PATERSON GROUP

memorandum

re: **Grading Plan Review**
Proposed Apartment Building
3080 Navan Road – Ottawa, Ontario

to: Seymour Pacific Developments (Ontario) Ltd. – **Rachel Ricard** – rachel.ricard@seymourpacific.ca

date: April 18, 2023

file: PG6527-MEMO.01

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to provide a Grading and Servicing Plan Review for the proposed development to be located at the aforementioned site. The following memorandum should be read in conjunction with the current Geotechnical Report (Paterson Group Report PG6527-1 Revision 1, dated March 22, 2023).

Grading Plan Review

Paterson reviewed the following grading plan prepared by Novatech for the subject site:

- ❒ Grading Plan – 3080 Navan Road (Rhythm Apartments), City of Ottawa – Project No. 122180 – Drawing No. 122180-GR, dated March 20, 2023.

Geotechnical Review and Recommendations

Based on the grading plans provided, the proposed grading throughout the majority of the subject site is within the permissible grade raise recommendations provided in the aforementioned geotechnical report.

However, in the north corner of the site, grade raise exceedances of up to approximately 0.5 m are currently proposed for the landscaped and hardscaped areas located within 5m of the building footprint. Where these grade raise exceedances are proposed, lightweight fill (LWF) is recommended to mitigate excessive settlement. The attached figure PG6527-Figure 1 – Lightweight Fill Recommendations indicates the approximate LWF locations and thicknesses which are recommended.

The LWF should consist of EPS (expanded polystyrene) geofoam blocks, which allow for raising the grade without adding a significant load to the underlying soils. For this application, EPS Type 15 should be used. It should also be noted that EPS is difficult to use under the groundwater level, as it is buoyant, and it must be protected against potential hydrocarbon spills.

As an alternative to the use of LWF, the areas of the proposed grade raise exceedances could be preloaded to the finished grade, or surcharged, using fill materials. This option, however, would require allowing an extensive period of time for the settlement to occur prior to construction, which may not be compatible with construction timelines. Additional information can be provided if this option is being given consideration.

We trust that this information is satisfactory for your immediate requirements.

Best Regards,

Paterson Group Inc.

Fernanda Carozzi, PhD. Geoph.

David J. Gilbert, P.Eng.

PG6527-FIGURE 1 - 3080 NAVAN ROAD, OTTAWA
LIGHTWEIGHT FILL (LWF) RECOMMENDATIONS

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PRELIMINARY
NOT FOR CONSTRUCTION

No.	REVISION	DATE	BY
	ISSUED FOR COORDINATION	MAR 20/23	

SCALE 1:250

DESIGN	ARM
CHECKED	GJM
DRAWN	ARM/CJF
CHECKED	ARM
APPROVED	GJM

FOR REVIEW ONLY
ISSUED FOR REVIEW
ISSUED FOR REVIEW

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
3080 NAVAN ROAD (RHYTHM APARTMENTS)

DRAWING NAME
GRADING PLAN

PROJECT No. 122180
REV
REV # -
DRAWING No.
122180-GR