

## memorandum

re: Geotechnical Response to City Comments

Proposed Multi-Storey Building

150 Laurier Avenue West – Ottawa, Ontario

to: Jadco Group – Sebastien Bond – sbond@jadcopgroup.com
cc: RLA Architecture – Robert Verch – rverch@rlaarchitecture.ca

date: September 29, 2023 file: PG5195-MEMO.03

Further to your request, Paterson Group (Paterson) prepared the following memorandum to provide responses to geotechnical-related City of Ottawa comments regarding the proposed building at the aforementioned site. The present memorandum should be read in conjunction with Paterson Group Report PG5195-1, Revision 3 dated September 29, 2023.

**Comment 1:** Please speak to any potential for heaving and rapid deterioration of the shale bedrock that may exist on this site and whether recommendations for a concrete mud slab is warranted to be placed on exposed bedrock, along with a Construction Dewatering Management Plan to assist in the protection of shale bedrock against excessive dewatering and exposure to ambient air. We understand a raft slab is being utilized and are concerned that any exposed shale will deteriorate during process.

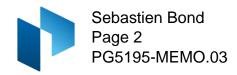
**Response:** Please refer to Subsection 6.7 - *Protection of Potentially Expansive Shale Bedrock* on the current geotechnical report. In summary, a 50 to 75 mm thick concrete mud slab has been recommended to be placed on the bedrock bearing surface within a 48-hour period of being exposed. The excavated sides of the exposed bedrock should also be sprayed with a bituminous emulsion or shotcrete to seal the bedrock from exposure to air and dewatering.

**Comment 2:** Rock anchor details are required for Municipal Consent and to protect all infrastructure from damage. Detail will show all existing infrastructure information gathered from survey and other reliable sources and depict where rock anchors will be penetrating any City owned property and/or easements, etc.

**Response:** Temporary tiebacks with rock anchorage installed as part of the temporary shoring design will specify anchor locations and should be reviewed and approved by city staff once shoring design by a qualified engineer is completed.

Toronto Ottawa





We trust that this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

Kevin A. Pickard, P.Eng.



David J. Gilbert, P.Eng.