

October 26, 2022
Project No.: 21121



TERRASTORY
environmental consulting inc.

Ernesto Rambaldini
1396 Crescent Road
Mississauga, ON L5H 1P6

SUBJECT: Scoped EIS Addendum
City File No: OZ 21-18 W7
2045 Heartwood Court, City of Mississauga

Dear Ernesto,

Terrastory Environmental Consulting Inc. (hereinafter “Terrastory”) was originally retained to prepare a Scoped Environmental Impact Study (EIS) in support of a consent (severance) application at the above-captioned location in Mississauga. The Subject Property is an approximately 0.5-hectare (1.2 acre) parcel bounded by Heartwood Court (southwest) and wooded residential parcels (northwest, northeast, and southeast). The Subject Property consists of an existing residence and pool surrounded by amenity space. Two separate drainage easements (Inst. LT879232 and LT1457005) encumber the lands.

Terrastory’s Scoped EIS was prepared for submission in August 2021. Comments on the Scoped EIS were received from City Park Planning (dated 23 March 2022) as part of a broader comment package prepared by City planning staff (dated 13 May 2022). A public meeting was held on 6 June 2022. A virtual conference call with relevant City staff to discuss their comments occurred on 20 July 2022, with a follow-up site visit attended by City Natural Heritage staff (P. Tripodo, S. Giacomantonio), Terrastory (T. Knight, R. Aitken), and the project Planner (Urban in Mind; J. Dickie) on 9 August 2022.

The purpose of this Scoped EIS Addendum is to provide a formal response to staff comments on the Scoped EIS and address additional feedback received from City Natural Heritage staff during the 9 August 2022 site meeting. As outlined below, the proposed development plan has been revised to provide enhanced levels of protection to the identified natural area beyond what was proposed through the initial application submission. Overall, it is the opinion of Terrastory that the rezoning application is appropriate in the context of relevant natural heritage policy requirements.

STAFF COMMENT ON SCOPED EIS

The staff report included the following comment from City Community Services Department (Park Planning Section) in relation to Terrastory’s Scoped EIS:

A scoped Environment Impact Study (EIS) (prepared by Terrastory Environmental Consulting), dated August 6, 2021, in support of this development is to be updated to reflect that the significant woodland boundary and should be based on the 2018 dripline as shown in Figure 2. The EIS is to be revised to include the location of the regionally significant Stavebank Oak Woods ESA in the mapping and more discussion around the presence of wetland features (e.g. natural green space) on the subject site is required.

Staff advises that there does not appear to be sufficient space located outside of the tree preservation area to support a severance and the creation of a new buildable area. The proposed severance would lead to a loss in the extent of the existing tree preservation area. The significant woodland disturbed by prior tree removal activities should be considered for rehabilitation and enhancement to restore woodland functions.

Additional feedback on the Scoped EIS was received from City Natural Heritage staff during a 9 August 2022 site walk (see below).

SITE WALK WITH CITY STAFF

Following the virtual conference call with City staff on 20 July 2022, two Terrastory Senior Ecologists (T. Knight and R. Aitken), City Natural Heritage staff (P. Tripodo and S. Giacomantonio), and a representative from the project Planner (J. Dickie) visited the Subject Property on 9 August 2022 to review site conditions and discuss the merits of the submitted planning approvals. During the site visit, a low-lying depressional area was observed along the base of slope which was originally identified and discussed in the Scoped EIS (see p. 8). The depressional area contained a variety of hydrophytic species including Purple Loosestrife (*Lythrum salicaria*), Sensitive Fern (*Onoclea sensibilis*), Hairy Willow-herb (*Epilobium parviflorum*), and Common Beggar-ticks (*Bidens frondosa*), intermixed with upland species including Canada Thistle (*Cirsium canadense*) and Tall Goldenrod (*Solidago altissima*).

During the site walk, City Natural Heritage staff raised several key topics which they requested to be discussed through this Scoped EIS Addendum, including further consideration of 1) the depressional area noted above, 2) woodland assessment and setback, and 3) other planning instruments which would allow for enhanced protection of the woodland. These three topics are discussed in the sections that follow.

DRAINAGE AREA ASSESSMENT

During the August 2022 site visit, City Natural Heritage staff questioned whether it was appropriate to consider the depressional area a “wetland”. In reflection of Terrastory’s characterization and analysis of the proposed severed lot in June 2021 and August 2022, the depressional area is described herein as a drainage swale (i.e., not a wetland). Overland runoff is conveyed to the drainage swale from a discrete slope to the north (and smaller slopes to the west and south) during storm events. The drainage swale contains hydrophytic plants (as noted above), which is typical of such features as they collect water and convey flow. As described in the original Scoped EIS (p. 8), this low-lying area outlets to a constructed armourstone swale and drainage easement within the Subject Property, and ultimately to a catch-basin at Heartwood Court. Title to the drainage easement was provided in Appendix 3 of the Scoped EIS. The seasonal or maximum elevation of the groundwater table beneath the depressional area is unknown. The location of the drainage swale is indicated on **Figure 1a**.

Terrastory has considered the appropriateness of undertaking a Headwater Drainage Feature (HDF) Assessment (TRCA and CVC 2014) for the identified drainage swale/depressional area. An HDF Assessment typically incorporates a two- to three-season fieldwork program and involves field investigations during the spring freshet (i.e., approximately March), early spring (approximately April/May), and finally in early- to mid-summer. Terrastory does not consider it appropriate to proceed with an HDF Assessment for the drainage swale as it represents a short (30 m) segment outletting to a registered drainage easement within the Subject Property, which is a constructed,

maintained feature (the deed includes several obligations which includes keeping the easement “free and clear of any trees”, etc.). Given these conditions, the most appropriate management regime for the drainage swale would be one that maintains or replicates its function (i.e., conveyance of drainage) through lot-level controls.

It is understood that a “Functional Service and SWM Report” (Premier Engineering Solutions, Nov. 2021) was prepared following finalization of the Scoped EIS in August 2021. This report and associated Post-Development Drainage Plan have been reviewed as part of preparing this Addendum. A swale is proposed north of the residence envelope in the approximate location of the existing drainage swale described above. The eastern portion (approximately half) of the swale will be incorporated into the natural feature setback (see below and **Figure 1a**).

There is an opportunity to design the drainage swale in a way that is considerate of the significance and sensitivity of the broader wooded area within the northern portion of the lands. As such, Terrastory recommends:

- **The post-development drainage swale will be designed as a “Vegetated Filter Strip” (or equivalent) consisting of naturalized vegetation.**
- **The drainage swale will incorporate a native, wet-tolerant seed mix to be specified by a qualified Ecologist and will be designed in accordance with the Low Impact Development Stormwater Management Planning and Design Guide (CVC and TRCA 2010).**

It is expected that a finalized design of the drainage swale will be developed through future detailed design.

WOODLAND DESIGNATION AND SETBACK

Per Section 4.2 of the Scoped EIS report, Terrastory undertook a technical analysis of woodland significance. While the woodland does not meet “Core Area” criteria pursuant to the Regional Official Plan (OP) as it is less than 40 m in width, the woodland was found to meet City “Significant Woodland” criteria per clause 6.3.12[f] of the City’s OP. Specifically, the woodland within the Subject Property is greater than 0.5 ha and located within 100 m of other “Significant Natural Areas”, particularly the Regionally Significant Credit River Marshes Life Science ANSI and Stavebank Oak Woods Environmental Significant Area. It is understood that City Natural Heritage staff reviewed this technical woodland analysis and believed the findings to be accurate.

The Significant Woodland would be considered a “Significant Natural Area” pursuant to its definition within Policy 3.6.12 of the City’s OP. Notwithstanding this, and as noted on p. 14 of Terrastory’s Scoped EIS, there are no significant natural feature designations currently mapped within the Subject Property (i.e., Significant Natural Area, Natural Green Spaces, Special Management Areas, Residential Woodlots) per Schedule 3 (Natural System) of the City’s OP. Omission of the woodland within the Subject Property (and Adjacent Lands) from the Significant Natural Area designation on Schedule 3 may have been purposeful as the size of the woodland would have been known during the most recent mapping update and, regardless, the Stavebank Oak Woods ESA is known from the Subject Property (and is also considered a Significant Natural Area per Policy 3.6.12).

In the Scoped EIS, Terrastory recommended establishment of a 5 m setback from the dripline of the rear-yard Significant Woodland. This 5 m dripline setback was considered sufficient as the proposed lot to be severed is situated within (or abutting) a residential community which has been present for several decades. The functions of the woodland would therefore have acclimatized to typical uses and conditions ongoing in the broader residential community. In other words, many of the ecological impacts typically associated with construction of a single detached residence adjacent to a woodland (e.g., light pollution, noise pollution) are negligible for this application as woodland functions have already adjusted to permanent human habitation.

While Terrastory believes that the recommended 5 m dripline setback is appropriate in the context of this development application, the dripline setback has increased to 7.5 m through application resubmission to provide an enhanced level of protection. The Woodland Enhancement Area (to be planted with native trees and shrubs) has thereby increased from 5 to 7.5 m, representing an increase of 160 m² of buffer plantings (520 m² in total). It is noted that the proposed residence envelope in fact achieves an 8 to 15 m setback from the dripline (i.e., considerably more than 7.5 m), as it is further separated from the setback given the lot configuration, on-site slopes, and need to construct a rear-yard drainage swale.

ZONING

Terrastory's original Scoped EIS (August 2021) considered the merits of a consent application within the Subject Property; we were not aware at that time that a ZBA was also required to facilitate development. During the site walk, City Natural Heritage staff requested that the project team consider planning instruments that would allow for greater long-term protection of the natural heritage values of the site, such as split zoning (i.e., residential and environmental). It is understood that the project Planner (Urban in Mind) has engaged with City planning staff on this matter, who indicated their lack of support for split zoning. Split zoning is therefore not considered further.

It is further understood from the project Planner that the City has recently agreed to divide the lands by way of Part Lot Control (rather than consent).

WEED CONTROL BY-LAW

On 14 October 2022, the Applicant received a "Warning of Non-compliance" Letter from a City By-law Enforcement officer (D. Akasi) in relation to the City's Nuisance Weed & Tall Grass Control By-law No. 125-2017. In order to rectify the violation, the Applicant was required to *"cut and maintain all tall grass on the property and/or adjacent boulevard, so as not to exceed 20 centimetres (8 inches) in height"*. It is understood that the Applicant has remedied the violation by cutting such vegetation below the required height.

The fact that the Applicant was legally required to maintain vegetation within the proposed severed lot further substantiates the opinions outlined herein, specifically that 1) no wetland is present, and 2) the drainage swale is not a naturalized feature and is suitable for replication through lot-level controls as part of build-out of the severed lot.

CONCLUSIONS AND CLOSURE

As outlined above, the proposed development plan has been revised to provide enhanced levels of protection to the woodland beyond what was proposed through the initial application submission.

Overall, and provided that all technical recommendations offered herein and through the original Scoped EIS (August 2021) are implemented in full, it is the opinion of Terrastory that the rezoning application is appropriate in the context of relevant natural heritage policy requirements.

Should you have any questions or require further clarification regarding the contents of this letter, we would be pleased to discuss them further and can be reached by phone (905.745.5398) or email (tristan@terrastoryenviro.com).

Regards,

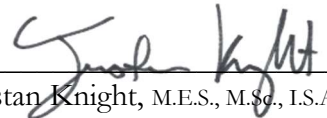
Terrastory Environmental Consulting Inc.

Report by:



Rob Aitken, B.Sc.
Senior Ecologist | GIS Specialist

Reviewed by:



Tristan Knight, M.E.S., M.Sc., I.S.A.
Senior Ecologist | President

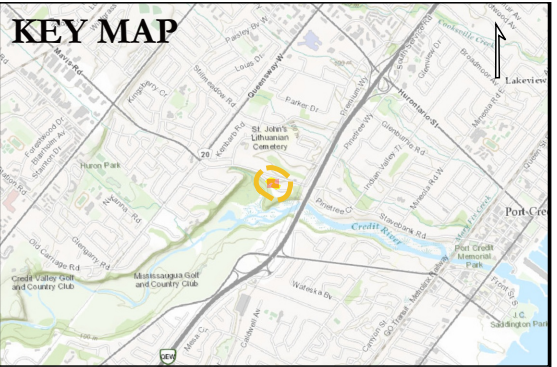
REFERENCES

CVC and TRCA, 2010. “Low Impact Development Stormwater Management Planning and Design Guide.”

TRCA and CVC. 2014. “Evaluation, Classification and Management of Headwater Drainage Features Guidelines.”

STATEMENT OF LIMITATIONS

This report has been prepared by Terrastory Environmental Consulting Inc. (hereinafter "Terrastory") for the client. All information, conclusions, and recommendations contained in this report are subject to the scope and limitations set out in the agreement between Terrastory and the client and qualifications contained in this report. This report shall not be relied upon by any third parties without the prior written consent of Terrastory. Terrastory is not responsible for any injury, loss, or damages arising from improper use of this report by third parties. Excerpts of this report or alterations to this report taken without the authorization of Terrastory invalidates the report and any conclusions therein.



Legend

Study Area
[Yellow dashed line] Subject Property

Administrative Boundaries
[Hatched area] Drainage Easement (Intst. LT1457005)

Built Features
[Cyan line] Constructed Armoustone Drainage Swale

Biophysical Conditions
[Green outline] Significant Woodland
[Cyan line] Centreline of Drainage Swale (approx. 30 linear metres)
[Blue line] Edge of Drainage Area (approx. 150 sq m)
[Grey line] Topographic Contours

Proposed Concept Plan
[White dashed line] Concept Dwelling Envelope
[Orange line] Retaining Wall
[Red dashed line] Lot to be Severed

Mitigation Measures Recommended
[Green outline] 7.5 m Woodland Setback
[Dotted area] Woodland Enhancement Area (520 sq m)

GENERAL NOTES:
-Features depicted herein should not be used in place of a professional survey.
-Numeric scale is for a 11x17 inch print.

 **TERRASTORY**
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Location:
2045 Heartwood Court
City of Mississauga

Project No.: 21121		Figure 1a: Biophysical Conditions and Concept Overlay
Date: 2022-10-13		
By: RA	Checked: TK	
Orthophotograph Date: 2021 (City of Miss.).		