

TECHNICAL MEMORANDUM

To: Rava Lee From: Megan Rochon

Cc: Rick Hubbard

File: 2002593 Date: June 10, 2021

Re: 2021 Top-of Bank Assessment, 551 Avonhead Road Lands

This Technical Memorandum has been prepared to provide input into the feature type classification of potential headwater drainage features identified on the 551 Avonhead Road property, located in Mississauga, Ontario (herein referred to as the Subject Lands).

Based on the proposed Draft Plan (April 2021), it is our understanding that a key issue that may potentially affect the proposed development limit is the location and classification (in particular the top-of-bank delineation) of the H1S1 drainage feature identified through the Headwater Drainage Feature Assessment (HDFFA) completed in 2021. At the time of the HDFFA, the top-of-bank of potential headwater drainage features on the Subject Lands was assessed to characterize the feature type, as defined by the Credit Valley Conservation/Toronto Region and Conservation Authority (CVC/TRCA) 2014 *Evaluation, Classification and Management of Headwater Drainage Features Guidelines*.

In accordance with the CVC *Watercourse & Valleyland Protection Policies* (2011), top-of-bank is defined as:

“the line, established and/or approved by Authority staff, which defines the transition between tableland and sloping ground at the top of a (slope, associated with a watercourse i.e. the crest of the slope). There may be situations where there are interruptions in the valley slope by plateau areas. In these cases, there may be a primary and secondary top of bank.”

It is generally understood that delineations of top-of-bank are often challenging and open to differing interpretations, depending on who conducts them. Top-of-bank delineation may be further complicated when topography is complex, and several inflection points are potentially present.

In the case of the Subject Lands, the headwater drainage feature identified on the property (H1S1; refer to **Figure 4** of the EIS) was characterized as a shallow troughlike depression that conveys flows during the spring freshet and large precipitation events. No terracing was visible on either side of the feature. Although the drainage feature was observed to be entrenched, a defined transition between the channel and tableland areas was not observed. As such, H1S1 was classified as a swale feature type and no top-of-bank was observed in association with the drainage feature.

Yours truly,

GEI Consultants
Savanta Division



Megan Rochon
Ecologist
mrochon@geiconsultants.com

REFERENCES

Credit Valley Conservation Authority (CVC) 2011. Watercourse & Valleyland Protection Policies. Available online at: https://cvc.ca/wp-content/uploads/2011/02/Appendix_C.pdf

Credit Valley Conservation and Toronto and Region Conservation Authority (CVC/TRCA) 2014. Evaluation, Classification and Management of Headwater Drainage Features Guidelines. January 2014. 26 pp.