

re: **Response to City Comments**
 Proposed Residential Development
 2710 Draper Avenue - Ottawa

to: Greatwise Developments - **Mr. Zaf Kelekvan** - zaf@greatwise.ca

date: July 22, 2019

file: PG1630-MEMO.25

Further to your request and authorization, Paterson Group (Paterson) prepared the following memorandum to respond to the current City of Ottawa engineering review comments for the aforementioned site. This memorandum should be read in conjunction with our geotechnical Report PG1630-4 Revision 1 dated February 21, 2019 and the stone strong retaining wall revised design PG1630-4 Revision 2 dated July 18, 2019.

Geotechnical Comments

Stone Strong Retaining Wall Design, Proposed Retaining Wall

Comment 12: *As per an email from Jessica D'Aoust (Lloyd Phillips & Associated Ltd.) Dated June 21, 2019 the intention is for the proposed stone strong retaining wall to follow the property line and go around the future "turning circle" at the rear of Block 5. The current proposal does not have the retaining wall following the property line as it is going through the "turning circle". Please discuss with Lloyd Phillips & Associated Ltd. And update the stone strong retaining wall design accordingly.*

Response: Stone Strong Retaining wall design was updated to follow property line and future turning circle.

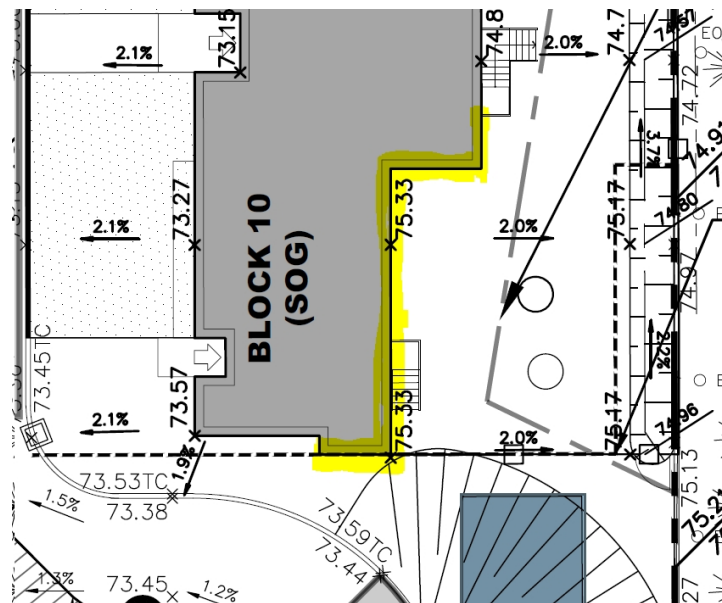
Comment 14: *Please document on the plans the noise wall proposed along the top of the wall as per the Gradient Wind Traffic Noise Assessment.*

Response: The position of the proposed sound barrier was incorporated into the retaining wall design and comments have been noted for design and construction purposes. The extent of the noise barrier wall is also shown on the plan view in the referenced wall design drawing.

Site Servicing Plan

Comment 18: *In accordance with the SPA for Phase 3-1, the Owner is required to coordinate with the adjacent property owner of 2702 Draper Ave. for the realignment of the existing private storm and sanitary services that currently occupy Phase 3-2 Block 10 or shall grant an unencumbered easement for the protection of these services. It is acknowledged that an approximate 4.5 metre easement is now shown on the plan to the granted. Please provide confirmation that any further excavation of these private services will not undermine or impact the adjacent Blocks. A condition within the subject approval will be included to confirm this requirement.*

Response: Upon review of drawing of the following drawings by DSEL: Existing Condition Plan 2781 Baseline Rd, Drawing No. EX-1, Revision 7 dated April 5, 2016 and Grading Plan Fresh Towns - 2710 Draper Avenue Phase 3-2, Drawing No. GP-1, Revision 4 dated July 22, 2019, the existing underside of manholes STMMH-3 and SANMH-161 was estimated to be 70.68 m and 70.41 m respectively. Based on our review, the footings along the southeast corner of Block 10 as shown below should be constructed over a zero entry lean concrete (15MPa) in-filled trench extending to a depth of 72.75 m or lowered to the same elevation to avoid undermining the subject footings during excavation for services.



Comment 23: *Please provide thermal insulation along the side of the existing catch basin within Draper Avenue as protection for the proposed services for Block 6.*

Response: A minimum 50 mm thick layer of SM rigid insulation should be placed between the catch basin and the proposed service laterals. The insulation should extend vertically to cover the entirety of the catch basin structure and horizontally 1 m beyond the catch basin structure edges.

Comment 25: *The rear-yard drainage proposal does not respect the current property line as minor and major system flows are proposed to be conveyed across the condominium lands. As per an email from Jessica D'Aoust (Lloyd Phillips & Associated Ltd.) Dated June 21, 2019 the intention is for the proposed stone strong retaining wall to follow the property line at the rear of Block 5 in order to allow for a future "turning circle" in order to maintain the original approved design for the condominium lands. If this is the intention the rear yard drainage system will be compromised and therefore will have to be designed and will be subject to additional reviews. If the intention is to proceed with the traffic circle to maintain the original approved design for the condominium lands which will require additional modification to Phase 3-2 lands it shall be communicated to DSEL to ensure the rear yard drainage system is design accordingly otherwise it will be difficult to accommodate such changes at a later date. The perforated pipe will not be permitted to be installed below the retaining wall.*

Response: From a geotechnical perspective it is acceptable for the proposed drainage to pass under the proposed stone strong retaining wall provided that SDR Grade 26 or equivalent is used where the drainage is crossing under the wall and the future turning circle. Alternatively, the perforated sub-drain pipe can be encased in a SDR Grade 26 or equivalent pipe where crossing under the wall and the future turning circle. Please refer to our revised retaining wall design drawing PG1630-4 Revision 2 dated July 18, 2019. The installation of the sub-drain pipe can rear yard catch basin will have to be completed prior or at the time of wall construction to avoid undermining the precast block units.

We trust that this information satisfies your requirements.

Best Regards,

Paterson Group Inc.



Joey R. Villeneuve, M.A.Sc, EIT



Faisal I. Abou-Seido, P.Eng.

Paterson Group Inc.

Head Office and Laboratory
154 Colonnade Road South
Ottawa - Ontario - K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

Northern Office and Laboratory
63 Gibson Street
North Bay - Ontario - P1B 8Z4
Tel: (705) 472-5331 Fax: (705) 472-2334

St. Lawrence Office
993 Princess Street
Kingston - Ontario - K7L 1H3
Tel: (613) 542-7381