

re: **Grading Plan Review**  
**Proposed Residential Development**  
**Wateridge - Block 29 - Wanaki Road - Ottawa**

to: Colonnade BridgePort - **Ms. Bonnie Martell** - bmartell@colonnadebridgeport.ca

date: September 13, 2019

file: PG4965-MEMO.02

---

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to provide a review of the grading plan for the aforementioned project as required by a City of Ottawa review comment.

The following memorandum should be read in conjunction with Paterson Report PG4965-1 Revision 1 dated September 13, 2019.

Paterson reviewed the following grading plan prepared by Novatech Engineering Inc. regarding the aforementioned development:

- ❑ Grading and Erosion and Sediment Control Plan, Project No. 119066-00, Drawing No. 119066-GR, Revision 2 dated September 13, 2019.

## **Grading Plan Review**

Based on our review of the above noted grading plans, the proposed grade raises for the proposed development of the aforementioned development are generally considered acceptable from a geotechnical perspective.

For design purposes, pad footings up to 5 m wide, and strip footings up to 3 m wide, placed on an undisturbed, hard to very stiff silty clay bearing surface designed using a bearing resistance value at serviceability limit states (SLS) of **150 kPa** and a factored bearing resistance value at ultimate limit states (ULS) of **225 kPa** is considered acceptable from a geotechnical perspective for the proposed buildings.

Furthermore, footings placed on an approved fill bearing surface can be designed using a bearing resistance value at SLS of **100 kPa** and a factored bearing resistance value at ULS of **175 kPa**. A geotechnical resistance factor of 0.5 was applied to the above noted bearing resistance values at ULS.

Ms. Bonnie Martell  
Page 2  
File: PG4965-MEMO.02

Footings designed with the provided bearing resistance value at SLS should have a total and differential settlement of 25 and 20 mm, respectively.

The bearing surface should be verified at the time of construction on a lot by lot basis to determine the appropriate serviceability resistance value.

We trust that this information satisfies your immediate requirements.

Best Regards,

**Paterson Group Inc.**



Richard Groniger, C. Tech.



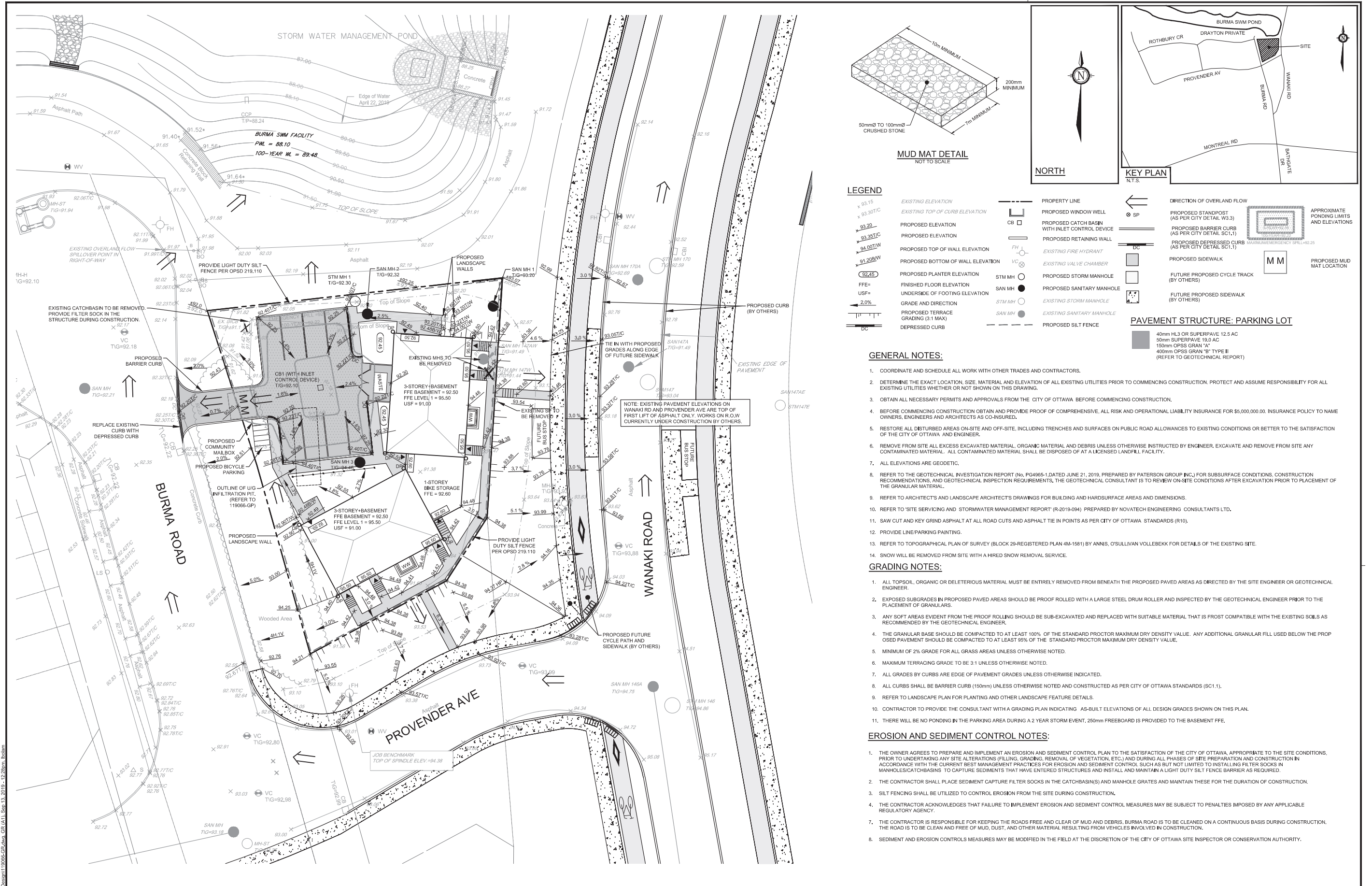
David J. Gilbert, P.Eng

**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



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.

**OWNER INFORMATION**

HABITAT FOR HUMANITY GREATER OTTAWA  
768 BELFAST ROAD  
OTTAWA, ON K1G 0Z7  
PHONE: 613-749-9950

No.	REVISION	DATE	BY
2.	ISSUED FOR COORDINATION	13 SEPT 2019	GJM
1.	ISSUED FOR SITE PLAN APPLICATION	25 JUN 2019	GJM

SCALE

1:200

0 2 4 6 8

DESIGN	FOR REVIEW ONLY
RG/LGB	
CHECKED	GJM
DRAWN	RG
CHECKED	LGB
APPROVED	GJM

**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  
455 WANAKI ROAD (BLOCK 29)

DRAWING NAME  
**GRADING AND EROSION AND SEDIMENT CONTROL PLAN**

PROJECT No.  
119066-00

REV  
REV # 2

DRAWING No.  
119066-GR

NOVATECH\CH01\20190625\20191119066\CAD\Design\119066-GR.dwg, GR (A1), Sep 13, 2019, 12:28pm, bhaban

DO7-12-190117