

Development Application Comment Tracking

DATE: May 6, 2025

Development Services

APPLICATION TYPE:	Plan of Subdivision & Zoning By Law Amendment Application
APPLICATION NO:	ZBA12-24-PS1-24-KD
LOCATION:	29 13th Concession Road, Scotland
AGENT / APPLICANT:	The Angrish Group
OWNER:	Michael Haley
CIRCULATION DATE:	April 16, 2025
CIRCULATION TYPE:	Third Submission Comments

The following comments / action items & advisory notes have been provided as result of the circulation of the proposed development at the above mentioned property. <u>Any attachments associated with the departmental comments have been attached for review.</u>

	DEPARTMENT:	County of Brant Operations					
N	NAME / CONTACT: Stefanie DiGiovanni						
	COUNTY OF BRANT / COMMENTING AGENCY COMMENTS		✓	AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]			
1.	1. The County-led Scotland MESP (Phase 1) was completed in February 2025 and provide recommendations related to stormwater management, water and wastewater servicing and the transportation network. Final guidance regarding the path forward for servicing will be determined through a County-led Master Plan Study (Phase 2 of the MESP), currently underway and expected to be completed in 12-15 months.						
2.	 Please p phospho 	nagement (April 2025): rovide a phosphorus balance, including existing orus loading and runoff volumes both pre- and velopment to ensure the required removal					



criteria is achieved.

- A legal outlet still needs to be provided for Outlet #3. The proposed SWM strategy will infiltrate the 10-year storm but beyond the 10-year storm will outlet to the neighboring lands. A sufficient downstream outlet will be required. The County-led MESP recommends coordination with the neighbouring lands to the south to achieve a legal outlet to the watercourse to the southwest.
- The County encourages the applicant to seek opportunities to combine SWM facilities with the existing SWM facility on Augustus St, and/or develop a coordinated SWM approach to limit redundant SWM facilities that operate independently and are not interconnected.
- The infiltration of stormwater containing contaminants such as road salts may negatively impact the quality of nearby existing and proposed private wells. This is not discussed further in the hydrogeological assessment and will need to be addressed in detailed design.
- The County-led Scotland MESP (Phase 1) has been completed and provided site-specific recommendations regarding to stormwater management. Further recommendations for SWM strategies and grading will be provided through the Scotland/Oakland Master Plan Study. The applicant is encouraged to align with the findings of this Study, which will be finalized within the next 12-15 months.



3. Water & Wastewater Servicing:

- Analytical results for nitrate from the site indicate high levels of nitrate. This poses a significant limitation to the Site's potential to support residential development. Where health-related ODWQS criteria are not met, the MECP recommends against approval of a development based on individual wells. As nitrate is a health-related parameter, the shallow overburden aquifer underlying the Site should not be developed for individual private water supply. Additional investigation is required to confirm the viability of the proposed development on private services.
- The shallow overburden aquifer accessed by the water supply test wells is understood to be the ultimate receiving aquifer for effluent from individual on-site wastewater systems and was demonstrated to have preexisting high levels of groundwater contamination by nitrates. The receiving aquifer is also understood to be used for water supply by down-gradient dwellings. As the area upgradient of the Site remains under active agricultural development, elevated nitrate concentrations are anticipated to persist following redevelopment of the Site.
- The Assessment has identified that the site cannot sustain private wastewater servicing . Additional investigation is required to confirm a viable wastewater servicing strategy for the proposed development.

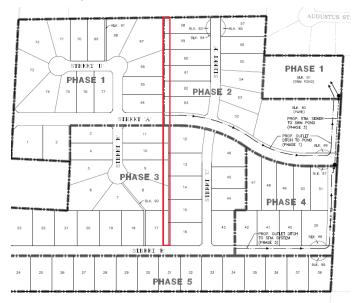


.	Transportation:	
	Consider completing Stopping Sight Distance calculations	
	in accordance with TAC guidelines to complement the	
	intersection site distance analysis.	
	Consider completing a sensitivity analysis for a single site	
	access versus the currently-proposed two-access	
	configuration.	
	 Previous Operations comments regarding traffic calming 	
	measures, implementation of Brant Safe Streets practices	
	and sidewalk width requirements (minimum of 1.8m) are	
	still valid and are to be considered in detailed design.	

	DEPARTMENT: Parks Capital Planning & Forestry						
N	NAME / CONTACT: Megan Thomas (Landscape Designer) / megan.thomas@brant.ca						
	COUNTY OF BRANT / COMMENTING AGENCY COMMENTS	AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]					
5.	As per previous comments that were not addressed as part of this Phasing Sketch, please see the below comments. Staff are of the opinion that the walkway connections need to be addressed prior to draft approval and determining extent of Phase 1 works.						
	 <u>Walkway Connection:</u> There is concern over the size and configuration of the Walkway Blocks from a safety and overall functional design perspective. Walkway corridors should be 8-12m wide to allow for space for the walking surface and adequate buffers. 						



- Note: These buffers should be designed to receive plantings
- A **continuous** corridor connecting Street B to the limits of the subdivision to the northeast should be achieved, doing so would create open sightlines from a safety perspective.
- Based on the proposed Plan the most sound configuration for the walkway blocks(s) would be as shown below:



If there is no pedestrian infrastructure planned for Street B, please ensure there is adequate pedestrian control measures in place (i.e. pedestrian gate) to slow movement prior to reaching the road. This detail should be included as part of detailed design.



	DEPARTMENT:	Environmental Planning					
Ν	NAME / CONTACT: Michelle Schaefle (Sr. Environmental Planner) / miche			chaefle@brant.ca			
	COUNTY OF BRANT / COMMENTING AGENCY COMMENTS			AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]			
6.	provide commen	anning has no further comments at this time and will ts on draft plan conditions regarding climate change at the applicable time.					

	DEPARTMENT: Enbridge Gas					
N	NAME / CONTACT:					
	COUNTY OF BRANT / COMMENTING AGENCY COMMENTS	√	AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]			
7.	Enbridge Gas does not object to the proposed application(s), however, we reserve the right to amend or remove developmen conditions. Please always call before you dig, see web link for additional details: <u>https://www.enbridgegas.com/safety/digging-safety-for</u> <u>contractors</u>					
8.	Thank you for your correspondence with regards to draft plan of approval for the above noted project. It is Enbridge Gas Inc.'s request that prior to registration of the plan, the Owner shall make satisfactory arrangements with Enbridge Gas Inc. (Enbridge Gas) to provide the necessary easements and/or agreements required by Enbridge Gas for the provision of local gas service for this project. Once registered, the owner shall provide these easements to Enbridge Gas at no cost, in a form agreeable and satisfactory to Enbridge Gas.					



	DEPARTMENT: Hydro One					
N	NAME / CONTACT: Land Use Planning Department, Hydro One Networks Inc. < <u>LandUsePlanning@HydroOne.com</u> >					
	COUNTY OF BRANT / COMMENTING AGENCY COMMENTS	~	AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]			
9.	We are in receipt of your Application for Subdivision, PS1-24-KD dated 2025-04-16. 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)					

DEPARTMEN	Cambium (Peer Review)	Cambium (Peer Review)			
	TY OF BRANT / COMMENTING AGENCY COMMENTS AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]				
10 Please find attached Peer Review comments for Hydrogeological Report via separate cover (February 2025).					



	DEPARTMENT:	Arcadis (Peer Reviewer)				
NAME / CONTACT:						
	COUNTY OF BRANT / COMMENTING AGENCY COMMENTS		√	AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]		
11	11 Please find attached Peer Review of Traffic Impact Study via separate cover.					

		DEPARTMENT:	Ainley (Peer Reviewer)				
NAME / CONTACT:							
		COUNTY OF BRANT / COMMENTING AGENCY COMMENTS		√	AGENT / APPLICANT / OWNER RESPONSE / COMMENTS [ACKNOWLEDGED / ADDRESSED / RESPONSE]		
		12 Please find attached Peer Review comments of the revised SWM submission via separate cover.					



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Locations Peterborough Kingston Barrie Whitby Ottawa

Laboratory Peterborough



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February 7, 2025

County of Brant Operations Department 26 Park Ave, Burford, ON N0E 1A0

Attn: Andrea Bazzard Director, Environmental Services

Re: Peer Review of Hydrogeological Site Assessment, Thirteenth Concession Road, Scotland, County of Brant, Ontario Cambium Reference: 20716-001

Dear Andrea,

Cambium Inc. (Cambium) is pleased to provide the County of Brant (the County) with a summary of our peer review of the *Hydrogeological Site Assessment Thirteenth Concession Road, Scotland, County of Brant, Ontario* (Report) prepared by G2S Consulting Inc. (G2S), dated January 9, 2025.

The Report was prepared in support of the proposed 77-lot residential subdivision of the property with a municipal address of 29 Thirteenth Concession Road in Scotland, Ontario (the Site). The Site has a total developable area of approximately 27.5 ha, which includes the residential lots, a park area, stormwater management (SWM) pond, and roadways. The proposed development will be privately serviced for water supply and wastewater disposal.

This review considered the information presented in the Report, as well as the prior Stage 1 hydrogeological investigation report for the Site also prepared by G2S.

SUMMARY OF PEER REVIEW FINDINGS

Cambium conducted this peer review to determine whether the Report prepared by G2S demonstrates that the proposed development is suitable for private servicing in accordance with the County's Official Plan and Provincial regulatory and technical requirements.



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February 7, 2025

The Report and supporting documents have been reviewed to confirm that all potential risks to water resources and nearby groundwater users have been properly characterized based on the proposed private water and wastewater systems, local threats, local soils, hydrogeologic vulnerability, water quality standards, and other relevant factors.

The field investigations and reporting by G2S were generally completed in accordance with provincial guidelines and industry practices. However, analytical results for nitrate in raw (unfiltered) samples taken from five test wells installed in the proposed water supply/wastewater receiving aquifer indicate significant limitations to the Site's potential to support residential development. Additional investigation is required to confirm the viability of the proposed development on private services.

Findings of Cambium's peer review, including the rationale for conclusions above, are summarized in the following sections.

Drinking Water Supply

The nitrate concentration in four of the five wells tested exceeded Maximum Acceptable Concentration (MAC) of 10 mg/L in the Ontario Drinking Water Quality Standards. The fifth well had an elevated nitrate concentration but was below the MAC.

A MAC is established for parameters which, when present above a certain concentration, have known or suspected adverse health effects. The MAC for nitrate has been established to be protective of the health and Health Canada recommends that levels be kept as low as reasonably practicable.

Where health-related ODWQS criteria are not met, provincial development Guideline D-5-5 (Private Wells: Water Supply Assessment) recommends against approval of a development based on individual wells. As nitrate is a healthrelated parameter, the shallow overburden aquifer underlying the Site should not be developed for individual private water supply.



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February 7, 2025

Therefore, additional investigation is required to confirm the viability of the shallow aquifer for private water supply or to identify an alternative water supply source for the Site.

Nitrate Attenuation

The shallow overburden aquifer accessed by the water supply test wells is also understood to be the ultimate receiving aquifer for effluent from individual on-site wastewater systems. The receiving aquifer is also understood to be used for water supply by down-gradient dwellings.

Analysis of raw water samples from the receiving aquifer demonstrate that there are pre-existing high levels of groundwater contamination by nitrate-nitrogen. Where the background nitrate-nitrogen concentrations in a receiving aquifer exceed 10 mg/L, provincial development Guideline D-5-4 (Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment) recommends against approval of development. As the area identified in the report as upgradient of the Site remains under active agricultural development, elevated nitrate concentrations are anticipated to persist following redevelopment of the Site.

Therefore, additional investigation is required to confirm the viability of the shallow aquifer for receiving effluent from private, on-site wastewater systems, or to identify an alternative wastewater servicing option for the Site.



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February 7, 2025

CLOSING

Thank you for the opportunity to provide this peer review for the County of Brant. If you have any questions, please contact the undersigned.

Best regards,

Cambium Inc.

Signed by:	
()	

Kyle Horner, Ph.D., P.Geo. Senior Hydrogeologist



KNH/knh

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CAMBIUM QUALIFICATIONS AND LIMITATIONS

Limited Warranty

February 7, 2025

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer, and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

Reliance on Materials and Information

The findings and results presented in reports prepared by Cambium are based on the materials and information provided by the client to Cambium and on the facts, conditions and circumstances encountered by Cambium during the performance of the work requested by the client. In formulating its findings and results into a report, Cambium assumes that the information and materials provided by the client or obtained by Cambium from the client or otherwise are factual, accurate and represent a true depiction of the circumstances that exist. Cambium relies on its client to inform Cambium if there are changes to any such information and materials. Cambium does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Cambium will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Cambium during the provision of services, work or reports.

Facts, conditions, information and circumstances may vary with time and locations and Cambium's work is based on a review of such matters as they existed at the particular time and location indicated in its reports. No assurance is made by Cambium that the facts, conditions, information, circumstances or any underlying assumptions made by Cambium in connection with the work performed will not change after the work is completed and a report is submitted. If any such changes occur or additional information affect its findings or results.

When preparing reports, Cambium considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Cambium is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations, governmental guidelines and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

Site Assessments

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

Only conditions at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site chosen for study by the client, or any other matter not specifically addressed in a report prepared by Cambium, are beyond the scope of the work performed by Cambium and such matters have not been investigated or addressed.

<u>Reliance</u>

Cambium's services, work and reports may be relied on by the client and its corporate directors and officers, employees, and professional advisors. Cambium is not responsible for the use of its work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Cambium without Cambium's express written consent. Any party that relies on services or work performed by Cambium or a report prepared by Cambium without Cambium's express written consent, does so at its own risk. No report of Cambium may be disclosed or referred to in any public document without Cambium's express, damage, expense, fine, penalty or other such thing which may arise or result from the use of any information, recommendation or other matter arising from the services, work or reports provided by Cambium.

Limitation of Liability

Potential liability to the client arising out of the report is limited to the amount of Cambium's professional liability insurance coverage. Cambium shall only be liable for direct damages to the extent caused by Cambium's negligence and/or breach of contract. Cambium shall not be liable for consequential damages.

Personal Liability

The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.



Stefanie DiGiovanni Project Engineer, Engineering and Infrastructure Planning County of Brant 26 Park Avenue P.O. Box 160 Burford, ON N0E 1A0 Arcadis Professional Services (Canada) Inc. 55 St. Clair Avenue West 7th Floor Toronto, Ontario M4V 2Y7 Canada Phone: 416 596 1930 www.arcadis.com

Date: April 25, 2025 Subject: Peer Review of Traffic Impact Study – 29 Thirteenth Concession Road Residential Subdivision

Dear Ms. DiGiovanni,

Arcadis has been retained to conduct a peer review of the document titled 29 Thirteenth Concession Road Residential Subdivision – Traffic Impact Study ("the subject document") prepared by RC Spencer Associates Inc. ("the consultant") in March 2024, and its associated Supplementary Memo ("the subject memo") dated April 2025, for Haley's Elevator Inc. ("the applicant").

We understand that the subject memo was prepared in support of a proposed development consisting of 16 single-family detached residential units and a stormwater management pond, to be located at the north end of the hamlet of Scotland, west of Highway 24. The subject document examined a larger plan comprising of 108 single-family detached residential units. Since that time, the developer has decided to phase the development, with Phase 1 proceeding in 2025, and consisting of 16 residential units and a stormwater management pond. A holding provision will be maintained on the remaining subdivision lands.

The purpose of a peer review is to determine if the assumptions, methodologies, and conclusions presented by the consultant are reasonable, conform to industry best practices, and can generally be relied upon by review agencies in their decision-making processes.

Study Area and Traffic Volumes

The study area includes the intersection of Thirteenth Concession Road / Simcoe Street (C.R. 16). It is our understanding that the roadway north of Thirteenth Concession Road is referred to as Bishopsgate Road. (Source: <u>maps.brant.ca</u>) For clarity and consistency, it is recommended the intersection be referred to as Thirteenth Concession Road / Simcoe Street / Bishopsgate Road throughout the report. The study area is considered appropriately defined given the scale and location of the proposed development.

The traffic volumes used for Existing Conditions Analysis are based on 2024 traffic counts, which are recent and likely provide a close representation of the present conditions. Two planning horizon years, 2029 and 2034, were analyzed. A 1.5% per year compounded annual growth rate applied to the Future Background Conditions Analysis, which is consistent with County of Brant's expectations, and represents a conservative approach to long-term traffic forecasting.

Stefanie DiGiovanni County of Brant April 25, 2025

Subject Site Trip Generation

Based on our review of the trip generation estimates presented in the subject document, the consultant has used the Institute of Transportation Engineers ("ITE") Trip Generation Manual 11th Edition fitted curve equation for Land Use Code 210: Single-Family Detached Housing. A summary of these trip volumes, as obtained from Table 1 and Table 2 in the subject memo, are presented in **Table 1**.

The magnitude of site trips estimated in the subject document are reasonable.

Table 1: Trip Generation Estimates

Time Period	Proposed Development Residential Units	Proposed Development Residential Site Trip Generation	Updated Proposed Development Residential Units (Phase 1)	Updated Proposed Development Residential Site Trip Generation (Phase 1)
AM Peak Hour	108	80	16	14
PM Peak Hour	100	107		18

Trip Distribution

The consultant has based trip distribution for the subject development on the observed existing north/south traffic flow patterns at the study area intersection. While this is a standard industry approach, particularly for developments located outside of the Transportation Tomorrow Survey (TTS) area, it is noted that the subject site falls within TTS Zone 8953.

Considering that TTS Zone 8953 is at the edge of the TTS data collection area, and covers a large rural area, the available data may not accurately represent travel patterns to and from destinations not explicitly captured within the TTS. Under these circumstances, it is our experience that using observed existing traffic patterns to determine trip distribution percentages is the preferred and appropriate methodology.

Additionally, it is recommended that the consultant includes a table or figure summarizing the calculation of existing trip distribution percentages (inbound and outbound) to help validate the site trip assignment shown in Figure 4 of the subject document.

Proposed Site Accesses

Two site accesses, referred to as the easterly and westerly accesses along Thirteenth Concession Road, are proposed as part of the development. For a full build-out scenario generating 80 AM peak hour and 107 PM peak hour two-way trips, single access could adequately accommodate site traffic, particularly given the low background volumes along Thirteenth Concession Road.

For Phase 1, which includes only 16 single-family units, a single site access would be more than sufficient. Even under full development, the unsignalized T-intersection configuration at both access points is expected to operate with acceptable levels of service, as reflected in the consultant's Synchro results. Consideration could be given to conducting a sensitivity analysis for a single site access versus the currently proposed two-access configuration along Thirteenth Concession Road in light of the anticipated site trip volumes.

Stefanie DiGiovanni County of Brant April 25, 2025

Sight Distance Assessment

The consultant states that the location of the two access would meet all Transportation Association of Canada's (TAC) *Geometric Design Guide for Canadian Roads* (GDGCR) (June 2017), intersection sight distance requirement if the posted speed limit of 80 km/h on Thirteenth Concession Road were used as the baseline by which requirements were calculated. This translates to an assumed 100 km/h operating speed (posted, plus 20 km/h). While Intersection Sight Distance (ISD) calculations are provided in Appendix F of the subject document, Stopping sight distance (SSD) calculations are not included. To present a complete assessment of sight distance at the proposed access locations, it is recommended that the consultant include SSD calculations in the report.

The intersection sight distance assessment appears to be reasonable, aligning with TAC guidelines.

It is recognized that the Brant County's Consolidated Entrance By-law 123-24 imposes sight distance requirements for developments within the County. While TAC is generally considered to be an appropriate design standard, it is recommended that the consultant also reviews and addresses the County's By-law requirements.

Conclusions

Based on our review of the document 29 Thirteenth Concession Road Residential Subdivision – Traffic Impact Study prepared by RC Spencer Associates Inc. in April 2025 for Haley's Elevator Inc., we offer the following recommendations for your consideration:

- Include Stopping Sight Distance (SSD) calculations in accordance with TAC guidelines to complement the intersection sight distance analysis.
- Include a table or figure summarizing the calculation of existing trip distribution percentages (inbound and outbound) to help validate the site trip assignment.

Consideration could be given to:

- Revising the intersection nomenclature to Thirteenth Concession Road / Simcoe Street / Bishopsgate Road for improved clarity and consistency with local mapping references.
- Conducting a sensitivity analysis for a single site access versus the currently proposed two-access
 configuration along Thirteenth Concession Road in light of the anticipated site trip volumes.

Should you have any questions related to this analysis please do not hesitate to contact us.

Sincerely,

Arcadis Professional Services (Canada) Inc.

Pooja. Jeeo la

Pooja Yeola Senior Transportation Planner Email: pooja.yeola@arcadis.com Direct Line: +1 289-327-0905

marchill

Margaret Parkhill, P.Eng. Business Unit Director, Mobility Advisory Ontario Email: margaret.parkhill@arcadis.com Direct Line: +1 416 596 1930



AINLEY & ASSOCIATES LIMITED

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VIA EMAIL

May 5, 2025

File No. 224100

County of Brant Development Services Department 66 Grand River Street North Paris, ON N3L 2M2

- Attn: Alexander J. Donn, Development Technologist
- Re: 29 Thirteenth Concession Road 12-24-PS1-24-KD-Haley 3rd Submission Zoning By-Law Amendment Peer Review Comments Stormwater Management Design

Dear Mr. Donn:

As requested by e-mail on April 14, 2024, we have completed our review of the information provided for the Haley Subdivision in the County of Brant. As requested, we have limited our comments to the storm water management design elements provided in support of the application. The following information was provided for our review:

• Letter from J.H. Cohoon Engineering Ltd. Response to SWM Design Review Comments, dated April 11, 2025.

The attached comment matrix provides comments based on our peer review of the documents with respect to the stormwater management design.

We trust this information is satisfactory. However, if you require any additional information, please contact the undersigned.

Yours truly,

AINLEY & ASSOCIATES LIMITED

Richard D. Sloan, P. Eng. Water Resources Team Lead



29 Thirteenth Concession Road County of Brant Zoning By-law Amendment 12-24-PS1-24-KD-Haley

No.	Ainley's 2nd ZBA Comments	Development Team Response	Ainley 3rd Submission ZBA Comments	Status
Stormv 1.	balance criteria to control the recharge volume to meet Pre- development conditions on property, quality control to minimize existing phosphorous loading to Lake Erie and its tributaries as compared to conditions prior to the proposed development, and to retain the runoff generated as a result of the 25mm storm event for 24 to 48 hours, in accordance with the Design Criteria provided in Appendix A of the County's CLI-ECA for the Municipal Stormwater Management System.	All applicable design guidelines are listed within Section 1.3 and Section 3.1 of the provided SWM report. The published CLI-ECA referenced states that for developed scenarios, we are to "Minimize existing phosphorus loadings to Lake Erie and its tributaries, as compared to 2018 or conditions prior to the proposed development." As previously stated, phosphorus removal for this scenario is being provided in accordance with the MOE SWM Planning and Design manual, which states that providing SWM quality control practices as outlined in the MOE SWM manual has been found to provide 40-50% removals of phosphorous. Given that our quality controls follow these referenced guidelines, the prescribed SWM quality treatment train is acceptable and provides the required phosphorous removals. The lack of pre-existing drywells and SWM ponds indicates that the addition of these LID features will exceed the pre-existing phosphorus removals. The CLI-ECA phosphorus removal requirements referenced have been addressed.		Carried Forward
2.	achieved.	The project's SWM design has been completed in accordance with the MOE SWM manual, and as such, the prescribed SWM quality treatment train is acceptable and provides the required phosphorous removals, as referenced above. The lack of pre-existing drywells and SWM ponds indicates that the addition of these LID features will exceed the pre-existing phosphorus removals. The CLI-ECA phosphorus removal requirements referenced have been addressed.	Additional calculations should be provided using available phosphorus budget tools (Nottawasaga Valley Conservation Authority, Lake Simcoe Region Conservation Authority) to ensure the phosphorus loading requirement is satisfied. Calculations will also be required to ensure that pre-development recharge volumes are maintained in post development conditions, particularly given the concerns for potential groundwater contamination identified in the previously submitted geotechnical reports.	Incomplete



29 Thirteenth Concession Road County of Brant Zoning By-law Amendment 12-24-PS1-24-KD-Haley

No.	Ainley's 2nd ZBA Comments	Development Team Response	Ainley 3rd Submission ZBA Comments	Status
3.	Outlet #3 cannot be considered a legal outlet since the collected drainage will be conveyed directly through private properties via surface drainage rather than to a natural watercourse. There is no right to discharge via overland flow even if quantity controls are provided; downstream property owners are not required to accept it and can legally block it. It is unclear from the information provided how infiltration of the 10-year event will occur under winter conditions and what the anticipated maintenance program would be. A SWM Block is required to act as a drainage route to avoid the private property and achieve a drainage route to Augustus Street.	The grading of the subject lands has been modified to ensure the majority of the water is directed into the storm water management facility located in the southwest corner of the site. The area along the western boundary is contained within the development and considered in the overall analysis of the site. The containment of the stormwater in this area occurs with the use of drywells which contain the storm events up to and including the 10-year storm event. In those storms that exceed their capacity, the runoff sheet flows over the property line onto the abutting lands but with the rates being below the pre-development rates. Drainage to outlet #3 has been reduced under the proposed SWM scheme from an existing outflow of 0.860 m3/s to a proposed 0.790 m3/s. No other feasible option is available to drain this area, and a net improvement to this outlet is already proposed.	Environmental Assessment process, as Phase 2 of the Master Environmental Servicing Plan (MESP).	Incomplete
4.	Clarification is required to demonstrate how catchments 202a, 202b, and 202c are conveyed to the facility since the proposed grading plan indicate low points at Lots 2, 11, 17, 31, 36 and 65.	Drainage of these catchments will occur as the road-side ditch low points fill up to the point of running down towards the SWM pond. This additional ditch water storage volume has not been accounted for in the SWM brief to date, as it is a conservative assumption at this stage to not include it. Additional grading details and localized pond limits can be provided at the time of detailed engineering	grading information provided to date. For instance, along Street A	Incomplete
5.	The post development SWMM model should be updated to include critical ditch sections and crossing culverts to ensure that major flows can safely be conveyed through the development within the road allowance and in accordance with County Engineering Standards, including any intercepted external areas.	Critical ditch sections can be analysed and documented at the time of detailed engineering design.		Incomplete
6.	Given the reliance on storage for infiltration purposes analysis of the 12-hour Chicago Storm and 24-hour SCS Storm are required to ensure that there is no flooding at the location of any of the proposed infiltration measures during longer duration storms.	County of Brant Development and Engineering standards require a 3- hour Chicago storm be utilized for SWM design. This has already been included in the design package supplied.	Per Section 1.02 of the County Standards: "Additional items may be required to address specifics for any given development. Each property is looked at based on its own merit and may require items over and above the Zoning By-Law requirements depending on the site and the nature of the development. Special circumstances may require items over and above these design standards." As a result, the additional analysis will be required per the original comment.	Incomplete



29 Thirteenth Concession Road County of Brant Zoning By-law Amendment 12-24-PS1-24-KD-Haley

No.	Ainley's 2nd ZBA Comments	Development Team Response	Ainley 3rd Submission ZBA Comments	Status
	County staff have identified that the roadside ditch along Thirteenth Concession Road is poorly defined and contains only minimum sized driveway culverts. As a result, it is unlikely that the existing infrastructure is sufficient for the Thirteenth Concession Road ditch to be considered as a legal outlet for the proposed development. Additional analysis will be required to demonstrate that the available capacity within the municipal road allowance is sufficient to safely convey drainage from the surrounding area, including the proposed development, to a natural watercourse.	The runoff has been directed away from the Thirteenth Concession Road and re-directed into the stormwater management facility. Although during detailed design, we would anticipate improvements being undertaken in this area, we anticipate further discussion with County staff to occur.	The revised grading and stormwater management design information was not provided as part of the current submission to demonstrate how the area previously intended to discharge to Outlet 2, as described in the October 2024 SWMR, can now be directed to and accommodated within the proposed SWM Block.	Incomplete
	The geotechnical report, included with the first submission, indicates that there is potential for groundwater contamination and includes a recommendation for the installation of an impermeable liner for the proposed SWM pond facility, yet the stormwater management design of the facility has been completed on the basis that runoff volumes from the 3-hour 10-year storm will be infiltrated to achieve quantity control targets. This is not discussed further in the interim hydrogeological assessment, included with the current submission. Confirmation is required from the geotechnical consultant to ensure that the proposed infiltration strategy, including the drywells proposed for rear yards, roadside ditches, and infiltration pond, is viable for this location with respect to separation from the groundwater table, potential for groundwater contamination and possible impact to the performance of the proposed septic systems, and include results from in-situ infiltration testing at key locations for each of the proposed infiltration performance. Please refer to comments prepared by the County's hydrogeological peer review consultant.	Coordination with the other consultant parties and any required modifications to the SWM facilities as part of that coordination will be undertaken during the Detailed Engineering Design stage.	Insufficient information has been provided to date to demonstrate that the SWM criteria, including water balance and phosphorus management, have been addressed to a sufficient level of detail to amend the Zoning.	Incomplete