



**re: Geotechnical Investigation – Response to Municipality of
Mississippi Mills Comments
Proposed Residential Development
1825 Ramsay Concession 11A- Mississippi Mills, Ontario**

to: Regional Group - **Ms. Stefanie Kaminski** - skaminski@regionalgroup.ca
cc: Novatech - **Mr. Drew Blair** - D.Blair@novatech-eng.com
date: October 2, 2024
file: PG5860-MEMO.04

Further to your request and authorization, Paterson Group (Paterson) prepared this memorandum to provide responses to the geotechnical-related comments from the Municipality of Mississippi Mills. This memorandum should be read in conjunction with the Geotechnical Investigation Report (Paterson Group Report PG5860-1 Revision 3 dated July 25, 2024) which has been prepared for the proposed development at the aforementioned site.

Geotechnical Investigation Comments

Comment 1: *Can you confirm that Paterson does not recommend the requirement for backup generators for units that will be below the seasonal high groundwater level, and instead dual sump pump system with a battery-powered secondary pump are sufficient?*

Response:

As the subsurface soil generally consists of clay material, it is expected that the groundwater infiltration to be minimal. Further, most of the surface runoff will be sheet drained to the catch basin and handled by the storm sewer. Hence, a dual sump system with a battery-powered secondary pump is sufficient upon Paterson completing an inspection on the sump pump installation in each unit. It should be noted that the sump pump system should be installed in accordance with the attached sump pump detail 121125-FIG-SPD dated September 2024, prepared by Novatech.

Comment 2: *Can you prepare a plan to indicate which units will be below the seasonal high groundwater level and would warrant a dual sump pump system with a battery-powered secondary pump? It would be helpful to understand if this requirement applies to all units or only a select few based on our current plan.*

Response:

Based on reviewing the grading plan Drawing No. 121125-GR1 and GR2 dated September 25, 2024, prepared by Novatech, the units with the proposed USF below the recorded spring high groundwater level are identified in the attached plans





As mentioned in the above response, it should be noted that the infiltration due to the seasonal high groundwater is expected to be minimal due to the cohesive nature of the subsurface soil condition. Hence, the seasonal high groundwater level is less likely to flood the basements of the units. Further, the sump pump system will ensure to prevent any detrimental effects of flooding to the units.

We trust that this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

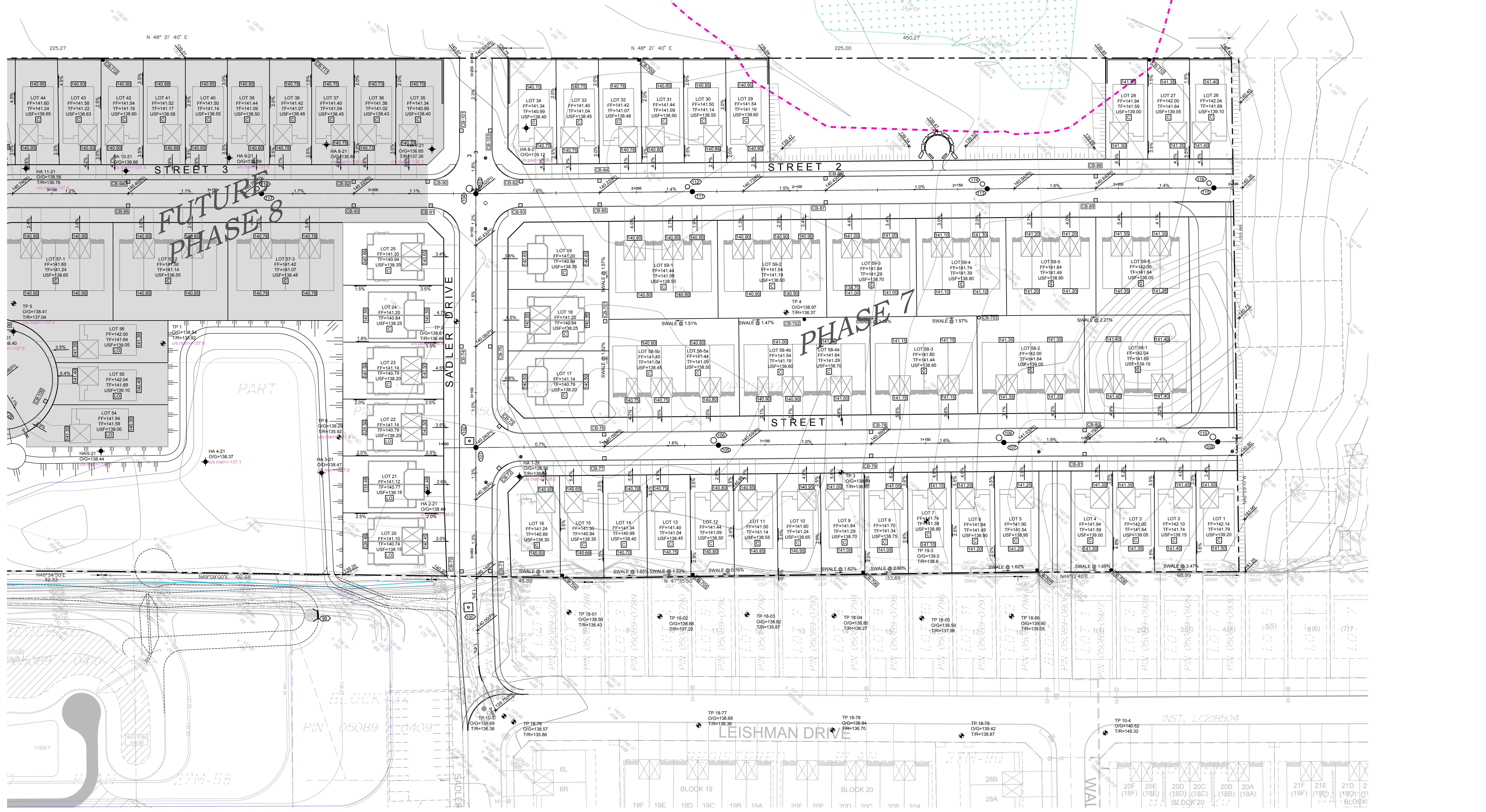
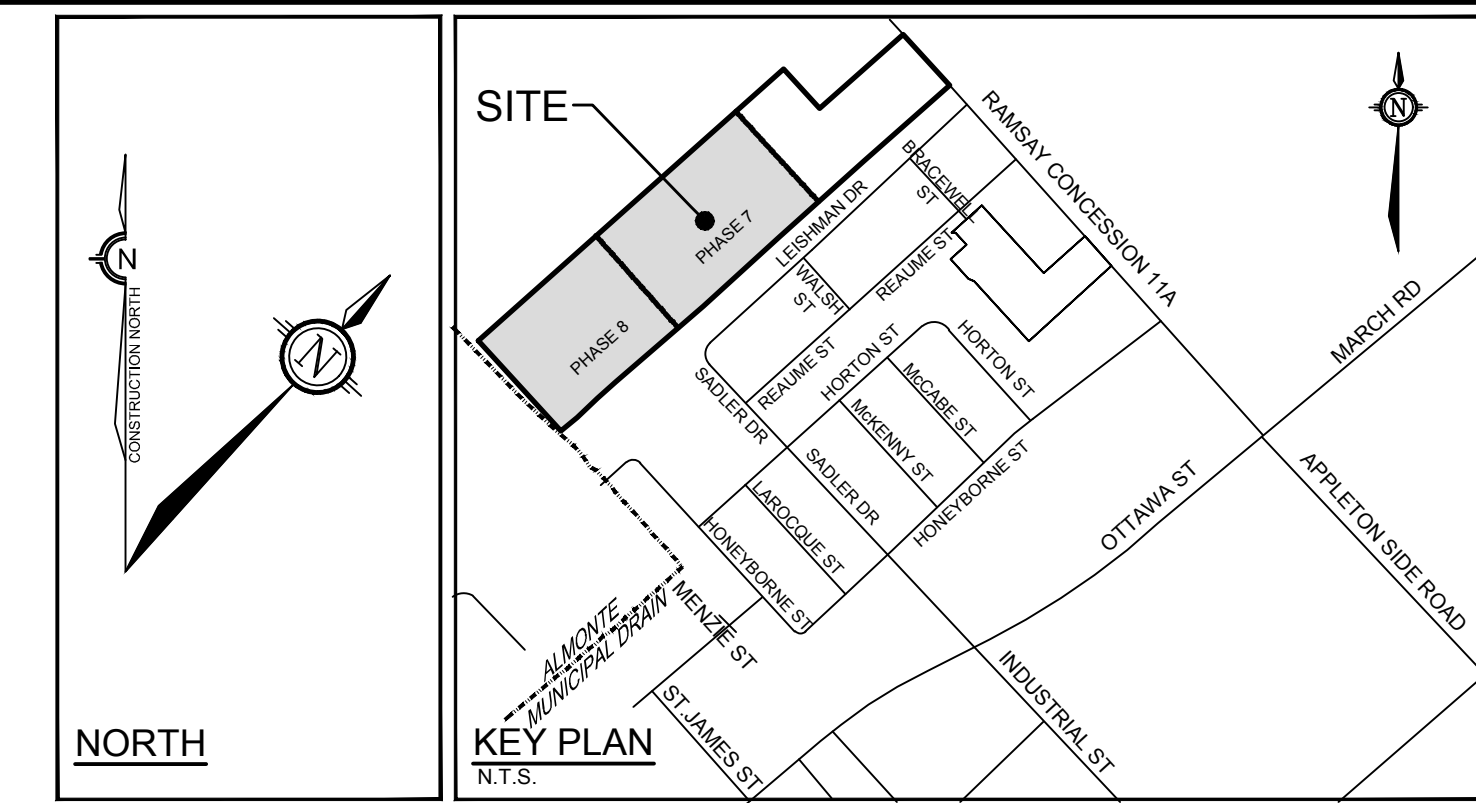
Balaji Nirmala, M.Eng.



David J. Gilbert, P.Eng.



The USF of all the units in Phase 7 are below the groundwater level recorded during the spring high



NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.

No.	REVISION	DATE	BY
0	preliminary design in progress	Sept. 25/24	DDB

SCALE	1:500
DESIGN	DDB
CHECKED	BM
DRAWN	SM
CHECKED	BM
APPROVED	DDB

FOR REVIEW ONLY	
LOCATION	MUNICIPALITY OF MISSISSIPPI MILLS MILL RUN EXTENSION
DRAWING NAME	PHASE 7 GRADING PLAN

Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

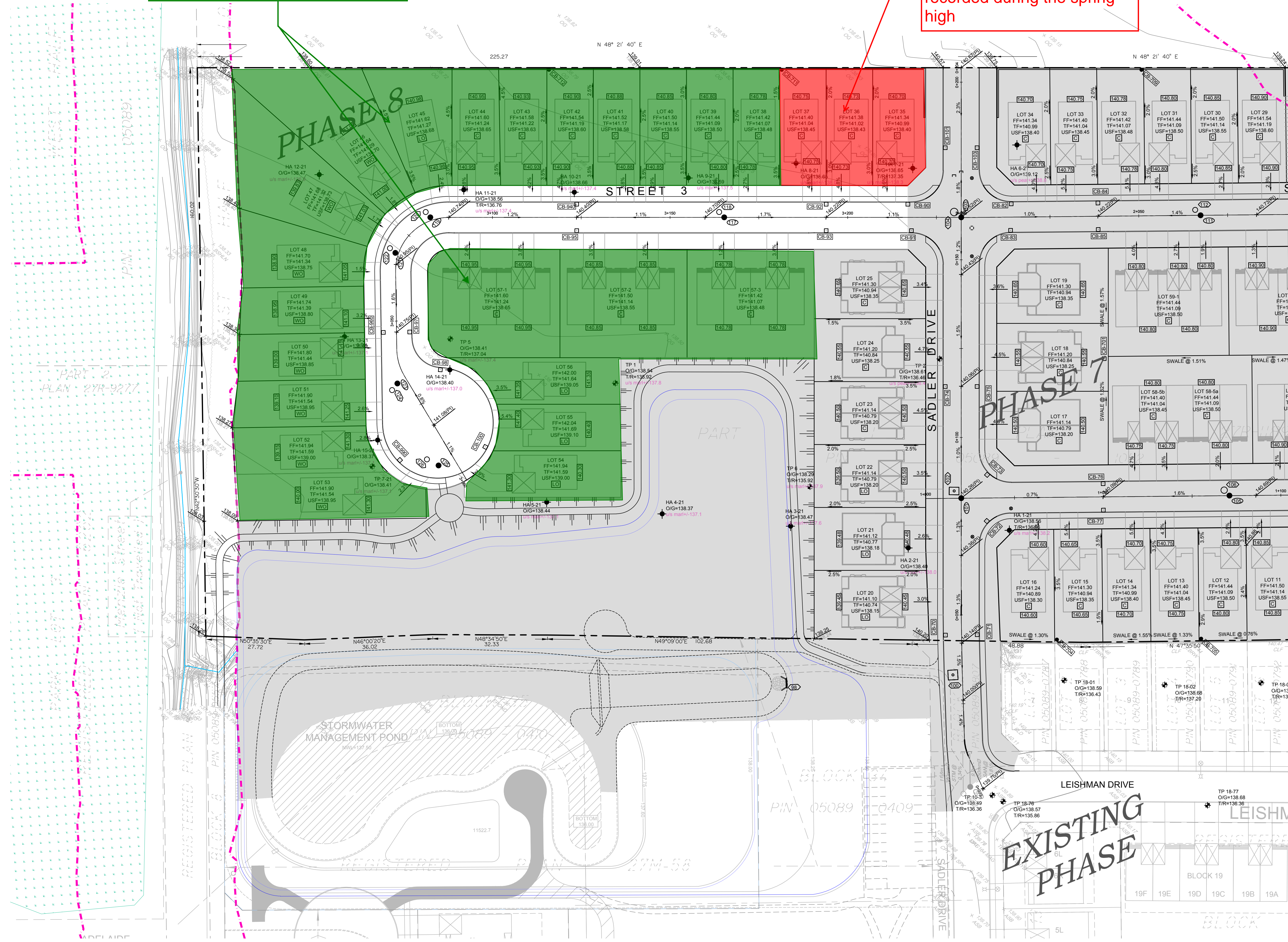
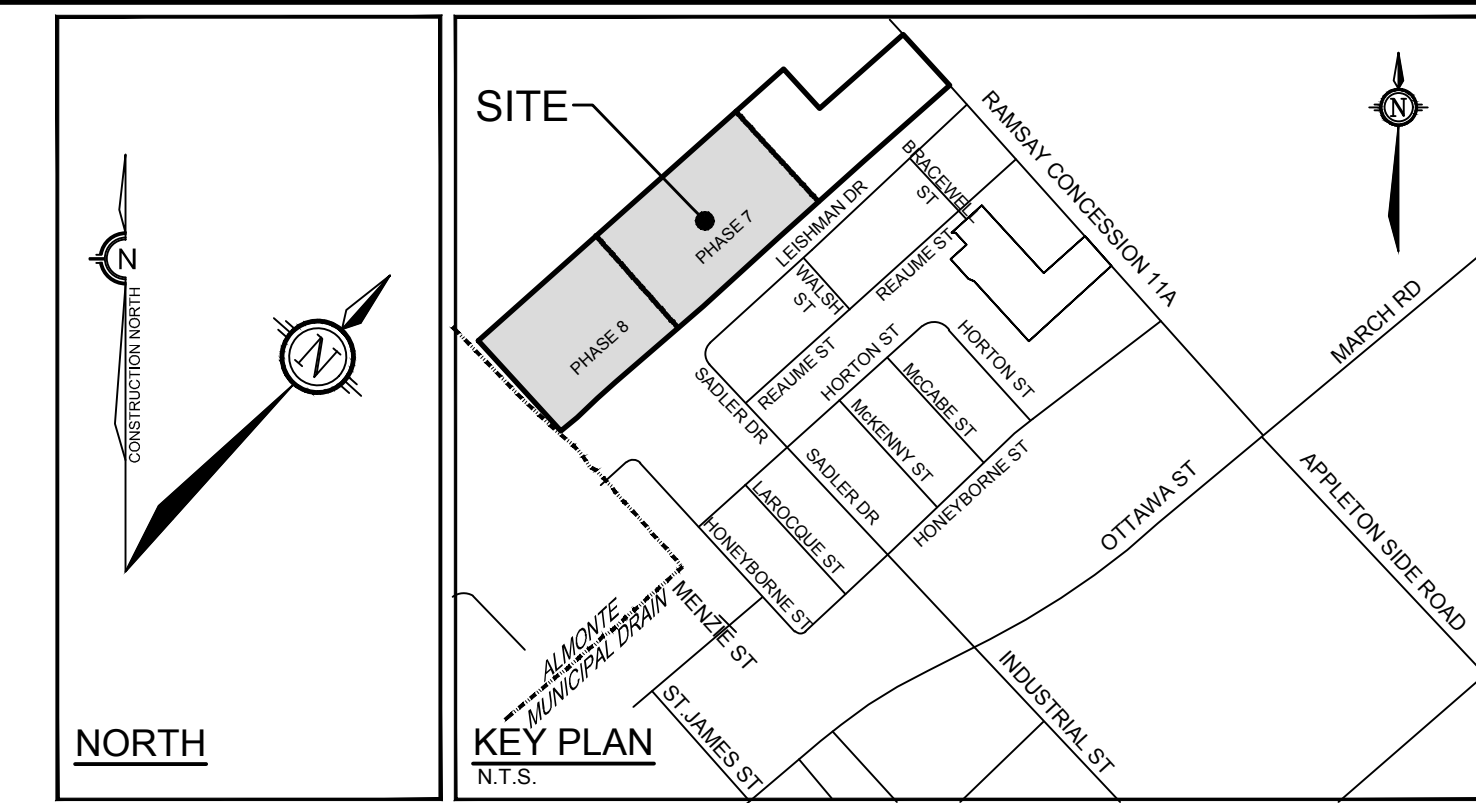
Telephone: (613) 254-9643
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PROJECT No.	121125-00
REV	REV # x
DRAWING No.	121125-GR1

Paterson Group MEMO.04 - Attachment 2

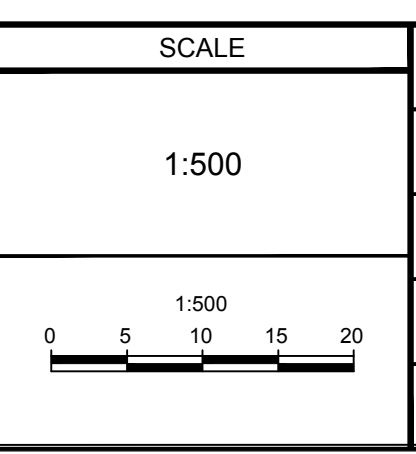
The USF of the units that are above the groundwater level recorded during the spring high

The USF of the units that are below the groundwater level recorded during the spring high



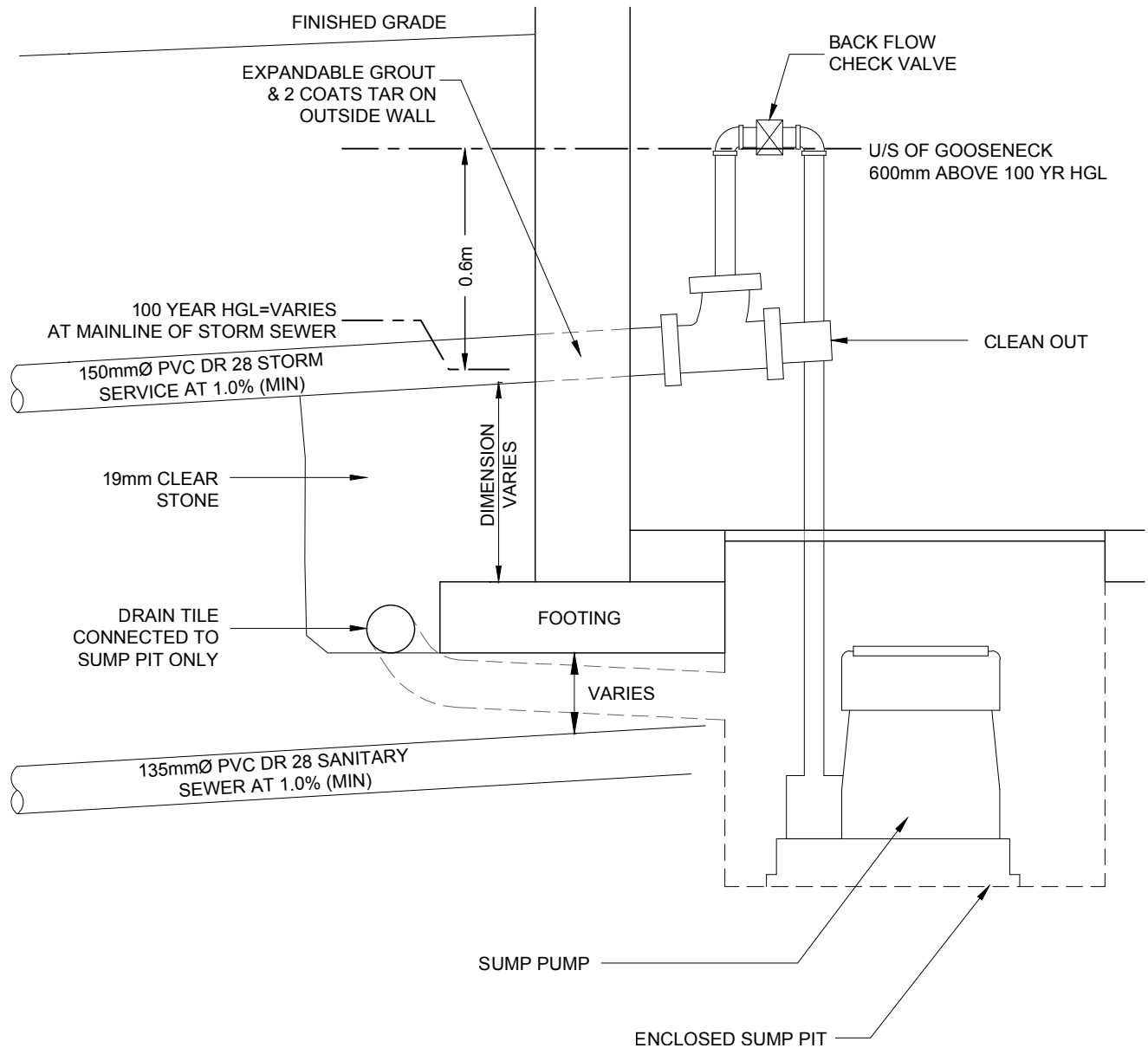
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NO.	REVISION	DATE	BY
0	preliminary design in progress	Sept. 25/24	DDB



DESIGN	FOR REVIEW ONLY
CHECKED: DDB	
DRAWN: BM	
CHECKED: SM	
APPROVED: BM	
APPROVED: DDB	

<p>Engineers, Planners & Landscape Architects Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P6 Telephone: (613) 254-9643 Facsimile: (613) 254-5887 Website: www.novatech-eng.com</p>	LOCATION MUNICIPALITY OF MISSISSIPPI MILLS MILL RUN EXTENSION	PROJECT NO: 121125-00
	DRAWING NAME	REV
	PHASE 8 GRADING PLAN	REV # x
		DRAWING NO. 121125-GR2



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N.T.S.



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MUNICIPALITY OF
 MISSISSIPPI MILLS
 MILL RUN EXTENSION
 PHASES 7 and 8
 SUMP PUMP DETAIL

SEPT 2024 121125 FIG-SPD