



**PLANNING, DEVELOPMENT
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Community Planning

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Matthew Colley
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D20-20/23 KIT

December 20, 2023

Committee of Adjustment
City of Kitchener
P.O. Box 1118
200 King Street East
Kitchener, ON N2G 4G7

**Re: Revised Comments for Consent Application
B2023-042
52 Edgehill Drive
James & Beverly Mellish
CITY OF KITCHENER**

The applicant is proposing to sever a new residential lot with frontage on Edgehill Drive.

Regional Fee:

The owner/applicant is required to submit the Regional consent review fee of \$350.00 prior to final approval of the consent.

Environmental Noise:

Regional staff note that the proposed severed and retained lots are in close proximity (approximately 95 metres) to King Street East (Regional Road No. 8). Although there are some existing intervening land uses between the proposed dwellings and the transportation noise sources, the proposed dwellings on the retained and severed lots will likely have impacts from transportation and stationary noise sources. It is the responsibility of the applicant to ensure the proposed development is not adversely affected by anticipated transportation (traffic) and stationary (commercial) noise impacts. ROP Policy 2.G.13 indicates that a noise study may be required for a development application for a sensitive land use submitted in the vicinity of an Existing or Planned Regional Road, Provincial Highway, the rapid transit system, transit terminals, railways or Area Municipal roads.

In lieu of requiring a detailed transportation and stationary noise study, and because the primary transportation noise source is a Regional Road, Regional staff require as a condition of the consent that the owner/applicant of the units on all (retained and severed) lots will be required to enter into a registered agreement with the Region of

Waterloo to include noise mitigation and warning clauses in all Offers of Purchase and Sale, lease/rental agreements.

For the severed lot, the owner is to agree that all dwelling unit(s) must be installed with an air-ducted heating and ventilation system suitably sized and designed with the provision of adding central air conditioning prior to occupancy. In addition, the following noise warning clauses will be included in all offers of purchase and sale, deeds and lease/rental agreements:

- a) *"Purchasers/tenants are advised that despite the inclusion of noise attenuation control features in the development and within the building units, sound levels due to increasing road traffic on King Street East (RR #8) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Region of Waterloo and the Ministry of the Environment Conservation & Parks (MECP)."*
- b) *"This unit has been designed with the provision of adding a central air conditioning system at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Region of Waterloo and the Ministry of the Environment, Conservation & Parks (MECP)."*
- c) *"Purchasers/tenants are advised that the stationary noise levels from the existing commercial land uses in the vicinity may also at times be audible."*

For the retained lot, the following noise warning clauses will be included in all offers of purchase and sale, deeds and lease/rental agreements:

- a) *"Purchasers/tenants are advised that sound levels due to increasing road traffic on King Street East (RR #8) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Region of Waterloo and the Ministry of the Environment Conservation & Parks (MECP)."*
- b) *"Purchasers/tenants are advised that the stationary noise levels from the existing commercial land uses in the vicinity may also at times be audible."*

Water and Wastewater Services:

Regional Staff note that the property does not currently have municipal water or sanitary services. City Staff have previously indicated that it is not feasible for the City, or the owner/applicant at their expense, to extend municipal sanitary services to the proposed retained or severed lot. The subject application proposes private services within the urban area.

Policy 2.J.8 of the Regional Official Plan permits residential infill development on individual on-site water and individual on-site sewage services, subject to the following:

- a) it is demonstrated to the satisfaction of the Region that the extension of servicing from a municipal water and/or wastewater system is not feasible;
- b) the site is not located within Wellhead Sensitivity Area 1, a High Microbial Risk Management Zone, or a Surface Water Intake Protection Zone 1 described in Chapter 8;
- c) studies prepared in accordance with the Regional Implementation Guidelines for Source Water Protection Studies and accepted by the Region, demonstrate that such services can operate satisfactorily on the site and will not have a negative impact on groundwater resources;
- d) it is demonstrated to the satisfaction of the area municipality's Chief Building Official that the site conditions are suitable for the long-term provision of such services with have no adverse effects; and
- e) the development application complies with Policies 5.B.8 and 5.C.6 as applicable

The owner/applicant submitted a Scoped Hydrogeological Study authored by Englobe in support of the proposed application. Regional Staff have completed a peer review of the study (September 2023) and subsequent revision (December 2023). The Region's peer review consultant provided sign off on the Scoped Hydrogeological Study on December 20, 2023. The peer review comments are attached.

Regional Staff confirm the study is satisfactory in accordance with the policies of the Regional Official Plan (ROP). Regional Staff have no further concerns on this item.

Well and Septic Decommissioning:

Regional Staff note that should municipal water and/or septic services be provided and connected to the proposed severed and retained lots, any private well and/or septic system on the proposed retained lands will have to be decommissioned in accordance with Regulation 903 of the Ontario Water Resources Act, Ontario Building Code and all other applicable regulation.

The Region has no objection to the proposed application, subject to the following condition:

- 1) That prior to final approval, the owner/applicant submit the Regional consent review fee of \$350.00.
- 2) That prior to final approval, the owner/applicant enter into a development agreement, registered on title, with the Region of Waterloo to include the following noise mitigation and warning clauses in all Offers of Purchase and Sale, lease/rental agreements for the severed lands:
 - a) That all dwelling unit(s) on the severed lands be installed with an air-ducted heating and ventilation system suitably sized and designed with the provision for central air conditioning.

- b) *"Purchasers/tenants are advised that despite the inclusion of noise attenuation control features in the development and within the building units, sound levels due to increasing road traffic on King Street East (RR #8) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Region of Waterloo and the Ministry of the Environment Conservation & Parks (MECP)."*
 - c) *"This unit has been designed with the provision of adding a central air conditioning system at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Region of Waterloo and the Ministry of the Environment, Conservation & Parks (MECP)."*
 - d) *"Purchasers/tenants are advised that the stationary noise levels from the existing commercial land uses in the vicinity may also at times be audible."*
- 3) That prior to final approval, the owner/applicant enter into a development agreement, registered on title, with the Region of Waterloo to include the following noise mitigation and warning clauses in all Offers of Purchase and Sale, lease/rental agreements for the retained lands:
- a) *"Purchasers/tenants are advised that sound levels due to increasing road traffic on King Street East (RR #8) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Region of Waterloo and the Ministry of the Environment Conservation & Parks (MECP)."*
 - b) *"Purchasers/tenants are advised that the stationary noise levels from the existing commercial land uses in the vicinity may also at times be audible."*

General Comments

Any future development on the lands subject to the above-noted consent application will be subject to the provisions of Regional Development Charge By-law 19-037 or any successor thereof. Please accept this letter as our request for a copy of the staff reports, decisions and minutes pertaining to each of the consent applications noted above. Should you require Regional Staff to attend the meeting or have any questions, please do not hesitate to contact the undersigned.

Yours truly,



Matthew Colley, MCIP, RPP
Senior Planner

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Our ref: 12602656-LTR-4

28 November 2023

Mr. Matthew Colley, MCIP, RPP
Senior Planner
Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick St.
Kitchener, ON N2G 4J3

Peer Review – 52 Edgehill Drive, Kitchener, Hydrogeological Study (Englobe Ref No.: 02200643.000)

Dear Mr. Colley,

1. Introduction

GHD Limited (GHD) has prepared this letter to summarize our peer review of the Hydrogeological Study (the Study) to support severance of a lot located at 52 Edgehill Drive, in Kitchener, Ontario (Site). The Study was completed by Englobe Corp. (Englobe) for Mr. James Mellish and is dated September 25, 2023 (Englobe Ref No. 00220643.000).

As requested, GHD has prepared this letter to provide the Regional Municipality of Waterloo (Region) with an opinion concerning the adequacy of the Study in relation to the Region's *Hydrogeological Assessment Guidelines for Privately-Serviced Developments – Scoped Stage 2 Studies – Revised November 25, 2020* (Region's Guideline). The letter also provides an opinion of the suitability of the interpretations and conclusions provided within the Study.

2. Opinion of Adequacy

Based on the description included in Section 2 (Methodology), Englobe's scope of work included advancing three test pits, collecting soil samples for laboratory analysis of grain size, completing an in-situ percolation test and collecting one groundwater sample from a previously installed well.

In general, the Study provides relevant details and discussion to support the severance; however, GHD notes the following deficiencies when comparing the Study to the Region's Guideline.

- a. The Study does not comment on the reason why a private septic service is the only practical option.
- b. The Study does not comment on the Site's proximity to GUDI wells or positioning relative to the 10-year travel time to Municipal supply wells. The Site does not appear to be within either; however, the Study should be updated to explicitly state this.

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- c. Section 3.5 states that "Englobe collected a groundwater sample from the existing on-Site on 29th, 2023." It is assumed that this sentence is missing reference to the well where the sample was collected, and the month of collection. In Section 2, Methodology, the Study states that the scope of work included "collecting one groundwater sample from a previously installed monitoring well." Section 2.5 states that a sample of untreated well water was collected from a faucet within the basement of the residential dwelling. Based on this conflicting information it is not clear where the groundwater sample was obtained from. This detail should be clarified. If the on-Site potable water supply well was used to determine background nitrate and nitrite concentrations, then the suitability of these results is questionable considering the proposed private septic system is presumed to be discharging to a shallow water table flow zone within the overburden.
- d. Section 2.5 does not include a water well record number or description of the residential supply well. GHD agrees that the local supply aquifer is within bedrock; however, this section would benefit by including a description of the well sampled.
- e. The Study notes that groundwater was not encountered in the test pits excavated, however the Test Pit Stratigraphy Log for TP2-23 indicates "saturated at the bottom". This note suggests groundwater was encountered at 3.0 metres below ground surface (mBGS) at TP2-23. This observation is relevant to the Study as the Region's Guideline specifies "determination of shallow on-site groundwater levels and groundwater flow direction". It is unlikely that the Study could determine shallow groundwater flow direction without additional investigation. Notwithstanding, it is likely that the shallow groundwater flow is directed towards the Grand River.
- f. Though not explicitly required by the Region's Guideline, a map illustrating the locations of private water supply wells identified in Table 3.1 and in the private well survey attachments would support the statement that the wells are located in close proximity to the Site.
- g. The Study does not include an analysis of nitrate impacts on the shallow groundwater due to the proposed on-Site sewage system.

3. Opinion of Suitability

GHD generally concurs with Englobe's discussion of the geology and hydrogeologic setting of the Site; however, an assessment of potential nitrate impacts resulting from the proposed on-Site septic system in accordance with Condition 3 of the MOEE *Procedure D-5-4 technical guideline for Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment* should be included. The presence of a substantial thickness of fine-grained soils between the receiving groundwater and the deeper aquifer used for private water supply may be sufficient evidence of hydraulic isolation of sewage effluent from water supplies. If deemed sufficient, this should be explicitly described in the Study in accordance with *Procedure D-5-4*.

The use of a groundwater sample from the deeper flow zone in which the private water supply well is completed is not suitable for characterizing background nitrate concentrations in the receiving groundwater. Depending on the results of the *Procedure D-5-4* assessment, characterization of the background shallow groundwater quality may be appropriate.

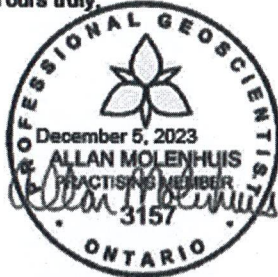
Notwithstanding the above, the shallow soils and hydrogeologic setting at the Site are not inherently unsuitable for the proposed private on-Site septic system.

4. Conclusion

As documented above, there are deficiencies in the scope of the Study as it relates to the Region's Guideline. Notwithstanding, there is substantial physical evidence that the Site is likely suitable for servicing with an appropriately designed private sewage disposal system.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,



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Our ref: 12602656-LTR-5

20 December 2023

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Peer Review – 52 Edgehill Drive, Kitchener, Hydrogeological Study (Englobe Ref No.: 02200643.000)

Dear Mr. Colley,

GHD Limited (GHD) has prepared this letter to summarize our review of the response to comments and revised hydrogeological study report prepared to support severance of a lot located at 52 Edgehill Drive, in Kitchener, Ontario (Site).

GHD originally provided a peer review of the report completed by Englobe Corp. (Englobe) for Mr. James Mellish and dated September 25, 2023 (Englobe Ref No. 00220643.000) (Englobe Report). GHD provided comments on the Englobe Report in a letter dated November 28, 2023 (November letter). The November letter provided the Regional Municipality of Waterloo (Region) with an opinion concerning the adequacy of the Englobe Report in relation to the Region's *Hydrogeological Assessment Guidelines for Privately-Serviced Developments – Scoped Stage 2 Studies – Revised November 25, 2020*.

GHD was provided with a revised Scoped Stage 2 Hydrogeological Study report dated December 14, 2023, (Revised Englobe Report) and a comment response matrix from Englobe on December 18, 2023. Based on GHD's review of the comment matrix and the Revised Englobe Report, GHD is satisfied that the revised report addresses the comments provided in the November letter.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

A handwritten signature in black ink that reads "Allan Molenhuis".

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