guidelines. Exceedances were noted for colour, hardness, and iron (each surpassed their respective aesthetic or operational objectives). Recommendations were provided regarding appropriate home treatment units and other mitigation measures, including:

- Hardness: Install a water softener to reduce scaling effects.
- Manganese: above the AO but below treatability limits, Greensand filters are recommended.
- Water treatment recommendations include the installation of a standard-grade residential water softener, and green sand filters. An ultraviolet (UV) disinfection unit may be considered as an optional measure, although bacteriological analysis did not detect the presence of bacteria.
 - ***BluMetric concurs with the conclusion that the bedrock aquifer is capable of supplying safe drinking water of acceptable quality, and agrees with the recommendations for treatment and other mitigation measures.***
- The well construction included a casing depth of 24.4m.
 - ***This aligns with the site's classification as hydrologically sensitive.***

Conclusions and Recommendations

BluMetric supports the determination that the site is appropriate for the development of a 13 lot subdivision. Provided that the hydrogeological recommendations outlined in this report are followed, and the lot schematic of Figure 5 is implemented, the proposed development is expected to be safe and sustainable over the long term.

Closure

If you have any questions relating to BluMetric's review, please do not hesitate to contact the undersigned.

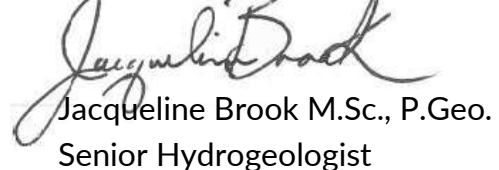
Respectfully Submitted,
BluMetric Environmental Inc

Peer Reviewer


Michael Melaney M.Sc., P.Eng.

Manager, Water Resources and Sr. Civil/Env. Engineer

Senior Reviewer


Jacqueline Brook M.Sc., P.Geo.
Senior Hydrogeologist

Ref: 220484_Middle Subdivision_Ontario.docx

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Ministry of the Environment, Conservation and Parks (MECP). (1996b). *Procedure D-5-5: Technical guideline for private wells—Water supply assessment*. Government of Ontario. Retrieved from <https://www.ontario.ca/page/d-5-5-private-wells-water-supply-assessment>

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Mississippi Valley Conservation Authority (MVCA) & Rideau Valley Conservation Authority (RVCA). (2015). *Scoped hydrogeological report requirements for development by consent in Lanark County* (Version 1.0, July 2, 2015). MVCA and RVCA.

Limiting Conditions

This Memorandum (the “Memorandum”) has been prepared for the exclusive use of Lanark County. This Memorandum is intended to provide a review and offer an opinion based on documents/data/productions provided by Lanark County and obtained from publicly available information sources (the “Information”). The opinions provided by BluMetric in the Memorandum:

Have relied in good faith on the Information provided by others as noted in the Memorandum and: has not independently verified the accuracy or completeness of such Information; have assumed that the Information provided is factual and accurate; must be read as a whole and sections thereof should not be read out of such context; and are based on our professional judgement and are subject to the limitations noted herein.

These limitations apply to the Memorandum. BluMetric agrees that the Memorandum represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Memorandum.

BluMetric Environmental Inc. accepts no responsibility for any deficiency, error, misstatement, or inaccuracy contained in this Memorandum because of omissions, misinterpretations or errors in the documents / productions given to BluMetric Environmental Inc. to review.

Nothing in this Memorandum is intended to constitute or provide a legal opinion. BluMetric Environmental Inc. makes no representation as to compliance with environmental laws, rules, regulations, or policies established by regulatory agencies.

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March 3, 2026

Lanark County
99 Christie Lake Road
Perth, Ontario
K7H 3C6

Attn: Koren Lam

**RE: Easton Subdivision – Hamlet of Middleville
Stormwater Management Peer Review
Jewell Project No.: 240-5539**

Ms. Lam,

Jewell Engineering has completed a review of the stormwater management design for the residential subdivision at 2236 Galbraith Road in the Hamlet of Middleville, Lanark County. The following documents were submitted for review:

- Lanark County Subdivision Application Form
- Draft Plan of Subdivision, prepared by Callon Dietz, dated October 2025
- Conceptual Plan, prepared by Callon Dietz, dated October 2025
- Planning Justification Report, prepared by Q9 Planning + Design, dated November 15, 2025
- Geotechnical Investigation Report, prepared by GEMTEC, dated April 3, 2024
- Servicing Options & Preliminary Stormwater Management Report, prepared by Tatham Engineering, dated November 18, 2025
- Sewer CCTV Inspection Report and Associated Files, dated May 16, 2025

The 10.5 hectare residential development would provide single detached estate homes in the hamlet of Middleville. This development is a single looping street that will have 13 residential lots and a stormwater management block. Site grading changes will be minimized with front yard sloping toward Street A while sides and rear yards will be undisturbed as possible. Stormwater will be conveyed to the stormwater management facility via ditches and culverts.

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Tatham reviewed the existing conditions drainage and identified the drainage patterns can be summarized into two catchments:

- Catchment 101 is the largest at 7.69ha. This catchment drains southeasterly to Galbraith Road and contributes to the storm sewer system along Galbraith Road or to the 450mm cross culvert under Concession Road 6D just west of the intersection. Both drainage routes collect on the west side of Concession Road 6D and enter the small watercourse that short cuts through
- Catchment 102 is south and west of Catchment 101 and drains in a diffuse manner toward Concession Road 6D.

They proposed a stormwater block that is approximately 0.42ha that is immediately upstream of the existing ditch inlet DICB1. Runoff will enter the SWM facility via a grass channel with a bottom width of 2m and side slopes of 3:1 to a maximum depth of 0.5m. Drainage will be routed from Street A through a proposed grassed swale situated within a 10m drainage easement over the west limit of Lot 9. The easement will include a 3m wide maintenance access route. Roadside ditches on Street A will have banks no steeper than 2.5:1 and flat bottom widths of 0.5m.

The pond is designed to receive internal drainage only from Catchment 201 and attenuate the discharge to a rate of 25 L/s in the 100-year rainfall event. This discharge rate is significantly reduced from pre-development conditions to allow the entire 100-year runoff to enter the existing storm sewer. Tatham determined that an available capacity within the storm sewer would be 25L/s.

When the external lands run off uncontrolled to the catchbasins and ditch inlets, the remaining capacity in the storm sewer during the 100-year 24 hour SCS Type II event is 25 L/s. Tatham has proposed a solution that will eliminate overland flow during major events.

In summary, I have no concerns with the proposed SWM design concept at this stage. My detailed review comments are included below.

Tatham identifies the stormwater management plan includes mitigation for water quality. The treatment target is “Enhanced”, which is understood as achieving 80% TTS removal. A dry pond is proposed to meet the MECP Water Quality Storage Requirements where a minimum active storage volume of 136.9 m³ is needed. The water quality active storage (calculated at 112.3 m³) needs to be detained for at least 24 hours. A detention time of 48 hours will be targeted during detailed design. The dry pond is not the only quality feature; the grassed swales throughout the site will also provide varying degrees of quality treatment to remove suspended sediments prior to the runoff entering the pond. The velocity of drainage in the grassed swale during the 25mm quality event is 0.38 m/s, sufficient to assist quality treatment objectives.

While a calculation that would show the combined treatment effectiveness of the pond/swale system was not included, one can conclude it would exceed the target removal rate given that the pond has significantly more than ample active storage on its own.

I have no concern with the water quality approach at this stage. Detailed review comments are included below.

Tatham addressed the questions of mitigation for peak flows, as well as the consideration of LID opportunities and water balance requirements. Tatham concluded that the peak flow could be reduced with the implementation of a SWMF to allow the 100-year event to be conveyed through the existing storm sewer alone. This approach is beyond the norm of Pre to Post, but is still accepted as long as it is feasible. LID opportunities will be explored where possible, specifically ensuring roof drains outlet to pervious areas to promote infiltration. Given the soil classifications in the area, I would agree that the area is suitable for infiltration. The municipality does not require a water balance.

I have no concerns with quantity, LID and water balance.

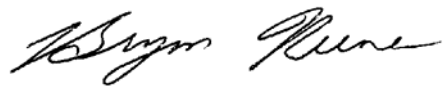
Jewell is satisfied with the general direction of the preliminary stormwater management plan and options. Within the report and calculations Jewell noted some inconsistencies which may change the calculations slightly. It is important that Tatham review the following comments and provide rationalizations or update accordingly during detailed design.

- 1) Ensure that the location of the homes, specifically the front of the house, abides by the grading and catchment plans. The catchment divide should consider the location of the house if all front yards are drained to the street.
- 2) Please elaborate upon the significance of restricting runoff from the site to be entirely conveyed by the storm sewer? In the existing conditions, only flows up to the 5-year would be expected to be conveyed by storm sewer, while the major events would travel overland. Explain why this is a preferred drainage solution.
- 3) The road crossing culvert from approximately Lot 10 to drainage easement has not been sized. Please provide relevant sizing in detailed design submission.
- 4) The emergency weir at an invert elevation of 192.30m has not been sized. Please provide sizing in detailed design submission.
- 5) The asphalt road width is inconsistent. It is listed as 8.5m wide in some contexts, where others the width is 9.5m. This width will directly affect the imperviousness and runoff generation. Please confirm the road width and verify that it is correct in detailed design submission.
- 6) Per GEMTEC's Geotechnical Investigation, there are reported rock outcroppings in the SWM Block. Provide comment on any impact this may have on the SWMF in detailed design submission.

It is understood that some concerns have been expressed regarding the existing storm sewer system that outlets through private property. This is reviewed under separate cover.

If you have any questions, please feel free to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryon Keene". The signature is fluid and cursive, with the first name "Bryon" and last name "Keene" clearly distinguishable.

Bryon Keene, P.Eng.
Jewell Engineering Inc.



March 4, 2026

Lanark County
99 Christie Lake Road
Perth, Ontario
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Attn: Koren Lam

**RE: Easton Subdivision – Hamlet of Middleville
Stormwater Management Peer Review
Jewell Project No.: 240-5539**

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Ms. Lam,

Subsequent to our initial review, comments from a downstream landowner were received and also reviewed by Jewell. The concerns expressed by the landowner relate to existing drainage issues they believe are currently causing damage to their property. They are concerned the proposed development will contribute to further damage.

In our discussion below we refer to the drainage system as a “municipal” system and intend to mean this to include Lanark County, but it is not intended to try to distinguish particular ownership, rather to categorize it as non-private.

The municipal storm sewer outlets southwest of Concession Road 6D into a tributary of Clyde River. The tributary flows through a series of on-line ponds thought to have been excavated historically. The tributary flows southward through the driveway for 4248 Wolf Grove Road and then through a culvert under Wolf Grove Road. The total distance of the route through private property is approximately 250m (from Google Maps). The landowner describes this route as a ‘water easement’. Jewell did not review the registry office to confirm if this is a registered easement in favour of the County for drainage, but the landowner states in the report that a registered easement was not found.

The intent of the Jewell review of the drainage concerns presented by the landowner is not to provide a critique of the landowner’s understanding of



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stormwater management principles, legislation or policies. Instead, we have reviewed the report to help provide a summary of the concerns raised and recommend potential actions that can be taken.

Provincial Policies

An email from the landowner alleges that Lanark is proceeding with an application that does not adhere to PPS 3.6.8, which directs planning authorities to manage stormwater in alignment with “comprehensive municipal plans for stormwater management that consider cumulative impacts of stormwater from development on a watershed scale.” The PPS provides direction to municipalities to undertake a wide range of integrated planning studies that many municipalities cannot undertake of their own accord. In this case, the proposed development lands are within the Clyde River watershed. While a municipally-initiated, watershed-scale study has not been completed by Lanark for the Clyde River watershed, the conservation authority has undertaken such studies that monitor and predict the impacts of development on a watershed scale.

The potential impacts of stormwater from development include:

- a. Flooding
- b. Erosion,
- c. Water quality degradation, and
- d. Reduction in groundwater recharge.

The 2024 MVCA Report Card for the Clyde River shows the Clyde River received excellent scores for surface water quality (phosphorus), forest cover, and groundwater quality (chlorides and nitrates) and good score for wetland cover. In that sense, the cumulative impacts are being monitored by the conservation authority, and the Clyde River watershed is in very good shape. There is no indication of cumulative impacts to surface water quality and the groundwater resource from development. This is very good news for the Clyde River Watershed and its residents.

It is also noted that Clyde River Floodrisk Mapping series issued December 8, 2023 provides a visual display of areas subject to flooding. Map 8 of the series shows the lands west of the subject site and it is evident that the Ouellette lands are not subject to watershed flooding – that is, they are entirely outside of the flood risk area. Floodrisk mapping includes forecasted development per Official Plans. This means, the flooding risk from cumulative impacts of development are considered and are mapped.

It would seem that work undertaken by the conservation authority (with funding from the municipality and other levels of government) has considered the cumulative impacts on a watershed scale and no risk to the Ouellette farm is presented.

Thus, it is concluded that the focus of the complaint is local impact, which is not the subject of the PPS 3.6.8.

Owner's Investigation Report

The concerns allege:

1. There has been a diversion of lands to drain through the tributary that would not naturally drain there. The extent of the diversion and the time of the diversion is not presented. The diversion is equated with the area serviced by the municipal storm sewer.
2. The water easement is 'under stress' and is experiencing damage.
3. The new development would increase this damage.
4. The direct damage is described as erosion.
5. Indirect damage is described as a maintenance obligation to 'prevent downstream problems'.
6. Hydraulic calculations using the continuity equation and Manning's Open Channel Flow equation (Imperial units) were put forward as evidence of scale of the diverted flows.
7. The volume of stormwater was low when purchased by the current owners in 2002, but has 'increased significantly' and is now causing damage.
8. Stormwater management ponds are not adequate to treat stormwater and should be 'heavily criticized'.

The allegations of existing damage are attributed by the landowner to two causes:

- climate change
- diversion of drainage via the storm sewer system.

The first cause – climate change is not within the power of the County to address. Planning for climate change, however, is. Going forward, new infrastructure must be resilient to climate change. Climate change impacts are considered

The second cause is claimed to be the diversion of lands by the storm sewer system. The storm sewer system is situated along the lower portion of Galbraith Road while the majority of the road is drained by open ditches. A review of the surface drainage in the area suggests the lands contributing to the tributary in question are generally consistent with topographic divides. This means the lands contributing to the municipal sewer system is not external to the natural watershed, but as can be seen from the natural topography, is fully within the natural watershed. A diversion of drainage is not the cause.

Timing of the historic changes to the tributary is not known. It is suspected that the original drainage system would have been ditched as the municipality constructed the first roads and

stormwater collected thereby passed through the road via a culvert. The culvert would have been a point source for concentrated flows. The later addition of a storm sewer wouldn't have diverted or added more external drainage or created a new point source. The urbanization of the drainage is suspected to have occurred long before the landowner purchased the property. According to the landowner's own analysis of the precipitation data, climate change impacts may be the cause of the erosion.

Other more recent but significant changes to the tributary were completed by the landowner with the construction of four large online settling ponds.

What can be done to address the existing alleged erosion?

The report claims that the municipal drainage has been diverted into his treatment system and is causing the erosion. But there have not arisen any links to indicate what structural changes have been made in the catchment that could cause this, as discussed earlier. If we are to interpret the landowner's intention with this claim, it is that the erosion can be corrected by diverting the municipal drainage away from his land. Could such a diversion occur and what would be the impact of this? To understand that much more study would be needed than presented here. But a cursory check can be contemplated.

The area contributing to the tributary is roughly estimated to be less than 35ha (see Figure 1). This represents a very small contributing area and would be insufficient to feed a continuously flowing watercourse unless supported by a substantial groundwater source. The landowner notes the presence of a groundwater source to the tributary. Not much is known about the aquifer supporting this spring.

The landowner describes the purpose of the online ponds as a 'runoff management system' that is designed to remove suspended solids and nutrients from stormwater drainage. The treatment system is discussed in detail and appears to include some active aeration. The goal of this system is stated by the landowner to produce 'high-quality water suitable for discharge into the environment.' The discharge point is the municipal ROW ditch where it crosses Wolf Grove Road.

The treatment system itself is described as providing crucial habitat and ecosystem diversity for a long list of species.

Although it is not stated in the report, Jewell assumes the 'runoff management system' was instituted by the owner, not for the treatment of the groundwater discharge that would be considered high quality water, nor for the treatment of municipal drainage that they allege is harming their runoff management system, but must therefore be intended for treatment of agricultural drainage from the landowner's property.

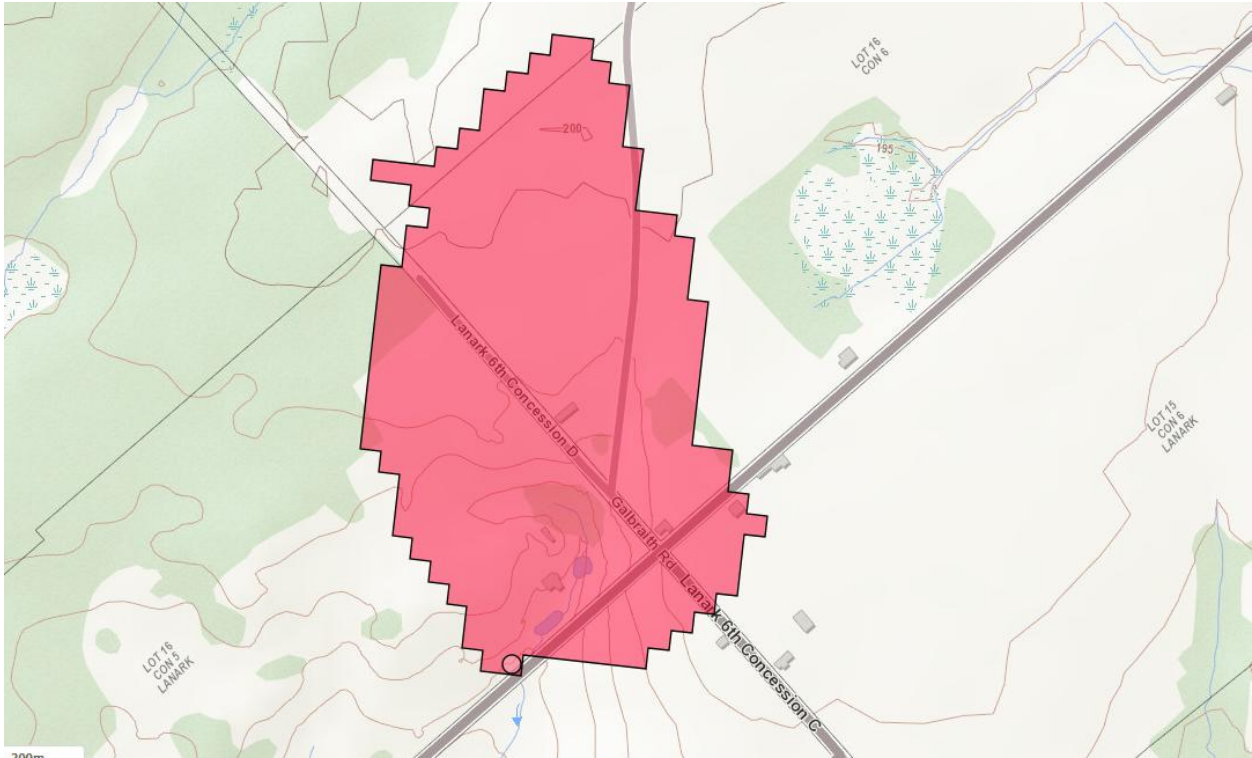


Figure 1: Contributing Area of the Tributary at Crossing of Wolf Grove Road (OWIT)

As such, it is not clear why the treatment would have been placed online since it would introduce contaminated water into the watercourse – the very feature to be protected. Stormwater quality treatment should not be performed online. It is clear that the design and construction of the works were completed with the knowledge of the drainage regime in place at that time and is still in place.

The tributary is reliant upon the surface and groundwater sources. Changes to the contributing area by a diversion of the drainage can also have a negative impact on the watercourse depleting it of its surface water contribution. Not enough is known about the groundwater source to assure a regulator that the water can be safely diverted out of the natural watershed to the tributary. A diversion of existing drainage is not recommended.

Nevertheless, the landowner has expressed they are not a willing host to the municipal drainage and are opposed to any development of lands within the contributing area. While it can be argued that drainage rights already exist through common law, the preferred solution would be to obtain formal drainage rights for the existing drainage.

Lanark County is interested in ensuring all drainage outlets meet the test of a ‘sufficient and legal outlet’. The sufficient outlet term is borrowed from the Drainage Act legislation that would not apply to this situation since no Drainage Act approval is known to exist over this

watercourse. However, the intention is understood. While common law and potentially riparian rights would support your drainage outlet, disputes can only be resolved through the courts, and this is not an effective use of taxpayers' resources.

Instead, granted drainage easements are the preferred approach for municipal drainage over private property.

Drainage from Development

Jewell has reviewed the stormwater management plan for the proposed development and found it to be proactively protective, providing more storage than would be required and resulting in a much-reduced release rate than what would be required to achieve pre-development conditions. Still, minor changes to hydrology will occur.

A significant impact of development is reduction in groundwater recharge. In a rural area with larger lots, this impact will be small and can be mitigated using stormwater management techniques to enhance infiltration. The facility has the opportunity to provide full mitigation of drainage impacts of development.

Although the position of the landowner is that a stormwater management facility is a poor investment, inherently flawed, costly, and should be 'heavily criticized', such a facility provides ample opportunity to enhance infiltration as well as increase evaporation and transpiration (withdrawal of water by vegetation). Contaminants do collect in stormwater management facilities, but do not 'develop' as alleged by the landowner. Well designed stormwater management facilities will collect sediment including contaminants associated with development, and they do require infrequent sediment removal and disposal, just as roadside ditches and catch basins do. There is no magic to a stormwater management pond. They are just better at settling out contaminants than ditches are. The better they do their job, the more they will collect contaminants.

Onsite drainage features can also be adapted to enhance infiltration. The impacts from development can be mitigated on site. The current design provides peak flow mitigation, but not full volumetric mitigation. The erosion allegations would be mostly related to peak flows, but to some smaller degree is influenced by increased volume of runoff.

What then should the municipality do?

One cannot separate out and divert the drainage from the developing lands since this would rob the tributary downstream of the water it needs. Stopping all development is not a solution either, albeit this may be the hoped outcome of some.

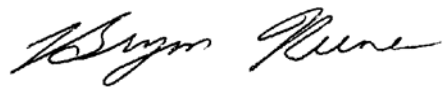
A full water balance analysis can address the volumetric concern. This is a higher level of stormwater management, but can likely be implemented here. However, since the landowner

is already alleging damage is occurring, no amount of reassurance can satisfy a landowner that the new development will not make matters worse. This may still be an unsatisfactory solution for a landowner that is already experiencing concerns.

An enhanced stormwater management plan that provides water balance matching pre-developed conditions will fully mitigate development impacts. This has not been fully presented in the current stormwater management design, but I suspect the design would be adaptable to implement full water balance.

If you have any questions, please feel free to contact the undersigned.





Sincerely,

A handwritten signature in black ink that reads "Bryon Keene". The signature is written in a cursive, flowing style.

Bryon Keene, P.Eng.
Jewell Engineering Inc.

FLOOD HAZARD AND REGULATION MAP CLYDE RIVER CARTE DU RISQUE D'INONDATION ET DE RÉGULATION

LEGEND / LÉGENDE

-  Regulatory Floodplain / La Crue Régulatrice
-  Regulatory Limit / Limite Réglementaire
-  Contours / Courbes
-  Cross Sections / La coupe transversale

Cross Section Number 4417 Nombre de la coupe transversale

Regulatory Flood Elevation (m) 102.10 Niveau de la crue régulatrice (m)

**INDEX CONTOUR INTERVAL 5 METRES
WITH 1 METRE INTERMEDIATE CONTOUR
CGVD2013**

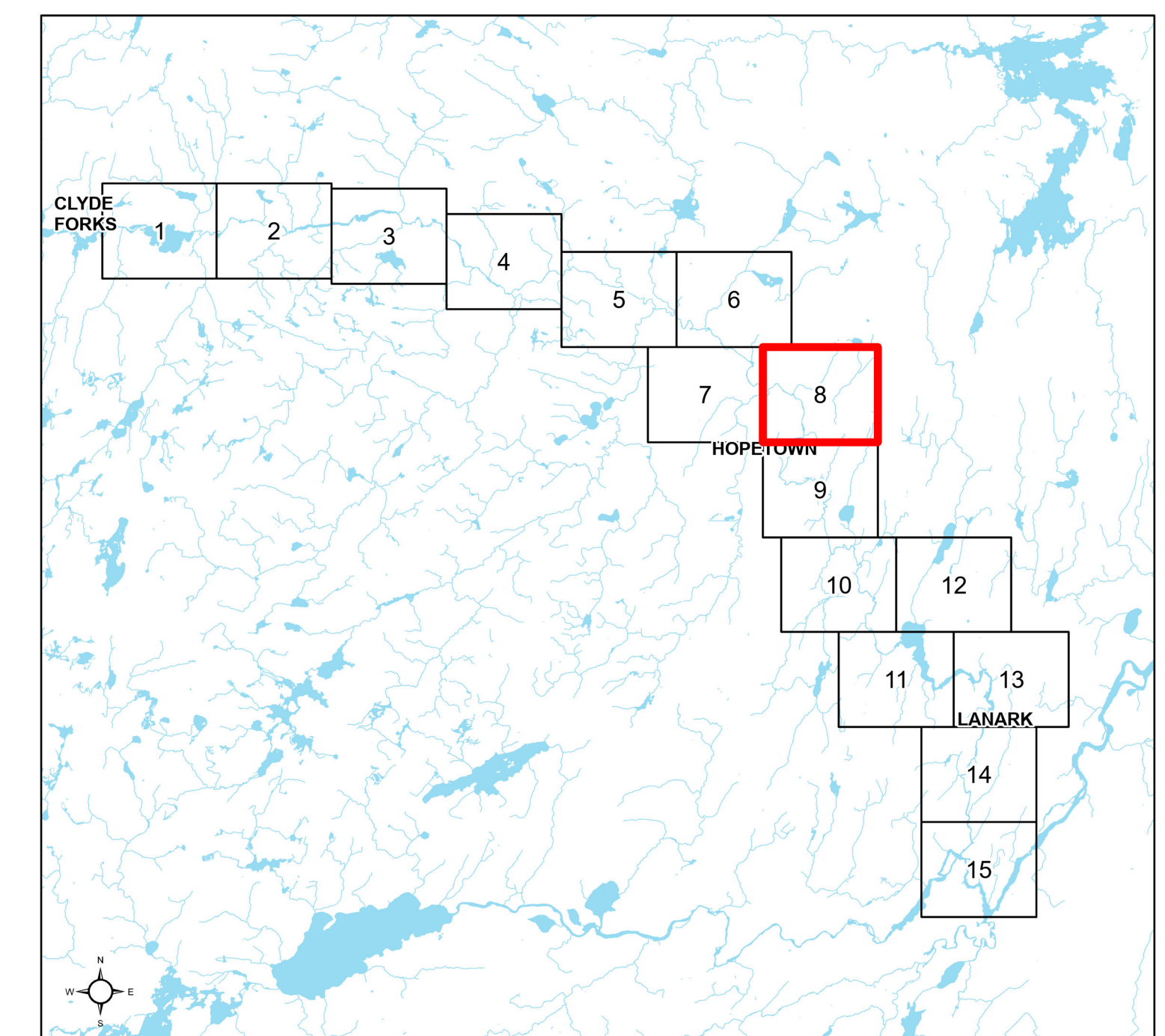
**COURBES DE NIVEAU PRINCIPALES DE 5 MÈTRES
AVEC COURBES DE NIVEAU INTERMÉDIAIRES DE 1 MÈTRE
CGVD2013**

GENERAL INFORMATION
Vertical Datum: CGVD2013
Horizontal Datum: North American 1983 CSRS
Map Projection: Transverse Mercator

RENSEIGNEMENTS GÉNÉRAUX
Niveau de référence vertical: CGVD2013
Niveau de référence horizontal: North American 1983 CSRS
Projection cartographique: Transverse Mercator



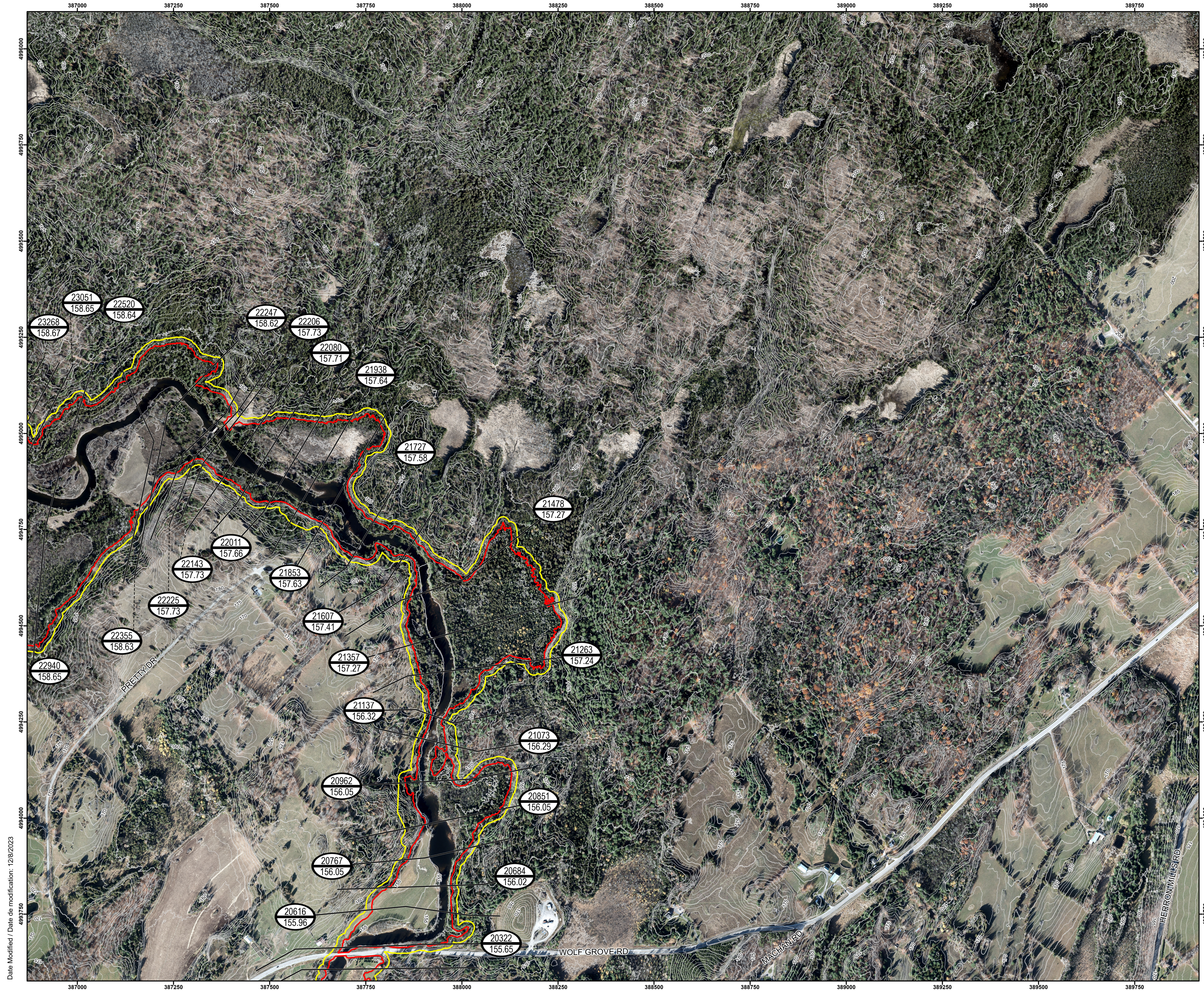
SHEET INDEX / TABLEAU D'ASSEMBLAGE



Note: The regulation limit represents all areas regulated under the Conservation Authorities Act, Section 28, Ontario Regulation 153/06. Although only floodplains are shown on these maps, the regulation limit is defined as a buffer around all flooding hazards, erosion hazards, and wetlands. These areas are regulated in an effort to maintain the vitality of our watersheds while also protecting lives and property from natural hazards.

Remarque : La limite réglementaire représente toutes les zones réglementées en vertu de la Loi sur les offices de protection de la nature, article 28, Règlement de l'Ontario 153/06. Bien que seules les plaines inondables soient représentées sur ces cartes, la limite de régulation est définie comme une zone tampon autour de tous les risques d'inondation, d'érosion et de zones humides. Ces zones sont réglementées dans le but de maintenir la vitalité de nos bassins versants tout en protégeant les vies et les biens contre les risques naturels.

REVISIONS		
NO.	DESCRIPTION	DATE
1	Issued for Public Review	Nov. 16, 2023
2	Issued for Board Approval	Dec. 8, 2023

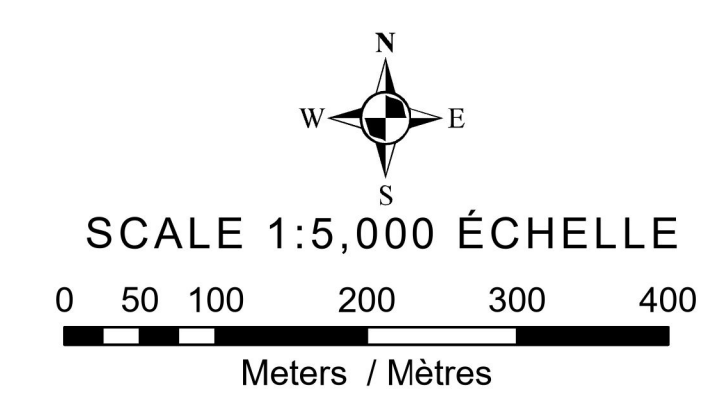


Date Modified / Date de modification: 12/08/2023

This map and the associated information displayed are to be used for general illustrative purposes only. Although best efforts have been made to create accuracy, due to the complex and extensive nature of the data, all representations and/or information provided herein are approximate and to be verified by user. User hereby acknowledges that this map is not intended for true and accurate navigational purposes and hereby accepts and assumes all inherent risks associated with the use of this map.

This map is produced in part with data provided by the Ontario Geographic Data Exchange under Licence with the Ontario Ministry of Natural Resources and the Queen's Printer for Ontario, 2023.

Aerial Imagery © DRAPE 2019
Digital Elevation Information © MVCA



Cette carte et les renseignements connexes qui sont affichés sont fournis à titre d'exemple général seulement. En dépit de tous les efforts consentis pour en garantir l'exactitude, les représentations ou renseignements que l'on trouvera ici demeurent approximatifs du fait de la nature complexe et de l'étendue des données, et doivent donc être vérifiés par l'utilisateur. L'utilisateur reconnaît par la présente que cette carte n'est pas conçue pour une navigation exacte et véridique, accepte et endosse les risques connexes associés à son utilisation.

Cette carte a été en partie réalisée à l'aide de données fournies par le Groupe d'échange de données géospatiales en Ontario, en vertu d'un contrat de licence passé avec le ministère des Richesses naturelles et l'imprimeur de la Reine pour l'Ontario en 2023.

Images aériennes © DRAPE 2019
Données altimétriques numériques © MVCA




Easton's Subdivision

From Julie Kapyrka <jkapyrka@alderville.ca>

Date Wed 2026-01-07 12:37 PM

To Koren Lam <klam@lanarkcounty.ca>; admin@q9planning.com <admin@q9planning.com>

Cc Taynar Simpson <tsimpson@alderville.ca>

 1 attachment (135 KB)

09-T-25004 - LH - Easton's Subdivision - New Subdivision Notice of Application Circulation.pdf;

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Aaniin Koren and Dayna,

Please see attached correspondence.

Miigwech,

Dr. Julie Kapyrka
Consultation Manager



Alderville First Nation

11696 Second Line Rd.
Roseneath, ON K0K 2X0

905-352-2662

jkapyrka@alderville.ca

ALDERVILLE FIRST NATION



11696 Second Line Road
Roseneath, Ontario K0K 2X0
Phone: (905) 352-2011
Fax: (905) 352-3242
www.alderville.ca

Chief: Taynar Simpson
Councillor: Lisa McDonald
Councillor: Jason Marsden
Councillor: Amber Crowe
Councillor: Kassie McKeown
Councillor: Joanne Smoke

VIA E-MAIL

January 7, 2025

Koren Lam
Senior Planner
Lanark County
99 Christie Lake Road
Perth, On. K7H 3C6
klam@lanarkcounty.ca
613-267-4200 ext.1505

Dayna Edwards
admin@q9planning.com

Dear Koren Lam,

RE: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

I would like to acknowledge receipt of your correspondence, which was received December 18th, 2025, regarding the above noted project.

As you may be aware, the area in which this project is proposed is situated within the Traditional and Treaty Territory of Alderville First Nation. Our First Nation's Territory is incorporated within the Williams Treaties Territory and was the subject of a claim under Canada's Specific Claims Policy, which has now been settled. All 7 First Nations within the Williams Treaties have had their harvesting rights legally re-affirmed and recognized through this settlement (2018).

In addition to Aboriginal title, Alderville First Nation rights in its Reserve and Traditional Territory and/or Treaty Territory include rights to hunt, fish and trap, to harvest plants for food and medicine, to protect and honour burial sites and other significant sites, to sustain and strengthen its spiritual and cultural connection to the land, to protect the Environment that supports its survival, to govern itself, sustain itself and prosper including deriving revenues from its lands and resources, and to participate in all governance and operational decisions about how the land and resources will be managed, used and protected.

Alderville First Nation is requiring a File Fee for this project in the amount of \$300.00. This Fee includes administration, an initial meeting, project updates as well as review of standard material and project overviews. Depending on the number of documents to be reviewed by the Consultation Department,

Proudly working together to build a prosperous and healthy environment that promotes independence, honours and respects our values, and enhances our way of life.

additional fees may apply. **Please make this payment to Alderville First Nation and please indicate the project name on the cheque.**

If you do not have a copy of Alderville First Nation's Consultation Protocol, it is available at: alderville.ca/wp-content/uploads/2017/02/AFNProtocol2.pdf. Please note that the mapping in this document needs updating to reflect the Williams Treaties First Nations Settlement Agreement 2018.

In order to assist us in providing you with timely input, please provide us with a Notice of Request to Consult containing relevant information and material facts in sufficient form and detail to assist Alderville First Nation to understand the matter in order to prepare a meaningful response. Guidance for giving notice can be found on pages 11-12 of our Consultation Protocol. Based on the information that you have provided us with respect to the notice of: **09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation**, Alderville First Nation may require a mutual agreement to establish a special consultation process for this project. After the information is reviewed it is expected that you or a representative will be in contact to discuss this matter in more detail and possibly set up a date and time to meet with Alderville First Nation in person or virtually.

Although we have not conducted exhaustive research nor do we have the resources to do so, there may be the presence of burial or archaeological sites in your proposed project area. Please note, that we have particular concern for the remains of our ancestors. Should excavation unearth bones, remains, or other such evidence of a native burial site or any other archaeological findings, we must be notified without delay. In the case of a burial site, Council reminds you of your obligations under the *Cemeteries Act* to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. As I am sure you are aware, the regulations further state that the representative is needed before the remains and associated artifacts can be removed. Should such a find occur, we request that you contact our First Nation immediately.

Furthermore, Alderville First Nation also has available, trained Archaeological Liaisons who can actively participate in the archaeological assessment process as a member of a field crew, the cost of which shall be borne by the proponent. Alderville First Nation expects engagement at Stage 1 of an archaeological assessment, so that we may include Indigenous Knowledge of the land in the process. We insist that at least one of our Archaeological Liaisons be involved in any Stage 2-4 assessments, including test pitting, and/or pedestrian surveys, to full excavation.

Although we may not always have representation at all stakeholders' and rights holders' meetings, it is our wish to be kept apprised throughout all phases of this project.

Should you have further questions or if you wish to hire a Liaison for a project, please feel free to contact Julie Kapyrka, Consultation Manager, at 905-352-2662 or via email at jkapyrka@alderville.ca.

Yours sincerely,



Chief Taynar Simpson
Alderville First Nation

Proudly working together to build a prosperous and healthy environment that promotes independence, honours and respects our values, and enhances our way of life.



Re: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

From Chris McKnight <projectco9@pikwakanagan.ca>

Date Fri 2025-12-19 9:03 AM

To Koren Lam <klam@lanarkcounty.ca>

Cc Dayna Edwards <dayna@q9planning.com>; Cassandra Tiegs <pmgr2.consultation@pikwakanagan.ca>;
Amanda Two-Axe Kohoko <consultation@pikwakanagan.ca>

1 attachment (846 KB)

Easton's Subdivision - New Subdivision, Notice of Application & Circulation.pdf;

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Kwey Koren,

My name is Chris McKnight, and I am contacting you on behalf of AOPFN Consultation Department with regards to the Project, *09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation.*

We thank you for contacting AOPFN and providing the community with the ability to participate and engage with this project.

I have attached a letter to this email that I invite you to review that outlines the next steps to evaluate the initiative in more details.

Should you have further questions please feel free to contact me.

Have a Happy Holiday!

Miigwetch,

THIS EMAIL IS CONFIDENTIAL

Chris McKnight

Project Coordinator, Consultation Department

Algonquins of Pikwakanagan First Nation

Phone: 613-625-4010

Email: projectco9@pikwakanagan.ca

Mailing Address: 1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0

Physical Address: 4-473 Kokomis Inamo, Pikwakanagan, ON K0J 1X0



Algonquins of Pikwakanagan First Nation

December 19, 2025

Name: Koren Lam
Address: 99 Christie Lake Road, Perth, ON, K7H 3C6
Email: klam@lanarkcounty.ca

RE: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

The Algonquins of Pikwakanagan First Nation (AOPFN) have occupied their Traditional Territory since time immemorial, practicing their ways and living according to their inherent laws and culture. AOPFN exercises Algonquin Aboriginal Rights and Interests in all parts of its Reserve, and to those parts of its Territory to which it has not been party to a final treaty, including lands under water.

This letter is to confirm receipt of the Notification of contemplated activity. In order for the AOPFN to conduct the initial review, a one-time fee of \$750.00 will be required for the preliminary review of the contemplated activity.

With work to be commenced in AOPFN's Territory, an initial referral fee of \$750.00 is to be paid to the Algonquins of Pikwakanagan First Nation at the below-noted address.

The \$750.00 referral fee may include the following in our preliminary review to make a determination:

- A quick overview of any Project Materials, including but not limited to Environmental Studies;
- Site Plans and Maps;
- Rehabilitation Plans;
- Conduct an evaluation to determine the level of consultation and accommodation (standard, medium, or major).

Once the referral fee has been paid and the evaluation of the documents has been completed, you will receive a letter which states either:

- a) Further consultation and accommodation are required by the Council of the AOPFN. An appointed AOPFN Representative will reach out to you and provide you with the AOPFN the Consultation Protocol; or

**1657A Mishòmis Inamo
Pikwakanagan, Ontario K0J 1X0**

Tel: (613) 625-2800

Fax: (613) 625-2332

- b) A letter that states AOPFN requires no further consultation or accommodation in relation to the proposed Project or initiative.

Please provide the contact information to send an invoice for the referral fee; once payment is received, we will commence the review.

Migwech,

A handwritten signature in blue ink, appearing to read 'A. Two-Axe Kohoko', with a large, sweeping flourish extending to the right.

Amanda Two-Axe Kohoko
Manager, Consultation Department
Algonquins of Pikwakanagan First Nation

CC. Chief and Council, AOPFN



09-T-25004 - Middleville Subdivision

From Municipal Planning <MunicipalPlanning@enbridge.com>

Date Wed 2025-12-31 12:47 PM

To Koren Lam <klam@lanarkcounty.ca>

 1 attachment (102 KB)

09-T-25004 - Middleville Subdivision.pdf;

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please find attached Enbridge Gas comments.

Please continue to forward all municipal circulations and clearance letter requests electronically to MunicipalPlanning@Enbridge.com.

Regards,

Willie Cornelio CET (he/him)

Sr Analyst, Municipal Planning

Engineering

ENBRIDGE

TEL: 416-495-6411

500 Consumers Rd, North York, ON M2J1P8

enbridge.com

Safety. Integrity. Respect. Inclusion.



Municipal Planning,
Engineering

tel 416 495 5180
municipalplanning@enbridge.com

Enbridge Gas Inc.
500 Consumers Road
North York, ON
M2J 1P8

December 31, 2025

Koren Lam
Senior Planner
County of Lanark
99 Christie Lake Road
Perth, ON K7H 3C2

RE: Draft Plan of Subdivision
Brent & Cyndi Easton
Galbraith Road (Middleville Subdivision)
County of Lanark
File No.: 09-T-25004

Dear Koren,

Enbridge Gas does not object to the proposed application(s) however, we reserve the right to amend or remove development conditions. This response does not signify an approval for the site/development.

Enbridge Gas does not currently have gas piping within the immediate area. To arrange for natural gas servicing to this development please contact Enbridge Gas at the following link:
https://enbridge.outsystemsenterprise.com/GetConnectedApp_UI/NewGasServiceInquiry

Sincerely,

Willie Cornelio CET
Sr Analyst Municipal Planning



LANARK - 2236 GALBRAITH RD - 09-T-25004

From LANDUSEPLANNING <LandUsePlanning@HydroOne.com>
Date Mon 2026-01-26 10:02 AM
To Koren Lam <klam@lanarkcounty.ca>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

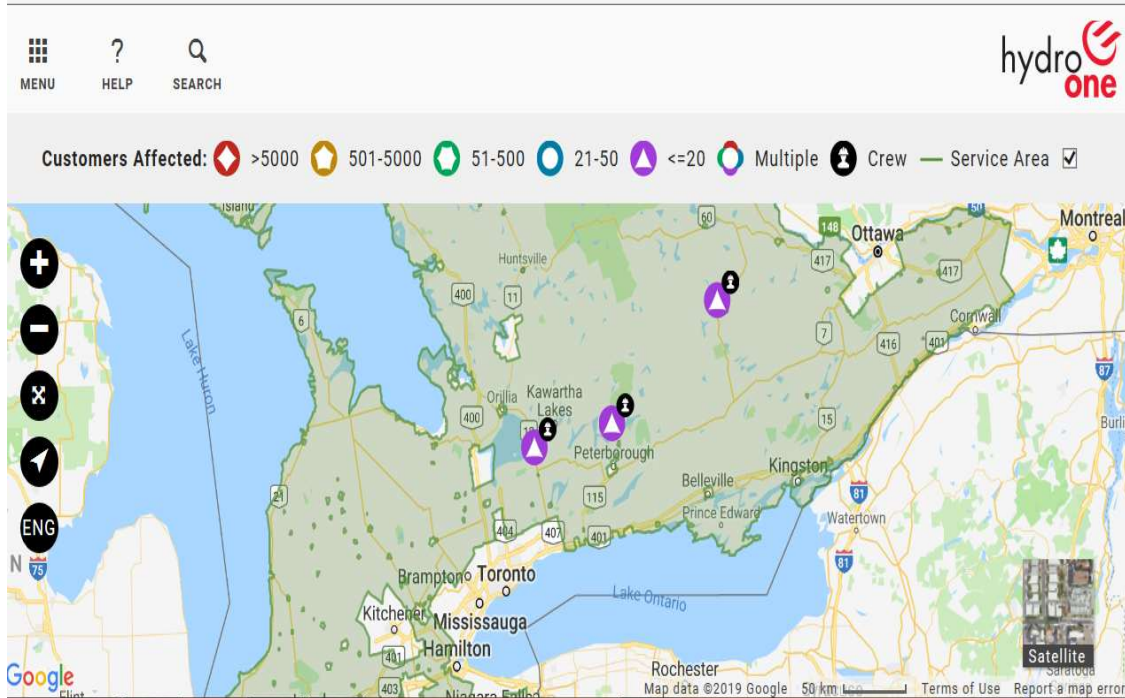
Hello,

We are in receipt of your Application for Subdivision, 09-T-25004 dated 2025-12-18. We have reviewed the documents concerning the noted Plan and have no comments or concerns at this time. Our preliminary review considers issues affecting Hydro One's 'High Voltage Facilities and Corridor Lands' only.

For proposals affecting 'Low Voltage Distribution Facilities' the Owner/Applicant should consult their local area Distribution Supplier. Where Hydro One is the local supplier the Owner/Applicant must contact the Hydro subdivision group at subdivision@Hydroone.com or 1-866-272-3330.

To confirm if Hydro One is your local distributor please follow the following link: [Stormcentre \(hydroone.com\)](https://stormcentre.hydroone.com)

Please select "Search" and locate the address in question by entering the address or by zooming in and out of the map.

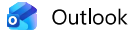


If you have any further questions or inquiries, please contact Customer Service at 1-888-664-9376 or e-mail CustomerCommunications@HydroOne.com to be connected to your Local Operations Centre

If you have any questions please feel free to contact Land Use Planning.

Thank you,

Land Use Planning Department
Hydro One Networks Inc.
Email: LandUsePlanning@HydroOne.com



Re: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

From Matthew Congreves <Matthew.Congreves@HydroOne.com>
Date Wed 2026-03-25 3:00 PM
To Koren Lam <klam@lanarkcounty.ca>

You don't often get email from matthew.congreves@hydroone.com. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Koren,

I want to further comment on this file.

1. Hydro One is in possession of valid unregistered easements over this land for our powerline that crosses through the proposed development.
 2. Hydro will need to be relocated to the north side of Galbraith Road.
 3. Hydro One will require new registered easement(s) from this developer. Without this being granted to us, we will be unable to relocate. The Developer should be compelled to provide this.
 4. Further to this, at its most extreme, this new proposed easement will encroach up to 13m from the south ROW into the lands (North border of Galbraith). As such, this may impact the developer's current draft proposal - as no building may be erected inside our easements, nor are any structures allowed to be built within 4.8m of our nearest overhead line. The developer will need to ensure the draft concept is revised to reflect the new Hydro line and easement.
 5. Please note that as of this time, Hydro does not appear to be in possession of a formal/official request for power for this subdivision. The developer will need to initiate this request with Hydro Ones subdivision group to start that process.
 6. A final comment I have, is that Hydro One is in progress of designing and constructing a new powerline through the village of Middleville, and down Galbraith road to the 11th concession. Design proposed 2026 and construct 2027.
- The driving forces behind this rebuild is to address grind constraints Hydro One is currently facing on this particular line. Constraints such as frequent High Loading events, Overloading events, Phase Misbalancing, and Substandard NEV values, have been noted, and are contributing to the implementation of this internal hydro project. I bring this to your attention because a System Impact Analysis, and further studying by our Asset Planners, will be required prior to Hydro having the ability to connect this subdivision.
- It is a possibility that this connection cannot be facilitated until such time as grid upgrades are completed - the developer will need to initiate a formal request, and Hydro can then provide further information and planning direction.

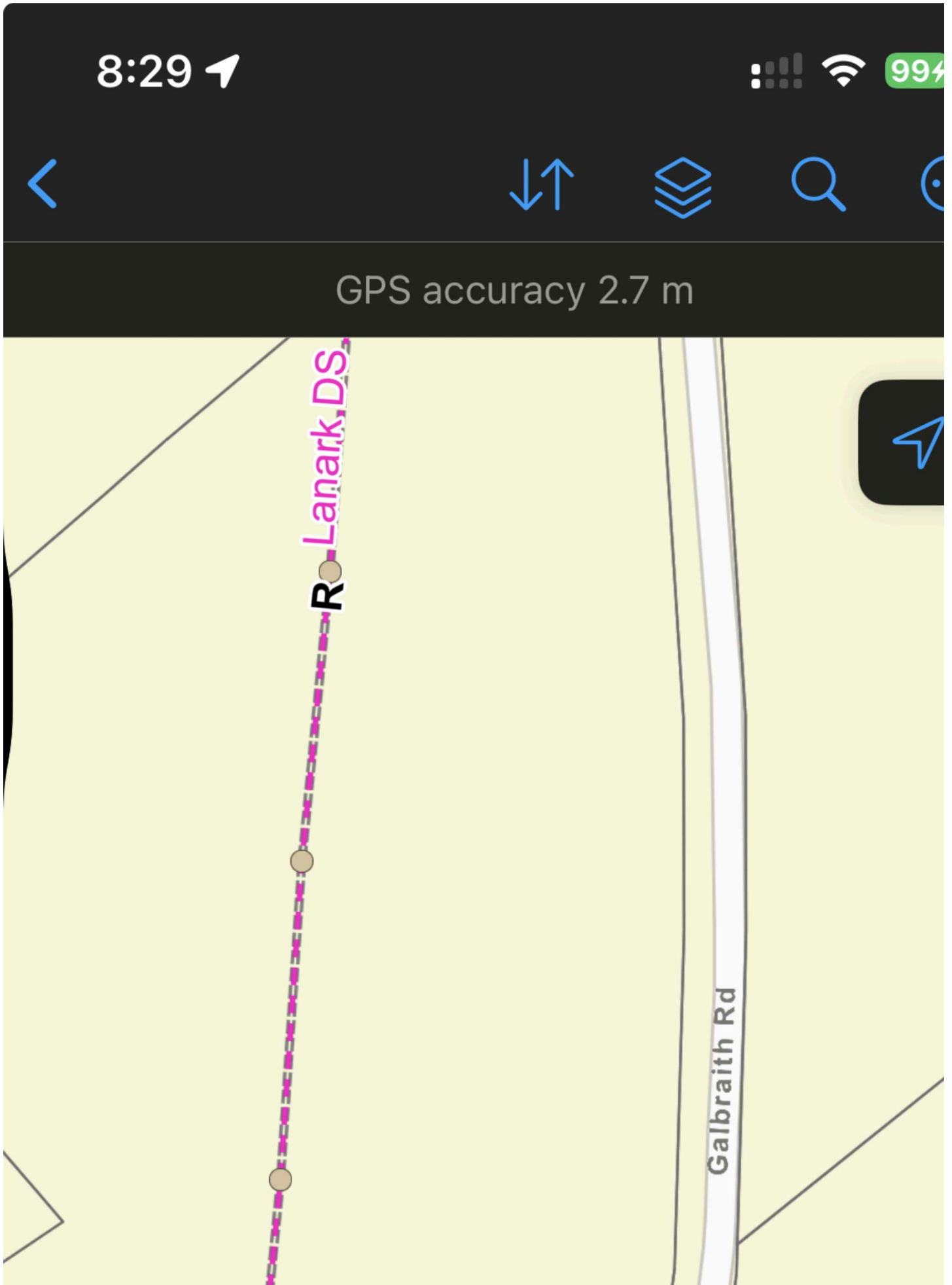
Thank you,

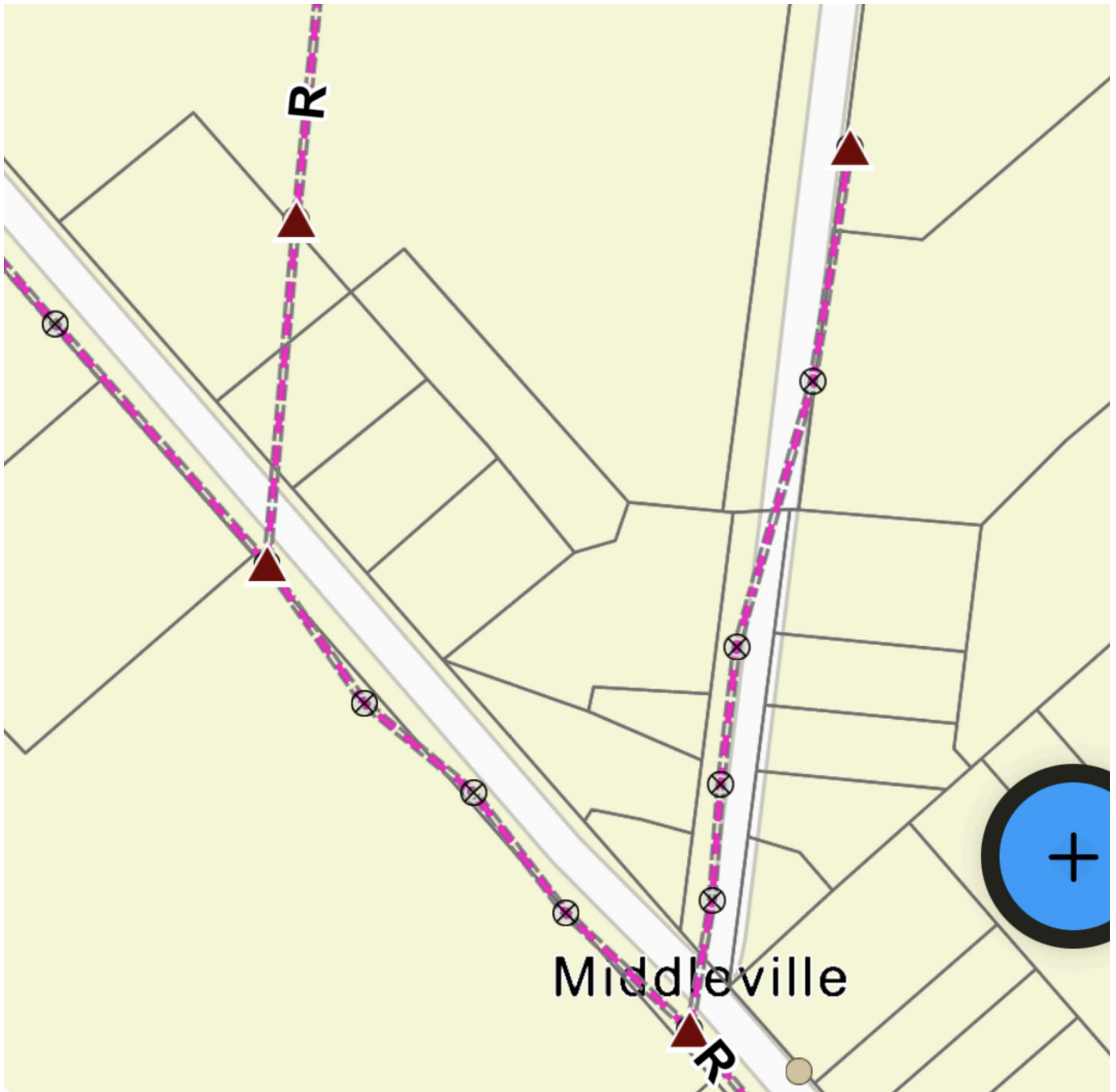
Matthew Congreves, C.E.T.
 Area Distribution Engineering Technician
 Hydro One Networks Inc.
 Design Services - Perth Operations
 C: 226-787-4265
HydroOne.com

From: Jason Cordick <Jason.Cordick@HydroOne.com>
Sent: Thursday, December 18, 2025 8:35 PM
To: Koren Lam <klam@lanarkcounty.ca>
Cc: Matthew Congreves <Matthew.Congreves@HydroOne.com>
Subject: RE: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

Thanks Koren

We have forward this onto one of my colleagues (Matt cc'd on this email) for him to comment on, we do have a project where we will be looking to construct a new line along Galbrith Road which will go right past this proposed development so we may require easement ect depending on which side of the road we build the line on, construction of this line wont be until 2027/2028 as we will only be starting design work on this starting late January 2026. Also want to note that there is an existing overhead hydro line that runs right through this development that would need to be relocated, this would need to be requested/paid for by the developer, not sure how the timing of the two project will work out but wanted to bring to your attention, please see screen shot below, the pink dashed line is the existing overhead hydro line tht runs through this proposed development.





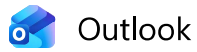
Thanks

Jason Cordick
Supervising Distribution Engineering Technician
Hydro One Networks Inc.
Design Services – Perth Service Center
613 267 8517
HydroOne.com

From: Koren Lam <klam@lanarkcounty.ca>
Sent: Thursday, December 18, 2025 2:52 PM
To: Koren Lam <klam@lanarkcounty.ca>
Cc: Dayna Edwards <dayna@q9planning.com>
Subject: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Good Afternoon,



Notification List - 09-T-25004 Easton's Subdivision

From Crystal Rodger

Date Mon 2025-12-22 6:22 PM

To Koren Lam <klam@lanarkcounty.ca>

You don't often get email from

[Learn why this is important](#)

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Hello

Please add me to the notification list for updates and file uploads.

Has the MDS calculation been applied?

Thank you

Crystal Rodger

[Yahoo Mail: Search, Organize, Conquer](#)



County File No. 09-T-25004

From Kirsten

Date Mon 2026-01-19 5:06 PM

To Koren Lam <klam@lanarkcounty.ca>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

Regarding the application from 1126432 Ontario Inc. proposing a subdivision at (part of) Lot 16, Concession 6, in the Township of Lanark Highlands, and, as per your notice dated 18 Dec 2025 ...

Please notify me of updates to the application as the review progresses and/or Lanark County's decision re this proposed subdivision.

This development would change the landscape in more ways than one. Many of us that have recently adopted Middleville as our home - having moved here from more populated areas - chose this place because of its rural environment and are deeply saddened by the proposed changes to the area.

Also, this email is to confirm that the previously expressed concerns of me and my neighbours still stand; that is, the below to which I have added additional notes:

- what, if any, impact there will be on the "deer yard" area (see township docs), and, impact on other wildlife / their habitats; there are several deer, foxes, coyotes, turtles, snakes, frogs/toads, darners, turkeys, grouse, vultures, and smaller bird breeds, including migrating birds, in the area (many of which I have seen/documented personally - including eastern bluebirds)
- long-term impact on the water table / our wells, and nearby creek (opposite my property; downhill from the proposed subdivision); also note, water runoff on that downhill has caused damage to my neighbours (Lot 43) more than once
- impact on the surrounding forest and misc flora
- increased traffic and noise (currently we have little to none, day and night)
- impact on local farms/farmers (the land is and has been used for cattle for several years)
- what kind of subdivision it will be (size of homes planned, loss of trees, children/park area, etc.)
- impact on our property tax bills (which is the least of our worries)

Especially worrying is the fact that we have heard nothing about what amenities, if any, amenities will be included in the development to occupy the expected occupants of these units; i.e., the children/teens. There is no store, library, playground, school, etc., in the area that can be reached without a car.

It is hard to understand why new homes are needed when there are homes in the area that have been vacant for several years. It feels like a township tax grab; a township that installed a second sidewalk last year (yes, I have two sidewalks in front of my home) and which removes the snow from neither.

And not in your control obviously, we were particularly disheartened to hear that a proposal to keep the land agricultural was rejected.

Several of my neighbours are in fact upset with the individual who sold the land, it is assumed, with the knowledge that his relatives would be changing it from agricultural to, essentially, suburban.

Kirsten Perreault

INVESTIGATION REPORT

IMPACTS FROM INCREASING DOWNPOURS AND POTENTIAL LAND DEVELOPMENTS
TO THE WATER EASEMENT LOCATED ON THE PROPERTY OF FERME OUELLETTE FARM

Prepared for:

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1 Purpose and Overview

The purpose of this investigation is to describe the impacts from increasing downpours and potential surrounding land developments to the water easement located on the property of Ferme Ouellette Farm. The intent of this report is to provide Lanark Highlands and Lanark County with the objective evidence that the water easement is at capacity and cannot manage additional water runoff from surrounding land development.

This report starts by describing the location of the water easement within the Lanark Highlands which is situated on Ferme Ouellette Farm and provides a background describing the current infrastructure feeding the water easement. The core of this report details seven expositions which are the foundation of the objective evidence. These expositions describe the current stormwater infrastructure and underscores impacts to existing issues and how these issues can only increase in the future with or without land development.

The tail end of this report concludes by summarizing the findings and highlights how the water easement impacts the current owners of the farm. References and sources are included to support the validity of this report appendices are included to provide additional details.

2 Locations

This report considers Ferme Ouellette Farm located in Middleville Ontario, Canada. Geographical details are provided in the following subsection.

2.1 Middleville Ontario

Middleville is a hamlet located in the township of Lanark Highlands in the County of Lanark Ontario. Its main intersection is situated at [45°05'51.7"N 76°23'46.3"W](#), or 5.097687, -76.396202. Figure 1 (Google, Middleville Ontario, 2025) is an aerial image of Middleville looking North where the image highlights the main intersection at the specified latitude and longitude.

Figure 1: Middleville, Lanark Ontario looking North with main intersection highlighted.



2.2 Ferme Ouellette Farm

Ferme Ouellette Farm is a federally registered farm located in the township of Lanark Highlands in the County of Lanark Ontario. The farm is located at civic address 4248 Wolf Grove Road with a business location situated at [45°05'49.0"N 76°23'54.7"W](#), or 45.096956, -76.398530. Figure 2 (Google, Ferme Ouellette Farm, 2025) is an aerial image of Ferme Ouellette Farm looking North with its approximate boundaries highlighted in red. Herin, Ferme Ouellette Farm is defined as the Subject Farm.

Figure 2: Ferme Ouellette Farm, Lanark Ontario looking North with farm boundaries highlighted in red.



3 Background

The Subject Farm has a natural spring which discharges water at very low volume all year round. Historically, this spring was used by the local population as a source of water from private and business use. This spring is at the heart of the water easement where additional water has been introduced to this local by an underground stormwater infrastructure and culverts. In essence, this has become a focal point for a large surface areas and runoff from the surrounding land. The combined systems collect, divert, and drain water from several sources including, but not limited to, rainfall, snowmelt, basement sump pumps, domestic watering, and pool draining. As designed, this system is intended to prevent flooding and erosion on private and public land; however, this report describes how this issue is diverted from surrounding properties within the hamlet onto the Subject Farm.

The water easement on the Subject Farm is currently under stress and year-over-year damage to the property increases. The cause of this damage relates to increasing downpours which would only be compounded by the development of surrounding land. Direct damage is evident via visual inspection where erosion decimates the land on the Subject Farm. Indirect damage has also occurred over time which impacts the runoff management system where continual maintenance must be performed to prevent downstream problems.

4 Expositions

The following expositions provide a comprehensive description and explanation of the water easement and the closely coupled elements. These expositions contain objective fact-based data and information which support how each element impacts and causes damage to the Subject Farm. Each element within the expositions is described in a discrete fashion whereas the conclusions consolidate each to describe how their effects have been and will continue to compound over time.

4.1 Culvert Infrastructure

Along the 6th concession D in Lanark, there are three culverts which divert storm onto the Subject Farm. The culvert situated furthest North has a diameter of 300 mm, followed by a 400 mm, and ending with 450mm. All three culverts are installed to drain from the East to the West and ultimately feed the confluence on the Subject Farm.

Selecting a CSP culvert for water capacity is based on diameter, shape, and the hydraulic characteristics of the flow. This study does not go in-depth and provides an average capacity based on each culvert installed at a 4-degree slope and provides estimates at their maximum capacity. The Mannings Equation was used to estimate the open channel flow of these culverts which represents the uniform flow which is a function of the channel velocity, flow area and channel slope. The equation is represented by the following independent variables:

Figure 3: Middleville culvert locations and diameters



Where:

Q = Flow Rate, (ft³/s)

V = Velocity, (ft/s)

A = Flow Area, (ft²)

n = Manning's Roughness Coefficient*

R = Hydraulic Radius, (ft)

S = Channel Slope, (ft/ft)

$$Q = VA = \frac{1.49}{n} AR^{2/3} \sqrt{S}$$

* n = constant value at 0.023 for corrugated metal pipe

Based on Mannings Equation, each culvert can accommodate the following maximum flow volume and velocity:

- a. 300 mm culvert: 155 L/s and 2.3 m/s

- b. 400 mm culvert: 335 L/s and 2.8 m/s
- c. 450 mm culvert: 460 L/s and 3.0 m/s

Adding each maximum flow volume from the three culverts gives a total maximum flow of 950 L/s. To help visualize this volume, we compare this to a standard bathtub which holds approximate 190 Liters. When running at maximum capacity, these three culverts can process the equivalent of five full bathtubs per second. Throughout the years, especially during heavy downpours, observations were made where these culverts were at their maximum capacity and the stormwater water had to circumvent the culverts or pool behind them until the excess water was processed. Based on this overview, these culverts are considered at capacity and are not suited to accommodate additional runoff from new developments.

Reworking these culverts to allow more surface runoff due to new developments will increase the volume of water on the Subject Farm which will increase the property damage. A stormwater management study is required to understand the impacts of downstream properties from new developments.

4.2 Underground Stormwater Infrastructure

Middleville's underground stormwater infrastructure is believed to be a gravity conveying system designed in an open channel configuration (SUDAS, 2025). The system uses the force of gravity to move stormwater through the network of pipes where the system must be sized so that the water surface within the conduit remains open to atmospheric pressure. In this case, the system relies on the natural gradient of the land to create the necessary pressure for the water to flow to a discharge point. This type of system is a common and cost-effective way to collect and transport stormwater.

The underground stormwater infrastructure located within Middleville consists of several grates, routing pipes and discharge point(s); which includes a discharge point which diverts water directly onto the Subject Farm. The generalized flow of the stormwater to this discharge point is South West towards the intersection of Galbraith Road and Concession Road 6D Lanark.

The outlet pipe of the underground stormwater system discharges on the South West side at the intersection of Concession Road 6D Lanark and Galbraith Road. The aerial view in Figure 4 shows the approximate location of the discharge. Figure 5 is a photograph of this discharge pipe; taken in June 2025. The discharge pipe was measured and found to have an inside diameter of 18 inches and an approximate slope of 4 degrees.

Figure 4: Location of an outlet pipe discharging onto the Subject Farm



Figure 5: Photograph of discharge pipe onto the Subject Farm



This discharge point is on municipal property which is currently not designed with a ditching system to divert the stormwater away from private land. Instead, this discharge point is imposed on a drainage easement which flows across the Subject Farm as shown in Figure 9. Due to the topography in this area, a water easement was imposed onto the Subject Farm which receives stormwater, and road debris as trash and suspended particles.

When the land was purchased by the current owners in 2002, the volume of stormwater and suspended particles was low and no apparent damage to the private land was taking place. Over the years, the volume of stormwater has increased significantly to the point where significant damage is occurring on the Subject Farm.

On 28 June 2025, a request was made to Lanark County for details on the stormwater infrastructure. At the time of this investigation, this data was not available nor provided. If received, this report will be revised based on the findings from these documents. A request was made for design document(s) along with any detailed drawings showing its implementation. The request was to include, but not limited to; inlet locations, pipe diameters, pipe slopes, depth of pipe installation and design decisions relating to infrastructure capacity.

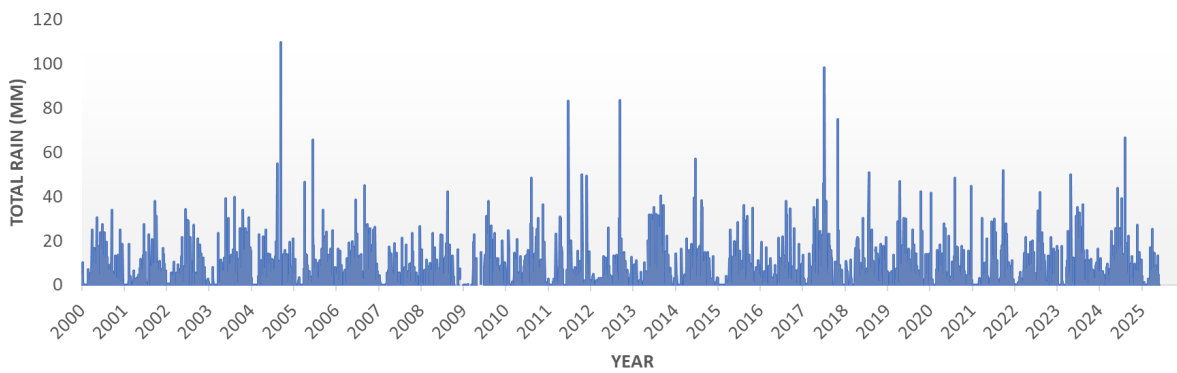
4.3 Rainfall Data

To help support the claim that the stormwater infrastructure is increasingly damaging and dumping particulates and debris on the subject farm, historical and trending rainfall data was analyzed for trending patterns. The Government of Canada maintains environment and natural resource data for which past weather and climate data is gathered and made available to the public. The Appleton Ontario weather station (Canada, 2005) was selected as it is the closest station to the subject farm with sufficient data to analyze. The weather station has the following particulars:

- a. Latitude: 45°11'09.024" N
- b. Longitude: 76°06'46.098" W
- c. Elevation: 133.00 m
- d. Climate ID: 6100285

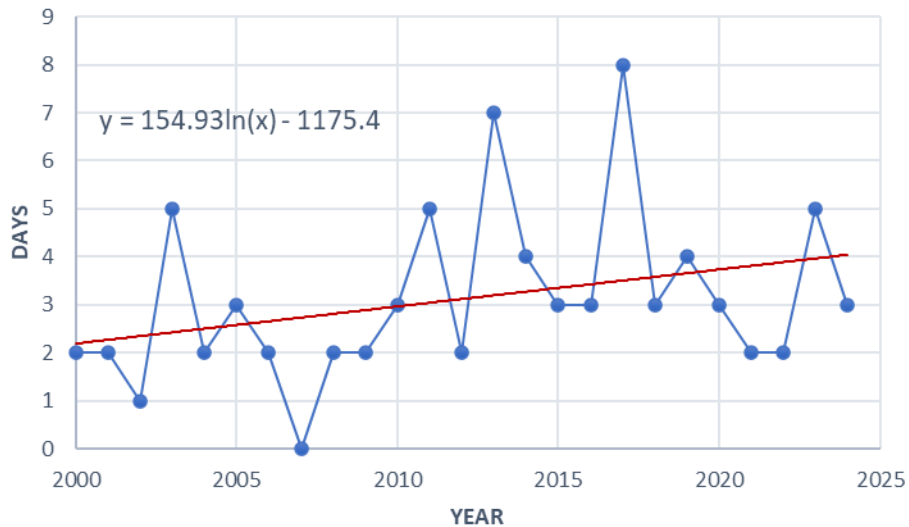
Historical daily data was downloaded from 01 January 2000 to 28 May 2025 which included the Total Rain (mm) field in the dataset. The raw data was consolidated for each year and a plot was generated to show the total rain in mm depicted in Figure 6. This raw data was analyzed for yearly trends to help understand the changing climate patterns for this region.

Figure 6: Total rain, by day, between 2000 to 2005 (Appleton, ON)



Total rain was counted for each year at specific discrete thresholds of 10, 20, 30, 40, 50, and 60 mm of rain per day covering the entire date range from the dataset. Results from each were put into a scatter plot which included a logarithmic trendline with its equation in the legend. A linear trendline model was also examined which showed similar trends. Figure 7 is a scatter plot for the total days where rainfall exceeded 30 mm. The plot includes a trendline which was bounded by the start and end dates from the dataset. The plot clearly shows that over the years that large amounts of daily rain fall are increasing. This trending pattern for upcoming years will have a negative impact to the stormwater infrastructure with a potential inability to management and distribute larger volumes of heavy downpour rain. Appendix C – Rainfall Thresholds includes all scatter plots for the discrete thresholds. Each plot in the appendix clearly shows that each trendline clearly shows there has been an increase of heavy downpours over the period in the dataset.

Figure 7: Total days by year where rain fall exceeded 30 mm



In conjunction with actual rainfall data, the Coupled Model Intercomparison Project Phase 6 (CMIP6) was used to predict the total annual precipitation between 1950 and 2100. The model is based on historical data ranging from 1950 to 2005. CMIP6 was selected over CMIP5 due to its significant advancements in spatial resolution, additional detailed representation of physical processes, and inclusion of wider ranges of emissions scenarios (Coupled Model Intercomparison Project, 2025).

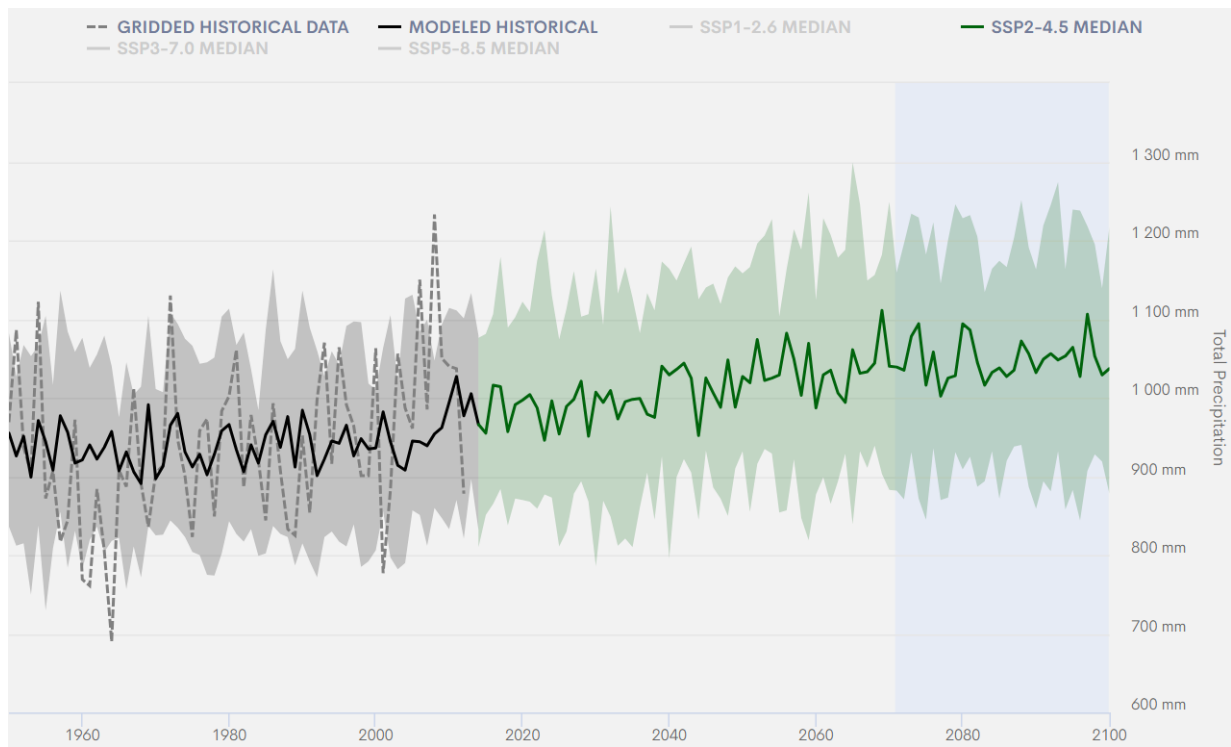
The purpose for presenting and discussing this data is to show the predicted rainfall trends and how they couple with and closely represent the measured rainfall discussed above. Climate data was obtained from ClimateData.ca which “provides high-resolution climate data to help decision makers build a more resilient Canada (ClimateData, 2025).” The SSP2-4.5 scenario was selected as it represents a “Middle of the Road” such that the model applies the current development patterns where challenges to adaptation and mitigations are considered at centerline. Figure 8 shows the total annual rainfall in mm from 1950 to 2100 which also includes snowfall over 30-year averages. Climate Data defines the properties in the chart as:

- A. The shaded region is bounded by the 90th percentile (90% of model results fall below this value) and the 10th percentile (10% of model results fall below this value).
- B. The bold lines indicate the median value, so half of the climate model results fall below this line and half of them are above this line.
- C. The grey area of the graph illustrates the historical component of the climate model simulations and spans the years 1950 to 2014 for the CMIP6 models.
- D. The coloured area of the graph illustrates the future component of the climate model simulations and spans the period 2015-2100 for CMIP6 models.

- E. 30-year averages are used to ensure that the data reflects the overall climate and not the more variable experience of weather. Annual averages can vary from year to year, whereas a 30-year average removes much of that variation and represents common conditions across the time period. Changes in 30-year averages over time are thus indicative of a change in climate that are unlikely to be caused by short-term variability.

This SSP2-4.5 model clearly shows an upward trend to rainfall in the upcoming years. These trends must be taken into consideration when evaluating any new development which would channel surface runoff onto the water easement on the Subject Farm which is already under stress.

Figure 8: Total Rainfall (mm) Model from 1950 to 2100



4.4 Water Easement on Subject Farm

The water easement on the Subject Farm has a confluence which is fed by four water sources: natural spring, hay fields, culverts, and stormwater infrastructure. The area of the confluence is approximately 1,000 m² and is situated directly downstream from all sources. The length of the water easement is approximately 270 m and follows an approximate course from North to South as highlighted red in Figure 9. The figure also highlights in light blue the location of the confluence.

Figure 9: Confluence and path of water easement



Natural Spring

The natural spring water, located directly in the confluence has a low volume of water which does not contribute to erosion and does not drastically change its volume based on heavy downpours or prolonged periods of rain or drought. This spring runs year-round at a fairly consistent rate. There are currently no known impacts to the discharge from this natural spring from new developments. Considerations should be put in place to understand the impact to this natural spring from any new developments from drilled water wells, material extraction for basements, and drainage infrastructure in and amongst the current water table.

Hay Fields

The rainfall runoff feeding the confluence originating on the Subject Farm comes from two fields located North West and West of the confluence. Both fields are grass covered hay fields which are harvested once per year. During heavy rainfalls, these fields soak up the majority of the water and are not heavy contributors of runoff to the confluence and as such do not cause erosion. During spring time, snow melt contributes to surface runoff until the snow has melted. In this case, the majority of the snow melt is absorbed by the fields and surface runoff is minimal and also does not cause erosion. Erosion from this source is described in section 4.5, Water Easement Ecosystem.

Culverts

According to the Lanark Fire and Public Works culverts report (Hutchings, 2025), there are a total of three Corrugated Steel Pipe (CSP) culverts which divert stormwater and runoff into the water easement on the Subject Farm. All three culverts are located on Concession Road 6D Lanark where each culvert progressively increases in diameter as they approach the water easement. See section 4.1, Culvert Infrastructure, for additional details.

Stormwater Infrastructure

No information was provided by the township of Lanark Highlands and Lanark County on the underground stormwater infrastructure. The only details obtained for this investigation are based on field observations as described in section 4.2, Underground Stormwater Infrastructure. Evidence of damage on the Subject Farm's property is discussed in section 4.7, Damage within Water Easement. This source of runoff is considered a major contributor of damage. Should a subdivision development be established as described in section 4.6, New Developments, then an increase of surface runoff will be directed to this water easement.

The township of Lanark Highlands and Lanark County were queried for the existence of an easement agreement to accommodate in influx of stormwater from the surrounding area. No easement agreement was found or exists to allow or define the capacity of stormwater allotted based on current and new developments. With the increase of heavy downpours which are often intense creates flash flooding which erodes and damages the property on the Subject Farm. See Figure 4 and Figure 5 for the location of the discharge pipe along with a photograph. Section 4.7, Damage within Water Easement, shows and discusses the existing damage from water erosion related to concentrating up-slope water to the easement.

4.5 Water Easement Ecosystem

In circa 2004, the Subject Farm worked with the Mississippi Valley Conservation Authority (MVCA) to develop a runoff management system which meets the requirements of a permanently vegetated area. The permanently vegetated area was designed as a staged pond system with outlets to provide an effective method for nutrient management from stormwater and surface runoff. This system consists of four in-series cells where each cell in the series is designed to remove different types of pollutants and particulate matter through a physical and biological processes. These outlets are crucial for controlling water flow and ensuring the desired level of treatment is achieved at each stage.

Referring to Figure 10, the first stage in the serial process starts at pond 'A'. Stormwater and surface runoff enters this first stage which allows larger particles and debris to settle out. This pond is also designed as a buffer such that the level of the water is kept below the overflow to account for downpours. The discharge point uses a 4" diameter pipe installed at an inclination of approximately 4 degrees. Water at the surface of this stage transitions to stage 'B' using this pipe.

The next stage consists of ponds 'B' and 'C'. The objective of these two stages is to remove suspended particles where gravity draws suspended particles to the bottom of the pond. The added benefit of these two ponds is to provide flow homogenization and removal of organic matter which are linked to suspended particles. These ponds also have a buffer such that the level of the water is kept below the

overflow level to account for downpours. Their discharge points also use 4" diameter pipes installed at approximately 4 degrees. Water at the surface of stage 'B' feeds stage 'C', and water at the surface of stage 'C' feeds the final stage, stage 'D'.

The final stage of treatment occurs within pond 'D' which is designed for tertiary treatment which further cleanses the water after the primary and secondary treatments. The purpose of this stage is to remove pollutants, nutrients (nitrogen and phosphorus), fine suspended solids, and pathogens which were not eliminated by the previous stages. Oxygen is a crucial component in water treatment which feeds the aerobic bacteria thus allowing them to break down organic matter. It is critical to note that this stage was designed to add oxygen to the water thereby enhancing the efficiency of water treatment by removing additional pollutants which greatly improves water quality. A dedicated aeration system is installed in this pond which runs continuously 24 hours a day, 7 days a week which provides an airflow of 80 L/min. As such, this final stage aims to produce high-quality water suitable for discharge into the environment.

To promote further filtration at each stage, and prevent erosion, MVCA provided guidance in selecting land and aquatic vegetation for this system. Local native vegetation was selected, planted, and is now currently well established. Non-invasive species were selected to promote a biodiversity within the system. The selection of vegetation served three purposes where firstly it had to support nutrient management from stormwater and surface runoff in the pond system, secondly it had to prevent erosion resulting from heavy downpours, and thirdly provide a natural habitat for local species. Since its inception, this system has matured and is operating as designed. With all do respect, it should be noted that erosional damage based on runoff from surrounding land must be fixed every year at the expense of the Subject Farm.

The ecosystem within and surrounding the water easement is well established and full of diversity. Since the inception of the runoff management system, the ecosystem slowly developed and has matured to its current state. The diversity of this ecosystem is consists of plant life, aquatic life birds, and mammals.

The plant life surrounding the runoff management system is deep rooted and provides support to the surrounding land to prevent erosion. It also serves as a habitat to frogs and other species which depend

Figure 10: Staged ponds supporting the runoff management system



on cover, next to the ponds, for survival. Unfortunately, these plants are continuously being damaged by increased levels and large volumes of runoff causing the banks to erode. The owners of the Subject Farm must provide continuous maintenance to ensure this zone is protected and remains established. In its current mature state, this ecosystem provides the resources necessary for survival consisting of food, water, and shelter for a wide range of species. The following species have been identified in this ecosystem¹.

- i. Reptile and Amphibians (Nature, Ontario, 2023)
 - a. Frogs and toads
 - b. Salamanders and newts: Spotted Salamander
 - c. Skink and snakes: eastern milk snake, eastern garter snake
 - d. Turtles: painted, snapping, blanding's, and wood turtles
- ii. Mammals
 - a. Otters, Muskrats, Beaver
- iii. Aquatic
 - a. Minnows, leeches, snails
- iv. Birds
 - a. Bitterns, Killdeer, Morning dove, Red-winged blackbird, Mallard, Great blue heron, King fisher

The following aquatic and non-aquatic plants have been identified/observed in the water easements' ecosystem².

- i. Aquatic Plants (Kawartha Lake Stewards, 2023)
 - a. Emergent Plants: Scirpus, Typha
 - b. Floating Plants: Brasenia
 - c. Submersed Plants: Elodea, Ceratophyllum, Potamogeton
- ii. Non-Aquatic Plants
 - a. Lythrum salicaria

4.6 New Developments

New developments within the Middleville community, be it residential or commercial, will have an impact to the stormwater infrastructure. The level of impact would be based on location and design of their stormwater management plan. To support this research, a location was investigated to get an

¹ An in-depth study was not performed to identify the full diversity of species living in this ecosystem.

² An in-depth study was not performed to identify the full diversity of aquatic and non-aquatic plants in this ecosystem.

understanding on its impact to the Subject Farm's ecosystem which is feed by the stormwater infrastructure and culverts.

The potential development property in is located north of Middleville and is bound by Galbraith Road and Concession Road 6D Lanark with central coordinates at 45.101573, -76.398355 or 45°06'05.7"N 76°23'54.1"W (Google, Potential Development Land, 2005). The plate in Figure 13, nested in Appendix A – Potential Development Land, highlights in light red the approximate boundaries of this land.

The Arc Geographic Information System (ArcGIS) was used profile the elevation changes of the land. The tool provides a profile graph used to visualize elevation changes along a user defined vector which displays elevation values over the distance of each 3D vector to help assess stormwater flow over land. Table 1 in Appendix D – Profile Data, Potential Development Land provides samples of profile data for the land shown in Figure 13. A total of six cross sections were measured with three running North to South and three running East to West. In all cases, the vector profile spans the edges of the property line. The three profiles running East to West were fairly flat with the following change in elevation:

- a. -3 feet change in elevation over approximately 0.2 miles
- b. -4 feet change in elevation over approximately 0.15 miles
- c. +4 feet change in elevation over approximately 0.05 miles

The three profiles running North to South were not flat and had the following change in elevation:

- a. -26 feet change in elevation over approximately 0.3 miles
- b. -25 feet change in elevation over approximately 0.3 miles
- c. -29 feet change in elevation over approximately 0.25 miles

Based on this study, the elevation profile of this land shows that surface runoff will concentrate at the Southern tip located at the intersection of Galbraith Road and Concession Road 6D Lanark. With the current stormwater infrastructure, additional surface runoff from a new development will feed the confluence on the Subject Farm and inevitably cause further damage. The Ontario Government's Ministry of the Environment publishes a Stormwater Management Planning and Design Manual (Ontario, 2025) which clearly states:

"As a consequence of urbanization, there is an increase in the volume and rate at which sediment and water are delivered to streams. This causes an increase in the erosive forces on stream banks and beds that dislodge and transport particles and, over time, damage the natural form of streams. Streams change shape and enlarge, the size distribution of stream bed sediments changes, and meander patterns may also be affected. Degradation of stream habitat leads to a decline in plant and animal diversity."

The sentence underlined in the quote is an existing problem for which the owners of the Subject Farm are contending with. This problem is yet to be resolved and catalysts, such as new developments adjacent to the confluence on the Subject Farm, will only amplify the existing problem.

Stormwater management using stormwater ponds has been implemented throughout various Canadian cities with various success rates. Once developed, they are not maintenance free and are subject to issues that cities are contending with. Environment Canada's National Water Research Institute (Mayer, Marsalek, & Delow Reyes, 1995) describe how, over time, nutrients and metal contaminants develop in stormwater ponds. In the study, they outline how concentrations of heavy metals develop in suspended and bottom sediments in stormwater ponds. Stormwater ponds come at a cost and require maintenance and provisions for disposal "due to the contamination levels and regulatory criteria, the only viable disposal option available is landfill disposal (Westerbeek, 2007)." The township and county should heavily criticize new developments proposing stormwater ponds as cities across Canada are researching and discovering their environmental impact and long-term costs.

4.7 Damage within Water Easement

The source of the erosion within the water easement stems from the culverts and the stormwater infrastructure. As previously described, the natural spring, hay fields, culverts, and stormwater infrastructure combined as one water source and subsequently feed the confluence. The culverts and stormwater infrastructure are part of the water easement whereas the hayfields and natural spring as in situ on the Subject Farm.

Over the past 20 years, erosion within the water easement has increased due to the higher volume and intensity of water from the culverts and stormwater infrastructure. Damage takes place as erosion, fence destruction, breaches and sediments to the runoff management system, and undermining of trees. Reoccurring costs relating to these damages are incurred by the owner of the Subject Farm with no compensation from Lanark Highlands or Lanark County. It should be noted the owner has not requested compensation at this point. This damage has a direct impact to the diverse wildlife contained within the water easement and the runoff management system. For details relating to the diversity of wildlife within this water easement, see section 4.5, Water Easement Ecosystem.

The hayfields which feed the confluence have an approximate area of 80, 000 m² (~20 acres). During heavy rainfalls, the majority of the water is soaked up by the ground which results in a minimal amount of water arriving at the confluence. The natural spring continuously discharges approximately one liter and gently flows through the confluence. Both of these sources of water do not damage the property. When comparing these two water systems at the confluence, it is evident that the water easement sources by culverts and stormwater infrastructure are the source of damage.

Figure 11 shows the water system feeding the confluence from the hay fields. From the picture, it is evident to see that erosion is not taking place and a healthy environment is present to support a diverse ecosystem. To promote this environment, vegetation was planted and allowed to establish over time. No maintenance is required to this section of land due to erosion or deposits.

Figure 12 shows the water system feeding the confluence from the culverts and stormwater infrastructure. From this picture, it is evident to see that erosion is taking place and a healthy environment is not present to support a diverse ecosystem. To help promote a healthy environment, vegetation was planted; however, heavy erosion continuously prevented them from establishing. From the figure, specific damage is highlighted. At point 'A', we see evidence of trash in several forms. This trash has an impact to the environment and as such the owner must continuously survey the area and clean up as required. At point 'B', we see evidence of fine and coarse sediment which, over time, creates deltas for which the owner must hire heavy machinery to remove the sediments to prevent buildup and blockages. The sediment is highlighted at this point; however, it takes place at each meander point. At point 'C', we see evidence that the erosion causes damage to fencing where this area of fence must be repaired annually. Not contained within the image are downed trees where their rooting system has been undermined.

From these two figures, it is clear to see that the water easement is past capacity and continuously experiences damage. With the increased trends in heavy rain downpours and potential new developments feeding this water easement with additional water will only compound the existing issue.

Figure 11: hay fields runoff feeding the concourse showing no damage



Figure 12: culverts and stormwater infrastructure feeding the concourse showing damage



5 Conclusion

This report investigated the impacts to the property from the water easement on Ferme Ouellette Farm relating to increasing downpours and potential surrounding land developments. Impacts to the easement and subsequent infrastructures on the property are enumerated in section 4, Expositions, where each discuss current and future issues relating to erosion and property damage.

The water easement, instantiated as a confluence, is fed by four separate sources where two are deemed as natural sources and the other two sources are the result of construction methods used to divert water towards the confluence. The two natural sources of water pose no issues to the Subject Farm despite increased down powers and annual rainfall. Their natural entrenchment provides methods to soak-in and slow down waterflow which is critical to prevent erosion. The two unnatural sources of water; however, pose an opposite effect from increased down powers and annual rainfall where they are currently causing and continue to cause damage and erosion. Their designs are unnatural and do not provide methods to soak-in nor slow down waterflow which increase and intensify erosion.

The owners of the Subject Farm are subject to continuous maintenance to the confluence, property, and the staged pond system. This maintenance is critical to prevent and correct damage where the damage has a direct negative impact to the biodiversity along the entire water course. The ability for the water easement to accommodate additional water shed from surrounding land due to potential developments is not feasible and will only serve as a catalyst to the existing issue.

To maintain the existing ecosystem within the confluence and water easement, the Subject Farm must continuously perform maintenance due to erosion from the water easement. Maintenance costs are solely assumed by the property owners and support from Lanark County or Lanark Highlands has not yet been requested. The increased water from heavy downpours has made it challenging to maintain this water course; however, provisions for additional maintenance costs have been allocated to the Subject Farm's annual budget. Increased damage to the property from excess water at the easement will not be tolerated especially if sourced from new developments.

6 References and Sources

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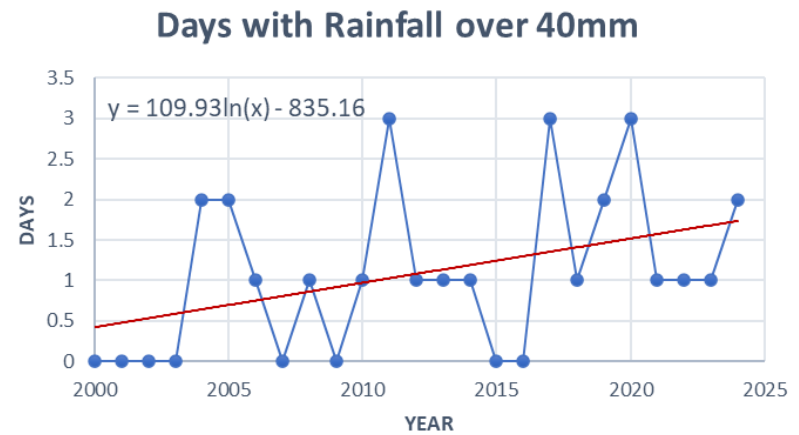
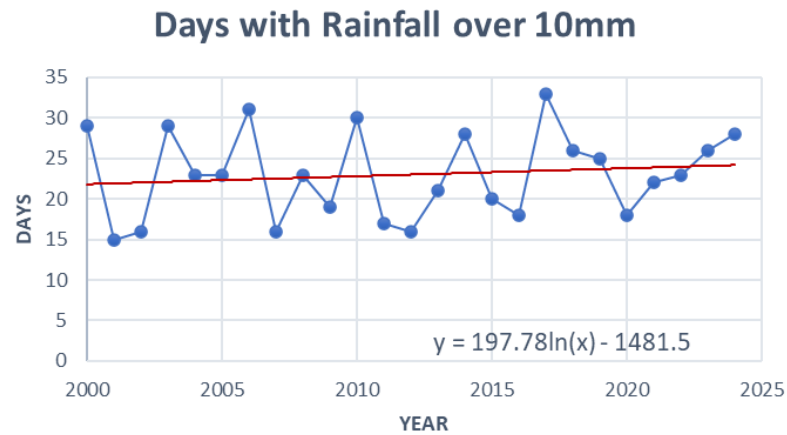
7 Appendix A – Potential Development Land

Figure 13: Potential Development Land



8 Appendix C – Rainfall Thresholds

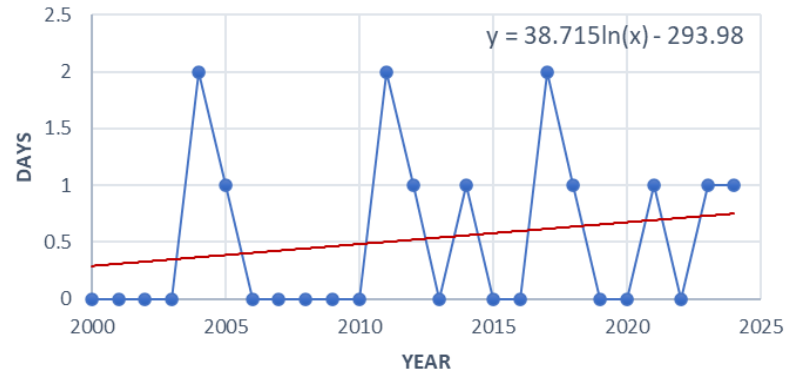
The following plots show the total rain fall per day over the specified threshold. Each plot also includes a trendline to show the pattern of increasing rainfall over the years.



Days with Rainfall over 20mm



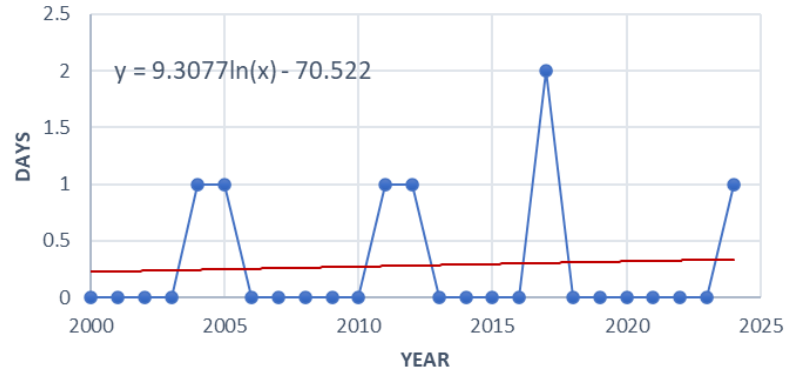
Days with Rainfall over 50mm



Days with Rainfall over 30mm

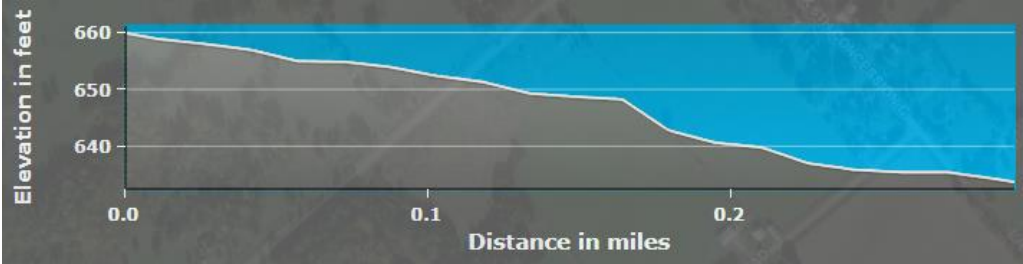





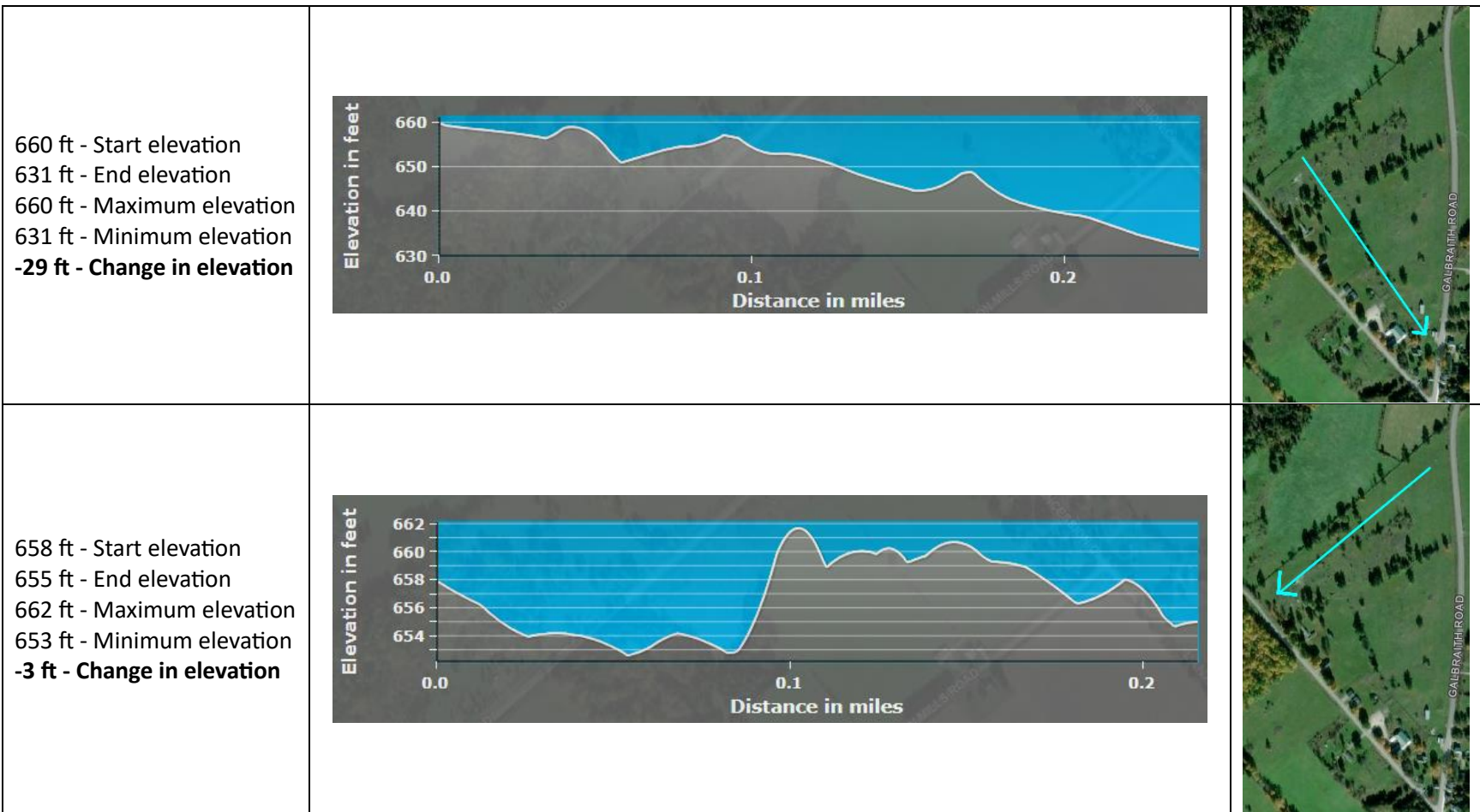
Days with Rainfall over 60mm



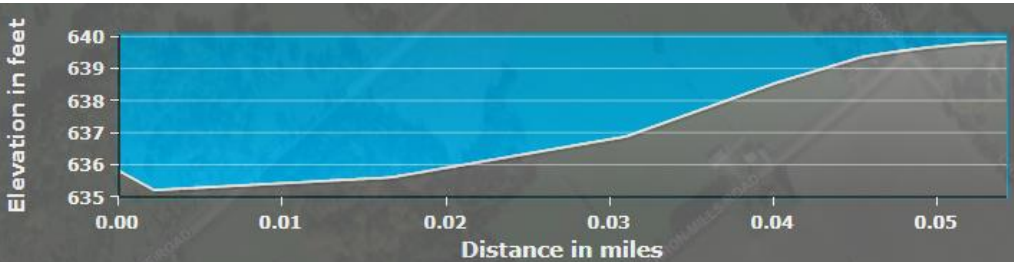



9 Appendix D – Profile Data, Potential Development Land

Table 1: Profile Data, Potential Land Development

Elevation Data	Cross Section Profile	Profile Vector
<p>660 ft - Start elevation 634 ft - End elevation 660 ft - Maximum elevation 634 ft - Minimum elevation -26 ft - Change in elevation</p>		
<p>656 ft - Start elevation 631 ft - End elevation 658 ft - Maximum elevation 631 ft - Minimum elevation -25 ft - Change in elevation</p>		



<p>651 ft - Start elevation 647 ft - End elevation 653 ft - Maximum elevation 647 ft - Minimum elevation -4 ft - Change in elevation</p>		
<p>636 ft - Start elevation 640 ft - End elevation 640 ft - Maximum elevation 635 ft - Minimum elevation 4 ft - Change in elevation</p>		

10 Appendix E – Photographs of Some Species and Plantlife in Established Ecosystem

Figure 14: Mallard Ducks



Figure 15: Painted Turtles



Figure 16: Bittern





RE: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

From patrick

Date Wed 2025-12-31 10:27 AM

To Koren Lam <klam@lanarkcounty.ca>

Cc 'Dayna Edwards' <dayna@q9planning.com>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Koren,

Thank you for the status on subject application, I appreciate the update.

I was able to download all schedules included in the application from the Lanark County website. During my preliminary reading, several concerns come to light with considerations towards surrounding landowners and Lanark County. These concerns are specific to Tatham Engineering's Servicing Options and Preliminary Stormwater Management Report.

Leading up to the feedback submission constraint of 03 March 2026, I'll ensure to review all schedules and submit my concerns.

**Note: Can you please forward to Dayna the investigation report I created last fall and CC me? I understand Dayna is with Q9 planning + design; however, the report will provide Dayna with some background relating to the existing issue with the current stormwater infrastructure.*

Cheers,
Patrick Ouellette



RE: 09-T-25004 - LH - Easton's Subdivision - New Subdivision, Notice of Application & Circulation

From patrick

Date Sun 2026-02-22 12:23 PM

To Koren Lam <klam@lanarkcounty.ca>

Cc 'Dayna Edwards' <dayna@q9planning.com>; caroline

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Koren,

Thank you for the opportunity to provide feedback relating to application: 09-T-25004 - LH - Easton's Subdivision - New Subdivision.

The application and all supporting materials have been reviewed and their contents are well understood. The review focused specifically on negative impacts the proposed subdevelopment will have to the environment and adjacent properties, particularly Ferme Ouellette Farm, located at 4248 Wolf Grove Road.

According to the Provincial Planning Statement section “3.6.8 – Planning for stormwater management” subsection g), provisions are required to “align with any comprehensive municipal plans for stormwater management that consider cumulative impacts of stormwater from development on a watershed scale.” Based on the preliminary report submitted by Ferme Ouellette Farm to Lanark County and the Township of Lanark Highlands, there are existing deficiencies within the current stormwater infrastructure that are already negatively affecting the farm property.

Introducing an upstream subdivision and coupling it to the existing stormwater infrastructure and related watershed framework, is considered cumulative and will exacerbate these existing issues and further negatively impact downstream properties. While the developer’s proposed Stormwater Management Plan briefly references reducing downstream impacts, no comprehensive study appears to have been conducted evaluating the full existing stormwater infrastructure, watershed framework, current water loading conditions, and their cumulative impacts on surrounding properties.

It is therefore recommended that the concerns outlined above, along with those detailed in the September 12, 2025 preliminary report prepared by Ferme Ouellette Farm, be thoroughly reviewed and addressed prior to proceeding with approval of the proposed subdivision application.

Please ensure my contact information remains on the notification list and that updates are provided as they arise. Depending on future application updates or critical decisions, Ferme Ouellette Farm may seek legal consultation and/or professional services to further support the concerns identified in this feedback submission.

**Note: The preliminary report created by Ferme Ouellette Farm submitted to the Lanark County and the Township of Lanark Highlands on the 12th of September 2025 can be included as part of this feedback.*

Should there be any questions, please do not hesitate to contact me.

Sincerely,
Patrick Ouellette, CET, BSc, MSc IS
Ferme Ouellette Farm