

TECHNICAL MEMORANDUM

DATE July 8, 2019

Project No. 18113515 (2000)

TO Josh Kardish
Regional Group Inc. c/o eQ Homes

FROM Christine Ko, P.Eng.

EMAIL Christine_Ko@golder.com

**RESPONSE TO CITY COMMENTS
PROPOSED RESIDENTIAL DEVELOPMENT
76 SALAMANDER WAY
OTTAWA, ONTARIO**

Golder Associates Ltd. (Golder) previously carried out a geotechnical investigation at or in close proximity to the proposed residential development located at 76 Salamander Way (hereinafter referred as "Site") in Ottawa, Ontario and the results of that investigation were provided in a report to Leitrim South Holdings Inc. and 4840 Bank Street Ltd. titled "*Geotechnical Investigation, Proposed Residential Development, Remer and Idone Lands, Ottawa, Ontario*" dated January 2017 (report number 13-1121-0083 (1046)).

This technical memorandum summarizes our response to the comments (File No. D07-12-19-0060) received from the City of Ottawa, through Regional Group Inc. (Regional), on June 25, 2019 pertaining to the subsurface information and recommendations provided in the above geotechnical report for this proposed development area, within which 76 Salamander Way is located.

City Comment

9) *Confirm that any grade raises, as indicated on the grading plan, are acceptable.*

Golder Response

The results of the geotechnical investigation carried out by Golder indicate the subsurface conditions at this Site generally consist of topsoil overlying sands and silts, and followed by bouldery glacial till, which is in turn underlain by bedrock. Based on the above and as noted in the geotechnical report, from a foundation design perspective there is no practical restriction on the thickness of grade raise fill that may be placed above original ground surface within the proposed residential development area.

Golder has reviewed the following grading plan prepared by IBI Group (IBI) for the 76 Salamander Way development.

■ Grading Plan, Project No. 114312, Drawing No. 200, Revision 1, Revised April 1, 2019.

Upon review, the grading plan was found to be in accordance with the recommendations provided in Golder's report from a grading perspective and therefore considered acceptable from a geotechnical point of view.

City Comment

10) *Clarify the soil type class.*

Golder Response

Based on the measured groundwater levels in the adjacent boreholes, the groundwater levels at this Site range from about 2 to 4.5 metres below the ground surface.

For basement excavations above the groundwater level, the overburden may be considered as Type 3 soils in accordance with the Occupational Health and Safety Act of Ontario (OHSA) and the excavation side slopes should be stable in the short term at 1H:1V.

If the basement excavations extend below the groundwater level (which is not expected to be the case for this site and considering the proposed single basement depth), the overburden may be considered as Type 4 soils and the excavation side slopes will need to be cut back at 3H:1V per OHSA.

City Comment

11) *Indicate the locations where light weight fill are going to be used.*

Golder Response

As noted in our response to Comment No. 9 above, the proposed grading at this site using typical soil or rock fill material is considered acceptable from a geotechnical point of view. In addition, based on the grading plan by IBI, there is sufficient earth cover (for frost protection purposes) over the footing bearing surfaces at the front and rear of the houses (i.e., greater than the 1.5 metres required for frost protection). Therefore, light weight fill is not considered to be required for the proposed Site development.

Closure

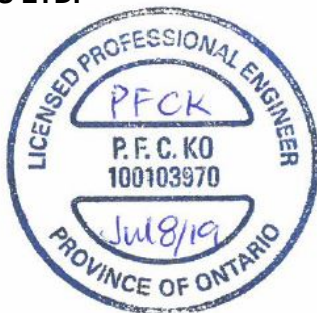
We trust that this memo provides sufficient information for your present requirements. If you have any questions concerning this memo, please don't hesitate to contact the undersigned.

Yours truly,

GOLDER ASSOCIATES LTD.



Christine Ko, P.Eng.
Geotechnical Engineer



Paul Smolkin, P.Eng.
Principal, Senior Geo-environmental Engineer

CK/PAS/mvrd

https://golderassociates.sharepoint.com/sites/101230/deliverables/geotech/18113515-2000-001-tm-rev0-city comments-0807_19.docx

C.C. Taylor Marquis, Regional Group Inc.
Ryan Magladry and Amy Zhuang, IBI Group