



**re: Geotechnical Responses to City Comments**  
**Proposed Mixed Use Development**  
**216 McArthur Avenue – Ottawa, Ontario**

**to: Cassidy E.W. Construction Consultant Ltd. – Mr. Chris Poirier –**  
[chris@cassidyewconstruction.com](mailto:chris@cassidyewconstruction.com)

**date:** December 12, 2022

**file:** PG6061-MEMO.01

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Further to your request, Paterson Group (Paterson) prepared the current memorandum to address the geotechnical-related review comments provided by the City of Ottawa. The following memorandum should be read in conjunction with the current Geotechnical Investigation Report (Paterson Group Report PG6061-1 dated January 27, 2022).

## **Geotechnical Investigation**

**Comment 12:** *Please submit a letter stating that the latest Grading and Servicing Plan has been reviewed and that it complies with the recommendations and statements of the latest Geotechnical Investigation*

**Response:** Reference should be made to the Grading and Servicing Plan Review memo (Paterson Group Memo PG6061-MEMO.02, dated December 14, 2022), which documents our review of the latest site servicing and grading plans for the subject site.

In summary, the grading is considered acceptable, from a geotechnical perspective. A silty clay deposit was not encountered during the geotechnical investigation and therefore no permissible grade raise restrictions have been provided for the subject site.

In addition, the proposed services have sufficient soil cover to provide suitable frost protection without the need for insulation. It is recommended that pipe bedding for sewer pipes placed on a bedrock surface be increased from 150 to 300 mm and indicated accordingly on Drawing C-1 prepared by D.B. Grey Engineering Inc. The proposed site servicing drawings are otherwise considered acceptable from a geotechnical perspective.

**Comment 13:** *Under the section 4.3, please provide the ground water readings in table format.*

**Response:** As noted in the aforementioned geotechnical report, piezometers were measured as dry on January 26, 2022. Therefore, there are no groundwater levels to report since the piezometers were dry at the time of taking the measurements. Based on this, a table format to present the groundwater level readings was not provided to the report since it was not encountered at the time of our measuring event.





**Comment 14:** *Report does not speak or relate to the USF elevation in terms of groundwater table.*

**Response:** Based on our review, the proposed structure will be founded at an approximate geodetic elevation of 59.55 m. This elevation generally corresponds to be below the bedrock surface such that the foundation will be founded upon a surface-sounded and suitable bedrock surface. The bearing-resistance value provided for bedrock is not considered to be influenced by the presence groundwater.

Given this, the recommendations provided in Section 5.3 – *Foundation Design* of the current Geotechnical Investigation Report is considered suitable for the proposed development with respect to the presence of groundwater.

We trust that this information is satisfactory for your immediate requirements.

Best Regards,

**Paterson Group Inc.**

Drew Petahtegoose, B.Eng.



David J. Gilbert, P.Eng.

