
SOIL-MAT ENGINEERS & CONSULTANTS LTD.

www.soil-mat.ca info@soil-mat.ca TF: 800.243.1922

Hamilton: 130 Lancing Drive L8W 3A1 T: 905.318.7440 F: 905.318.7455

Milton: PO Box 40012 Derry Heights PO L9T 7W4 T: 800.243.1922



PROJECT No.: SM 177692-G

January 9, 2020

GSP GROUP INC.
162 Locke Street South – Suite 200
Hamilton, Ontario
L8P 4A9

Attention: Nancy Frieday, MCIP, RPP
Senior Planner

**SUPPLEMENTAL HYDROGEOLOGICAL CONSIDERATIONS
PROPOSED EIGHT STOREY RESIDENTIAL BUILDING
4063 UPPER MIDDLE ROAD
BURLINGTON, ONTARIO**

Dear Ms. Frieday,

As requested, SOIL-MAT ENGINEERS has prepared this Supplemental Hydrogeological Considerations letter in connection with the above noted project. This letter report should be read in conjunction with our initial geotechnical investigation report, SM 135055-G dated May 16, 2013, and slope stability assessment report dated SM 177692-G, dated September 27, 2017.

We understand that the development will involve the construction of an eight storey residential building with one underground parking level. Based on the Preliminary Grading and Erosion Control Plan drawings prepared by S. Llewellyn & Associates, dated January 3, 2017, the proposed building will have a basement floor elevation of 135.60 metres, approximately 2 to 3.5 metres below the existing ground surface. The adjacent creek to the north was noted to have a water level at approximately 135.0 metres.

Given the anticipated depths of construction and estimated water level noted above, as well as the proximity of the proposed structure from the existing creek and the low permeability of the clayey silt overburden soils and Queenston shale bedrock encountered at the borehole locations, the static groundwater table is not anticipated to have an notable effect on the proposed excavations. Infiltration of groundwater would be expected to be generally limited to precipitation infiltrating through permeable seams as well as from surface runoff. Given the relatively low permeability of the subsurface soils, the rate of infiltration of such water into open excavations would be expected to be relatively low, and of relatively negligible volume. There would not be any expected



significant long-term dewatering control required. The total infiltration would be expected to be considerably less than 50,000 litres/day, such that a permit to take water [PTTW] would not be required.

With respect to construction of foundations and perimeter drainage, the recommendations provided in our geotechnical report would be considered valid and should be adhered to. The proposed construction would not be considered to have an effect on the existing groundwater level or flow. During construction, care should be taken to ensure drainage to the creek to the north is unaffected.

We trust that these supplemental hydrogeological comments are sufficient for your present requirements. Should you require any additional information or clarification as to the contents of this document, please do not hesitate to contact the undersigned.

Yours very truly,
SOIL-MAT ENGINEERS & CONSULTANTS LTD.

A handwritten signature in blue ink, appearing to be 'K. Richardson'.

Kyle Richardson, P.Eng.
Project Engineer



Distribution: GSP Group Inc. [1, plus pdf]