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December 15, 2020

2640085 Ontario Inc.
c/o Innovative Planning Solutions
647 Welham Road, Unit 9A,
Barrie, ON L4N 0B7

Attn: Vanessa Simpson
Senior Planner

Re: Woodland Assessment at 140 Lockhart Road, City of Barrie, ON
Cambium Reference No.:10957-001

Dear Vanessa Simpson,

Cambium Inc. (Cambium) was retained by 2640085 Ontario Inc. to conduct a Woodland Assessment for the property located at 140 Lockhart Road, in the City of Barrie, Ontario (the Site; Figure A). The subject woodland feature is located in the northwest corner of the 90 acre Site which also contains an existing rural residential dwelling and associated accessory structures, agricultural fields, a watercourse, and wetlands. 2640085 Ontario Inc. is currently pursuing planning approvals to facilitate the development of a commercial/industrial subdivision on the Site. The woodlot assessment was requested by City of Barrie Planning staff, to determine whether the proposed removal of the feature is consistent with applicable provincial policy.

The woodland was characterized based on data collected through a background information review and subsequent field investigations. The following report is intended to summarize our methods and findings, identify the current status of the woodland based on the Natural Resource Network policies and definitions contained in the *City of Barrie Official Plan* (2018), and provide an assessment of the significance of the feature according to provincial criteria.

BACKGROUND INFORMATION REVIEW

Existing background information pertaining to the Site and surrounding landscape was compiled and reviewed, as part of a comprehensive desktop exercise, to better understand local biophysical conditions. In southern Ontario,



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readily available data includes aerial orthophotography, topographic base mapping, and geological records. Natural environment and land use schedules that form part of the City of Barrie Official Plan were reviewed to acquire municipal data. Natural area records and species occurrences were obtained from digital resources and reference materials. The comprehensive desktop review for this Site included the following resources:

- Natural Heritage Areas: Make-a-map and Natural Heritage Information Centre database (Ministry of Natural Resources and Forestry, 2020)
- City of Barrie Official Plan, 2018

FIELD INVESTIGATIONS

Site visits were conducted by qualified Cambium staff in the spring and summer of 2020, to document flora and fauna within the woodland according to standard protocols. The field investigations included a two-season inventory of vascular plants, three spring breeding bird surveys, a bat survey for maternity roost trees, and general wildlife habitat surveys. The Ecological Land Classification (ELC) System for Southern Ontario (Lee et al., 1998) was used to classify the vegetation community.

On September 8, 2020, Cambium staff also met on Site with Lake Simcoe Region Conservation Authority (LSRCA) staff (Kate Lillie, Natural Heritage Ecologist), to review the woodland feature as it relates to LSRCA goals and objectives, and collaboratively delineate the feature boundary (i.e., dripline). The boundary was demarcated in the field with wooden stakes and georeferenced using a handheld GPS unit. In the following days, the feature boundary was surveyed by a qualified Ontario Land Surveyor (Rudy Mak Surveying Ltd.).

FINDINGS

The subject woodland is bordered by existing commercial/industrial developments on Bayview Drive and Saunders Road to the north and west, and agricultural lands to the south and east. The woodland was classified as a FOD5-3 Dry – Fresh Sugar Maple – Oak Deciduous Forest. The FOD5-3 community



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was dominated by Sugar Maple and Northern Red Oak and was characterized as a mid-aged to mature forest with a dense understory.

Two notable species were identified that inform the significance of the woodland: Eastern Wood-pewee (*Contopus virens*; a species of songbird) was heard calling from within the woodland during the spring breeding bird surveys. This species is provincially listed as 'Special Concern'; however, 'Special Concern' species are not afforded habitat protection under the *Endangered Species Act, 2007* (ESA).

In addition, a single Butternut tree (*Juglans cinerea*) was identified in the northeast corner of the woodland. Butternut are provincially listed as 'Endangered', and as such, are afforded certain protections under the ESA.

Butternut Health Assessment and Classification

The level of protection granted to an individual Butternut tree is determined based on a health assessment and, more specifically, the degree to which the tree has been affected by the fungal pathogen known as butternut canker (*Sirococcus clavigignenti-juglandacearum*). Prior to undertaking any activity that may harm or kill a Butternut, the health of the tree must be assessed by a certified Butternut Health Assessor, following the Ministry of Environment, Conservation and Parks (MECP) methodologies. Butternut Health Assessments (BHA) are documented in detailed reports which must be submitted to MECP for review. Butternut trees are classified as follows:

Category 1: in the advanced stages of disease as a result of butternut canker ("non-retainable")

Category 2: the tree does not have butternut canker or disease is not as advanced ("retainable")

Category 3: could be useful in determining how to prevent or resist butternut canker ("archivable")

A BHA should be completed during the "leaf-on" season (May 15 to August 31); however, a BHA can be carried out outside this time frame by assuming 100% canopy cover.



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A BHA was conducted for the subject Butternut tree by a qualified Cambium Assessor, on October 1, 2020. The results of the BHA indicate that the identified tree is a hybrid, based on the assessment of seven characteristic traits.

According to provincial BHA guidelines, hybrid trees are not afforded protection under the Endangered Species Act, 2007 (ESA).

During the 30 day period that follows the submission of a BHA Report to the MECP, no Butternut trees (of any category) may be killed, harmed, or taken.

During this period, MECP may request additional time to audit the assessment.

The BHA completed for the Butternut identified on the Site will be submitted to MECP for review.

WOODLAND ASSESSMENT

Current Status According to City of Barrie Official Plan

According to Section 4.7.2.6 (b) of the City of Barrie Official Plan (2018), a Woodlands are generally defined as ‘a contiguous wooded area, of no less than 0.2 ha, irrespective of ownership, maturity, composition, and density in accordance with the City’s Tree Preservation By-law’. Similarly, Section 6.5.2.2 d (ii) of the Official Plan states that “all contiguous woodlands greater than 0.2 hectares are protected by the City’s Tree Preservation By-law, irrespective of ownership, maturity, composition and density”. The City of Barrie has the authority to control development adjacent to woodlands, to prevent destruction of trees.

According to Schedule H (Natural Heritage Resources) of the Official Plan, the subject Woodland is partially designated as a Level 2 Resource, and partially designated as a Level 3 Resource, within the City’s Natural Heritage Resource Network.

With respect to Woodlands, Schedule H defines Level 2 Resources as those greater than 4 ha and less than 10 ha in size, and Level 3 Resources as those greater than 0.5 ha and less than 4 ha in size, or within 30 m of a Level 1 or 2 feature of any type.



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Based on the data collected in spring/summer 2020 and the Resource Level definitions provided on Schedule H of the Official Plan, the entire feature now qualifies as a Level 2 Resource.

Assessment of Significance Based on Provincial Criteria

The subject woodland was assessed in consideration of provincial criteria for Significant Woodlands outlined in the MNRF Natural Heritage Reference Manual (Ministry of Municipal Affairs and Housing, 2020).

1. **Woodland Size:** The woodland (Community 4 – FOD5-3) is approximately 4.88 ha in size. This excludes the area of pole wood identified bordering the mature forest to the east (Community 3 - FOD5-10).

According to the City of Barrie's Urban Forest Strategy (Nov. 25, 2013), *the total mapped forested areas on both private and public land is 1,595 hectares, or 19.6% of the total land area within the City of Barrie.*

Section 2.1 of this document states: *"Many municipalities have set targets for canopy area in their long term strategic goals. The current forest cover is mapped at 19.6% of the land area in Barrie, while current estimates of canopy cover is around 23-25%. An actual measurement of total canopy area (forested area plus individual trees) has never been completed for the City of Barrie."*

According to MNRF Natural Heritage Reference Manual, where woodland cover represents 15–30% of the land cover, woodlands 20 ha in size or larger should be considered significant. Therefore, the subject woodland is not considered significant based on provincial size criteria.

2. **Ecological Function:**

- a. Woodland interior: The woodland offers little to no interior habitat. The dimensions of the feature are approximately 252 m by 173 m. Interior woodlands are those with a minimum of 100 m from an outer forest edge.
- b. Proximity to other woodlands or other habitats: No other significant natural features were identified within 120 m of the woodland. The



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nearest watercourse and wetland are located approximately 235 m to the south.

- c. Linkages: The woodland is isolated from other natural features. The western property boundary fencerow may provide minimal linkage between the forest and the watercourse/wetland to the south. The woodland does not provide a connecting link between two other significant features that are within a specified distance (e.g., 120 m) and meet minimum area thresholds (e.g., 1–20 ha, depending on the circumstance).
- d. Water protection: The woodland is within a sensitive watershed (Lake Simcoe), as is the case for most woodlands in City of Barrie; however, it is not within a specified distance (e.g., 50 m or top of valley bank if greater) of a sensitive groundwater discharge, sensitive recharge, or sensitive headwater area, watercourse or fish habitat.
- e. Woodland diversity: The woodland consists primarily of Sugar Maple and current species diversity is low. A single butternut tree was identified in the northeast corner of the feature. Based on the preliminary BHA, the tree is classified as a hybrid (hybrid trees are not afforded protection under the ESA).

3. **Uncommon Characteristics**: Woodland community classified as FOD5-3 Dry – Fresh Sugar Maple – Oak Deciduous Forest, which has an S5 provincial ranking. No rare or provincially restricted woodland plant species were identified. Based on tree sizes (dbh) observed, the subject woodland is considered mid-aged to mature. None of the trees documented would be over 100 years old. The constituent forest community types are relatively common on the local landscape.

4. **Economic and Social Functional Values**:

- High productivity in terms of economically valuable products together with continuous native natural attributes and meet



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minimum area thresholds (e.g., 2–10 ha, depending on circumstance). The subject woodland does not meet this criteria.

- A high value in special services, such as air-quality improvement or recreation at sustainable level that is compatible with long-term retention and meet minimum area thresholds (e.g., 0.2–10 ha, depending on circumstance). The subject woodland does not meet this criteria.
- Important identified appreciation, education, cultural or historical value and meet minimum area thresholds (e.g., 0.2–10 ha, depending on circumstance). The feature is located on private property and is not used for recreational or educational purposes. The subject woodland does not meet this criteria.

Other Relevant Field Observations

1. Bat maternity roost surveys were completed on May 25, 2020 per MNRF Midhurst District protocol. Based on the size of the area surveyed, the snag density for the woodland did not meet the criteria for bat colony Significant Wildlife Habitat (SWH).
2. Breeding Bird Surveys (BBS) were completed on June 8, and 15, 2020.
 - a. One SAR bird species identified within the woodland: Eastern Wood-pewee (Special Concern, not afforded habitat protection under the ESA). The woodland qualifies as Special Concern and Rare Wildlife Species SWH; however, this species is relatively abundant and commonly found in woodlands in Simcoe County.
 - b. Only one Interior Forest Bird species identified in woodland: Scarlet Tanager (*Piranga olivacea*; June 15, 2020, singing male, no confirmation of breeding). Therefore, the woodland does not qualify as Area Sensitive Bird Breeding SWH.
3. No stick nests used by raptor species were identified during any of the field investigations.



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4. Ash trees identified in forest appeared to be affected by Emerald Ash Borer (EAB).

In Summary, given that the subject woodland meets very few criteria for significance, the feature does not qualify as a Significant Woodland under provincial natural heritage policy.

CONCLUSION

In conclusion, based on the work carried out by Cambium in spring/summer 2020, the subject woodland in the northwest corner of the property located at 140 Lockhart Road does not qualify as a Significant Woodland according to provincial criteria. Based on the Natural Resource Network definitions provided in the City of Barrie Official Plan, the entire feature qualifies as a Level 2 Resource. Given these findings, the proposed removal of the woodland is at the discretion of the City and should be considered as part of the municipal natural heritage system planning process.

Best regards,

Cambium Inc.

Jeremy Prah, B.Sc., EP, Can-CISEC
Senior Ecologist / Project Manager

Ernie Silhanek, F&W Dipl.,
Senior Ecologist / Senior Project Coordinator

JPP/es/djl

Encl. Figure A

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ENVIRONMENTAL IMPACT STUDY

2640085 ONTARIO INC.
140 Lockhart Road,
Barrie, Ontario

LEGEND

- Butternut Tree
- 25m Butternut Tree Buffer
- 30m Wetland/Watercourse Setback
- Watercourse
- ▨ Culvert
- ▨ Wetland - Delineated with LSRCA
- Site (approximate) (37.12 ha)
- Woodland Dripline - Delineated with LSRCA

Current City of Barrie Official Plan - Natural Resource Network Designations

- Level 2 Resource (5.43 ha)
- Level 3 Resource (1.51 ha),
*Now qualifies as Woodland / Level 2 Resource

Notes:
 - Base mapping features are © Queen's Printer of Ontario, 2019 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
 - Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
 - Cambium Inc. makes every effort to ensure this map is free from errors but cannot be held responsible for any damages due to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.



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WOODLAND ASSESSMENT

Project No.: 10957-001	Date: October 2020
Scale: 1:4,500	Rev.: NAD 1983 UTM Zone 17N
Created by: MAT	Checked by: JP
Figure: A	