

Our Ref: 11209539

12 July 2023

Vargas Properties Inc.

c/o Michael Testaguzza, RPP, MCIP
The Biglieri Group
2472 Kingston Road
Toronto, Ontario M1N 1V3

Re: Response to Comments – Updated Geotechnical Investigation Report, Proposed Residential and Commercial Development, Part Lot 13, Concession 15, Millbrook, Ontario

Dear Mr. Testaguzza:

GHD Limited (GHD) is pleased to present the following response regarding the Erosion Hazard Limits (EHL) assessment presented in the updated geotechnical investigation report, dated January 25, 2023, completed for the above noted development. GHD's response follows the comment received from the Otonabee Region Conservation Authority (ORCA).

ORCA Technical Review Memo – Item 7

ORCA Comment – The Erosion Hazard Limit still has not been properly delineated around the north-west corner of the stormwater management pond. As indicated in the snapshots below, Figure G.1 Updated Geotechnical Report and Figure 2 DEM layer from PTBO County GIS, the watercourse and associated slopes make a bend in this location.

- a. The proposed Erosion Hazard Limit does not represent the shift in the creek or the floodplain / slope location in the top west corner of the SWM Block. Please add additional cross-section(s) to properly calculate / delineate the Erosion Hazard Limit.
- b. Please plot the Erosion Hazard Limit on the PSG-1 Preliminary Site Servicing and Grading Plan and adjust the SWM Block to be outside the hazard, if needed.

GHD Response – An additional cross-section (Section 10-10') was plotted at the north-west corner of the SWM Block. The location of Section 10-10' is illustrated in the attached updated **Figure G.1**. The EHL setback along Section 10-10' is illustrated in the attached **Figure G.8**, using the previously established 8 m toe erosion allowance, 3H:1V stable slope inclination and 6 m erosion access allowance. The updated EHL setback is illustrated in the attached Erosion Hazard Limit Assessment Plan, **Figure G.1**. The SWM pond design has been adjusted to be entirely outside the defined EHL setback as illustrated in the updated PSG-1 Preliminary Site Servicing and Grading Plan.

We trust that this response letter meets with your immediate requirements. Should you have any additional questions, please contact our office.

Sincerely,

GHD

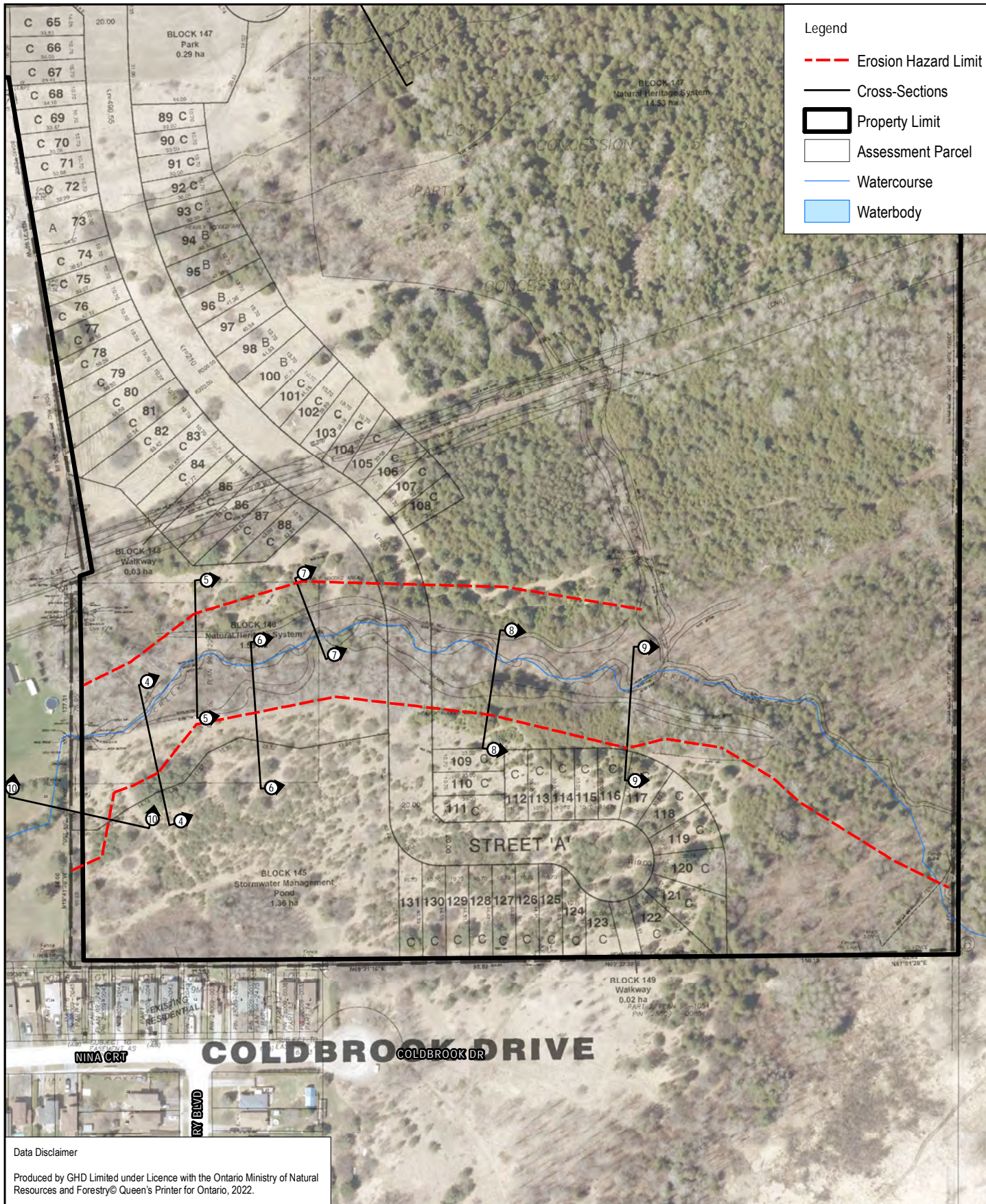


Leandro Ramos, P.Eng.
Senior Geotechnical Engineer



Robert Neck, P.Geo.(Limited)
Senior Geoscientist, Project Director

Figures



Data Disclaimer

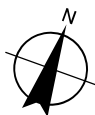
Produced by GHD Limited under Licence with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.

1 cm = 24 meters

0 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N

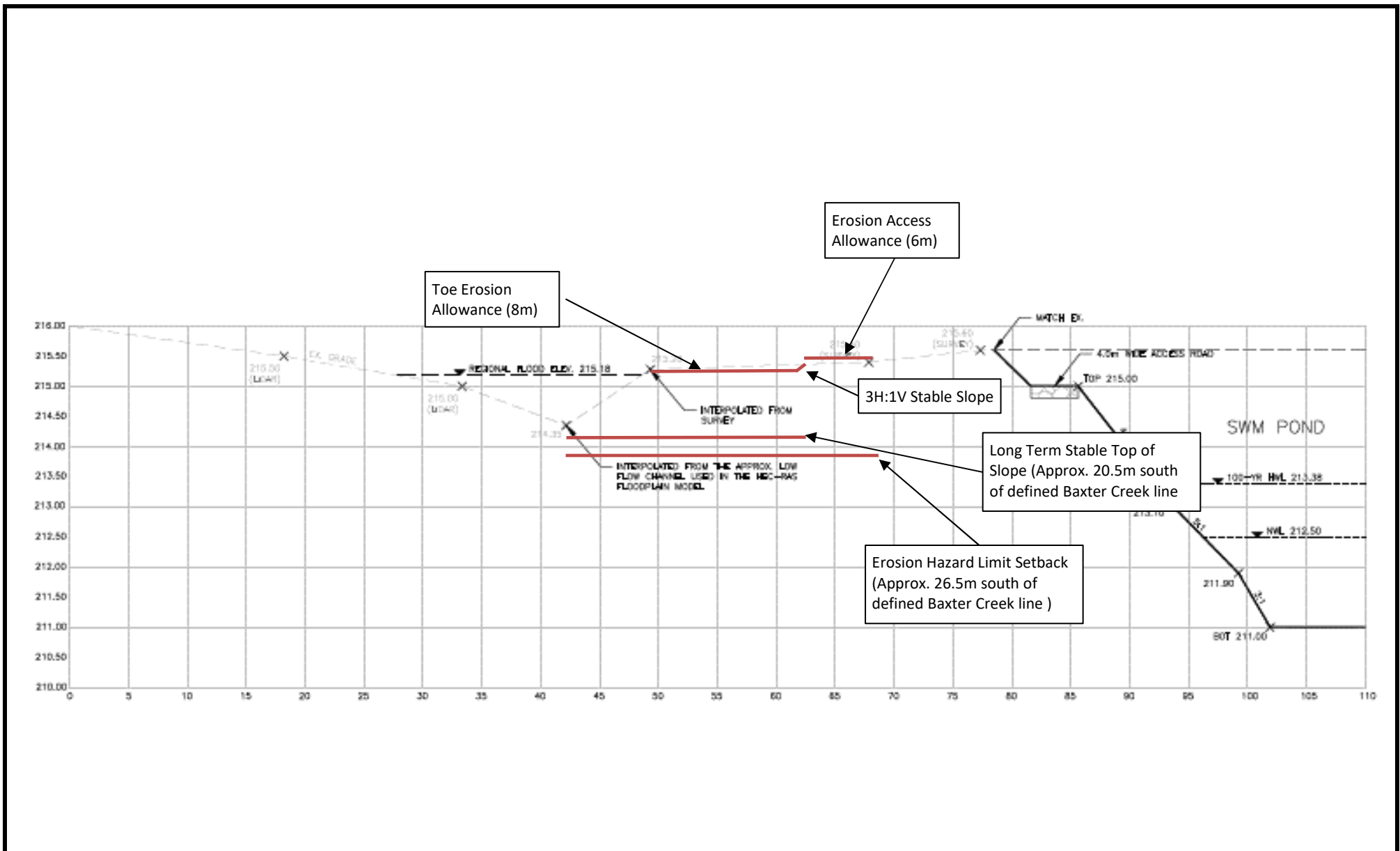


Vargas Properties
963 County Road 10, Millbrook, ON
Pt Lot 13, Con 5, Geographic Township of Cavan
Township of Cavan Monghan

Geotechnical Investigation
Erosion Hazard Limit Assessment Plan

Project No. 11209539
Revision No.
Date Jun 20, 2023

Figure G.1.



Scale:
As Shown Above



Vargas Properties Inc.
Part Lot 13, Concession 5, Millbrook, Ontario
Updated Geotechnical Investigation Report

EROSION HAZARD LIMIT ASSESSMENT - CROSS SECTION 10-10'

11209539
Jun. 2020

FIGURE G.8



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