# patersongroup

# memorandum

### consulting engineers

re: Grading and Servicing Plan Review

Proposed Multi-Storey Building 54, 56 & 60 Bayswater Avenue - Ottawa

to: Centennial Properties - Mr. Steve Hulaj - steve@centennialdev.com

**date:** October 1, 2021 **file:** PG5645-MEMO.02

Following to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to complete a review for the grading and site servicing plans and to provide recommendations from a geotechnical perspective for the aforementioned project. The following memorandum should be read in conjunction with the current Geotechnical Investigation Report (Paterson Group Report PG5645-1, dated February 24, 2021).

#### **Background Information**

Based on the above noted geotechnical investigation, the subsurface profile across the subject site consists of topsoil underlain by fill, followed by a stiff, brown silty clay deposit. The silty clay is underlain by glacial till.

Due to the presence of the silty clay deposit below the proposed building, a permissible grade raise restriction of 2.0 m was provided in the Geotechnical Investigation Report.

## **Grading Plan Review**

Paterson reviewed the following grading plan prepared by Novatech for the aforementioned development:

☐ Grading and Erosion & Sediment Control Plan - 54, 56 & 60 Bayswater Avenue - Project No. 120169 - Drawing No. 120169-GR - Revision 1, Dated June 16, 2021.

Based on our review of the aforementioned grading plan, the proposed grades are within the permissible grade raise restriction of 2.0 m provided throughout the subject site in the aforementioned Geotechnical Investigation Report. Therefore, the proposed grading is considered acceptable, from a geotechnical perspective, and no lightweight fill or other considerations to accommodate the proposed grades are required.

Mr. Steve Hulaj Page 2 PG5645-MEMO.02

## Site Servicing Plan Review

Paterson reviewed the following drawings prepared by Novatech for the aforementioned development as part of this review:

General Plan of Services - 54, 56 & 60 Bayswater Avenue - Project No. 120169 - Drawing No. 120169-GR - Revision 1, Dated June 16, 2021.

Based on our review of the site servicing plan, sufficient frost protection has been provided to the proposed site services, which are noted to tie into the existing services located along Basywater Avenue. To reduce long-term lowering of the groundwater level at, and in the vicinity of, the subject site, clay seals are recommended to be provided in the servicing trenches near the property boundaries.

The clay seals should be at least 1.5 m long (in the trench direction) and extend from trench wall to trench wall. Generally, the seals should extend from the frost line and fully penetrate the bedding, subbedding, and cover material. The barriers should consist of relatively dry and compactable brown silty clay placed in maximum 225 mm thick loose layers compacted to a minimum of 95% of the materials standard Proctor maximum dry density. The clay seals should be placed at the site boundaries and at strategic locations at no more than 50 m intervals in the service trenches.

The proposed site servicing is considered acceptable from a geotechnical perspective, and no additional frost protection or other considerations to accommodate the proposed servicing are required.

We trust that this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

Kevin A. Pickard, EIT

Oct. 1, 2021
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