P.O. Box 74087, RPO Beechwood, Ottawa, On., K1M 2H9 Phone: (613) 899 0834 Compaction testing - Geotec. Engineering - Soils Inspections



Ottawa, November 26, 2024 No.: 1000-Tawadina-YME-L5

Imran Gulamani Bayview Wateridge Inc.

Reference: City of Ottawa File D07-12-22-0127 (375 Codd's Road).

**Subject:** Re-examination of waterproofing requirements in report 55-BWI-R1 for foundations placement above the water table and recommendations in connection with infiltration chamber at a 1.3 m setback from the wall of the proposed building.

The subject report recommends waterproofing for 9 storey buildings with 2 levels of underground parking.

As expressed in Elema Experts-Conseils inc. (EEC) letter dated November 08, 2024, the proposed building at this site will have 1 level of underground parking and will be 6 storeys in height.

Based on the subject report and the EEC letter the profile considered will be:

1. Top of bedrock: 87.23;

2. Underside of Foundation (USF): 86.59

3. Underside of the infiltration chamber: 86.46

4. water table elevation: 85.36

Note that the water table is below the USF.

Waterproofing requirements remain in connection with the Low Impact Development (LID) guidelines but not in connection with underground parking below the water table.

To meet the LID the following is recommended:

- Waterproof the underground foundation walls via Tremco Paraseal<sup>®</sup> GM/LG-20 MIL or similar *and* for water which may breach this waterproofing;
- Provide drainage pipes within the inside perimeter of foootings. The elevation of the underside of drainage pipes must be the same as the USF and;

- connected to the perimeter drainage pipes add drainage pipe lines within the perimeter of the building. Drainage pipes are generally within a permeable sleeve, surrounded by clear stone and coverded with mermeable geotextile fabric *and*;
- provide drainage to a sump.

To minimize the impact to the building from the subject chamber:

- Provide a clay seal between the foundation wall and the chamber;
- Wet of optimum water content for proctor density of silty clay is estimated to be around 19 %. Natural water content for clay is generally greater than 19%.
- Clean the bedrock surface using compressed air;
- Because of the proximity of the wall and the chamber only light compaction is to be applied to the clay seal. Provide a single pass of compaction equipment on 30 cm lifts of silty clay having approximately 19% of water content *and*;

For protection of the bearing surface of bedrock along the subject chamber:

• Use a saw to cut the bedrock at the edge of the chamber to allow placement of the chamber at its proposed elevation. Do not attempt ripping.

Do not hesitate to contact us if you have any questions.



Yuri Mendez, M. Eng, P. Eng No.: 1000-Tawadina-YME-L5