patersongroup

memorandum

consulting engineers

re: Geotechnical Response to Engineering Review Comments

Proposed Multi-Storey Building

61 Pinehurst Avenue - Ottawa, Ontario

to: Mr. Ali Karimi – <u>a.shirazia@gmail.com</u>

date: February 9, 2022 **file:** PG5720-MEMO.01

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to document our responses to the engineering review comments from the City of Ottawa for the proposed multi-storey building at the aforementioned site. The current memorandum should be read in conjunction with Paterson Report PG5720-1, dated March 30, 2021.

Geotechnical Items

Comment 44: Please provide a revised report or confirmation that the design drawings have been received and reviewed.

Response: Paterson reviewed the following design drawings prepared by Republic Urbanism for the proposed development:

- ☐ Site & Landscape Plan 61 Pinehurst Ave., Ottawa Project No. 2021-001 Drawing No. SP&LP101 Revision 2 Dated October 9, 2021
- ☐ 61 Pinehurst Ave., Ottawa Project No. 2021-001 Drawings No. A06 to A09 Revision 2 Dated October 9, 2021

Due to the absence of a silty clay deposit at the subject site, permissible grade raise restrictions were not required for the subject site, from a geotechnical perspective. Furthermore, due to the absence of a silty clay deposit at the subject site, tree planting restrictions are not applicable for the proposed development. Therefore, based on our review of the above-noted drawings, and in consideration of the subsurface profile encountered at the time of our investigation, the design drawings are considered acceptable from a geotechnical perspective.

Bearing Resistance Values for Foundation Design

Based on our review of the above-noted plans, it is expected that the proposed footings will be placed over a clean, surface-sounded bedrock bearing surface. Footings placed on clean, surface-sounded bedrock surface can be designed using a factored bearing resistance value at ultimate limit states (ULS) of **1,500 kPa**.

Mr. Ali Karimi Page 2 PG5720-MEMO.01

Footings on bedrock designed using the above noted bearing resistance value at ULS will be subjected to negligible total and differential settlement. Reference should be made to the above noted geotechnical report for additional design information.

We trust that the current submission meets your immediate requirements.

Best Regards,

Paterson Group Inc.

Fernanda Carozzi, PhD. Geoph.



Scott S. Dennis, P.Eng.