

re: **Grading Plan Review**
Proposed Commercial Development
2165 Robertson Road - Bell's Corner - Ottawa

to: Fotenn - Ms. Bria Aird- aird@fotenn.com

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file: PG4694-MEMO.02 Rev.01

Further to your request, Paterson Group (Paterson) conducted a grading plan review for the proposed commercial development to be located at the aforementioned site. The following memorandum should be read in conjunction with our geotechnical Report PG4694-1 dated November 16, 2018.

Grading Plan Review

Paterson reviewed the following grading plans prepared by DSEL Ltd. for the aforementioned development:

- Grading Plan - 2165 Robertson Road - Project No. 18-1062 - Drawing No. GP-1-Sheet No. 1 - Revision 4 dated May 25, 2021.
- Grading Plan - 2165 Robertson Road - Project No. 18-1062 - Drawing No. GP-2-Sheet No. 2 - Revision 4 dated May 25, 2021.

Based on our review of the aforementioned grading plan, the proposed grades are in compliance with the permissible grade raise recommendation provided by Paterson and are considered acceptable from a geotechnical perspective. Therefore, no lightweight fill or other considerations to accommodate the proposed grades are required at this time.

Landscaping Considerations

Tree Planting Restrictions

The proposed development is located in an area of a low sensitivity deposit of silty clay with respect to tree planting considerations. Based on our review of the subsurface profile throughout the subject site, the underlying silty clay crust within the upper 3.5 m is relatively dry and designated as a hard to stiff silty clay. Therefore, the proposed development is located within an area of low to medium sensitive silty clay deposits for tree planting.

According to the City of Ottawa Tree Planting Guidelines, tree planting setback limits can be used as 7.5 m for small (mature tree height up to 7.5m) and medium size trees (mature tree height 7.5 m to 14 m). The tree setback can be reduced to 4.5 m provided the following items are met:

- The underside of footing (USF) extends to 2.1 m or greater below the lowest finished grade within 10 m from the tree, as measured from the center of the tree trunk and verified by means of the Grading Plan as indicated procedural changes below.
- A small tree must be provided with a minimum of 25 m³ of available soil volume while a medium tree must be provided with a minimum of 30 m³ of available soil volume, as determined by the Landscape Architect. The developer is to ensure that the soil is generally un-compacted when backfilling in street tree planting locations.
- The tree species must be small (mature tree height up to 7.5 m) to medium size (mature tree height 7.5 m to 14 m) as confirmed by the Landscape Architect.
- The foundation walls are to be reinforced at least nominally (minimum of two upper and two lower 15M bars in the foundation wall).
- Grading surround the tree must promote drainage to the tree root zone (in such a manner as not to be detrimental to the tree).

In-Ground Swimming Pools

The in-situ soils are considered to be acceptable for the installation of in-ground swimming pools. The soil removed to accommodate an in-ground swimming pool weighs more than the water filled in-ground pool. Therefore, no additional load is being applied to the underlying sensitive clays.

Aboveground Swimming Pools, Hot Tubs and Exterior Decks

If consideration is given to construction of an above ground swimming pool, a hot tub or an exterior deck, a geotechnical consultant should be retained by the homeowner to review the site conditions. No additional grading should be placed around the exterior structure. The swimming pool should be located at least 3 m away from the existing foundation to avoid adding localized loading to the foundation and the hot tub should be located at least 2 m away from the existing foundation. Otherwise, construction is considered routine, and can be constructed in accordance with the manufacturer's specifications

We trust that this information satisfies your immediate requirements.

Paterson Group Inc.



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