



re: Geotechnical Responses to MVCA Comments
Proposed Residential Development
Brown Lands – Country Road No. 29 & Strathburn Street – Almonte, Ontario

to: Strathburn Almonte Regional Inc. – **Mr. Evan Garfinkel** –
cc: egarfinkel@regionalgroup.com
Novatech – **Mr. Trevor McKay** – t.mckay@novatecheng.com

date: September 20, 2024

file: PG6260-MEMO.03

Further to your request, Paterson Group (Paterson) has prepared the current memo to provide our responses to the comments from the Mississippi Valley Conservation Authority (MVCA) in the letter dated September 3, 2024 (File No. 09-T-23005) for the proposed residential development to be located at the aforementioned site. This memo should be read in conjunction with the current Geotechnical Investigation Report (Paterson Group Report PG6260-2 Revision 3 dated September 20, 2024).

Comment Responses

Comment 11: *In section 6.9 Slope Stability Analysis under Field Observations, it states “The slope observed at the west portion of the site was observed to have an approximate incline ranging between 2.5H:1 to 3.5H:1V”. Is this describing the “West Tributary” area of the site’s slope that is referenced throughout the report? If so, please clarify what the slope’s properties are based on i.e. slope height, toe of slope location, distance from toe of slope to water’s edge, etc.*

Response: Yes, the slope described as being along the “west portion of the site” is referring to the slope along the West Tributary. The slope was noted to range between 4 m and 6 m in height, with a toe located about 10 m or greater from the West Tributary. This has been clarified in the current Geotechnical Investigation Report, referenced above.

Comment 12: *In section 6.9 Slope Stability Analysis under Field Observations, it states “The slope observed at the east portion of the site was observed to have an approximate incline ranging between 2H:1 to 3H:1V”. Is this describing the “Mississippi River” area of the site’s slope that is referenced throughout the report? If so, please clarify what the slope’s properties are based on i.e. slope height, toe of slope location, distance from toe of slope to water’s edge, etc.*





Response: Yes, the slope described as being along the “east portion of the site” is referring to the slope along the Mississippi River. The slope has an approximate height of 7 m with a toe which varies from being located along the Mississippi River to being setback about 25 m from the river. This has been clarified in the current Geotechnical Investigation Report, referenced above.

Comment 13: *Section 6.9 Slope Stability Analysis under Toe Erosion and Erosion Access Allowance for the “West Tributary” does not include a discussion of erosion access allowance. However, a 6 m access allowance is shown in the cross sections Figure 2A and 2B in Appendix 2. Please add the relevant discussion to the body of the report.*

Response: Yes, an erosion access allowance has been included where there is a stable slope allowance setback along the West Tributary. A discussion about this erosion access allowance been added to the current Geotechnical Investigation Report, referenced above.

Comment 14: *Section 6.9 Slope Stability Analysis under Toe Erosion and Erosion Access Allowance for the “North Tributary” states “Given that no stable slope setback or toe erosion setback is required along the slope adjacent to the north tributary, an erosion access allowance is not required.” Using this rationale to justify a 0 m erosion access allowance is not generally accepted, and a 6 m access allowance is generally required to allow for future maintenance of the slope as per the MNR Technical Guide for Erosion Hazard Limit.*

Response: Given that there are no slope stability nor toe erosion issues along the North Tributary, there is no need for an erosion access allowance since maintenance or repair of the slope will not be required once the site is developed. It would only be if a slope failure or toe erosion was anticipated that an erosion access allowance would be needed to provide access for future repair or maintenance of slope.

It should be noted that Page 6 of the Technical Guide - River & Stream Systems: Erosion Hazard Limit from the Ontario Ministry of Natural Resources states that this guide “is not intended to be a list of mandatory instructions on technical methodologies to be rigidly applied in all circumstances. Instead, the Guide serves to assist technical staff experienced in natural hazards management to select the most appropriate methods and flexible implementation measures in the identification of riverine erosion lands.” Accordingly, it is our interpretation that a 6 m erosion access allowance is not required under all circumstances, with this slope being one of those circumstances.



We trust that the current submission meets your immediate requirements.

Best Regards,

Paterson Group Inc.

Scott S. Dennis, P. Eng.

