

re: Geotechnical Review – Tree Planting Restrictions & Setbacks
Proposed Residential Development – Wateridge Block 105
Mikinak Road & Vedette Way – Ottawa, Ontario

to: Mattamy Homes – Conor Sutherland – Conor.Sutherland@mattamycorp.com

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file: PG7353-MEMO.01

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to provide a review of the landscaping plans with respect to tree planting setbacks from the building foundations within the proposed residential development. The current memorandum should be read in conjunction with the Geotechnical Investigation Report (Paterson Report PG7353-1 Revision 1 dated April 30, 2025).

Paterson reviewed the following plans prepared for the aforementioned residential development:

- ☐ Block 105, 615 Mikinak Road, Wateridge Village – Job No. 25-066 - Landscape Plane – Sheet No. L1.0 – Revision 5 dated October 21, 2025, prepared by NAK design strategies.

During the geotechnical investigation, Paterson completed laboratory testing in accordance with City of Ottawa Tree Planting in Sensitive Marine Clay Soils (2017) Guidelines. Based on the results of this testing, the silty clay at the subject site is considered to be a low to medium sensitivity clay.

As such, a tree planting setback limit of 4.5 m from foundation walls is applicable for small (mature tree height up to 7.5m) and medium size trees (mature tree height 7.5 m to 14 m) provided that, among other conditions, the underside of footing (USF) of the adjacent building(s) is 2.1 m or greater below the finished grade.

Where the proposed building footings are located less than 2.1 m below finished grade, Paterson recommends one of the following be done:

- ☐ Subexcavate the existing fill material and/or native clay soil to a depth of 2.1 m below the proposed finished grade and backfill up to USF using Ontario Provincial Standard Specifications (OPSS) Granular A or B Type II. The material should be placed in maximum 300 mm thick lifts and compacted to at least 98% of its standard Proctor maximum dry density (SPMDD).
- ☐ The engineered fill pads should extend 150 mm beyond the edge of the building footings, with a minimum 300 mm thickness.



OR

- ☐ Extend lean concrete from the USF to a depth of 2.1 m below the proposed finished grade. The lean mix concrete should consist of a minimum 17 MPa 28-day compressive strength concrete and extend at least 150 mm wider than all sides of the footing (strip and pad footings) at the base of the excavation.

It should be noted that all other conditions outlined in the aforementioned Paterson Geotechnical Report and the City of Ottawa Tree Planting in Sensitive Marine Clay Soils (2017) Guidelines must also be met.

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

Best Regards,

Paterson Group Inc.

Kevin A. Pickard, P.Eng.

