



June 23, 2021

Carveth's Marina
426 Carveths Marina Rd
Harcourt, ON K0L 2H0

Attn: Randy Hauth
Sent via email to: <randyhauth@hotmail.com>

Re: Natural Heritage Evaluation at 426 Carveths Marina Road, Harcourt, Ontario
Cambium Reference No.: 12908-001

Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217.7900
(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P O Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



Dear Randy Hauth,

Cambium Inc. (Cambium) is pleased to provide the following Natural Heritage Evaluation (NHE; the Study) at 426 Carveths Marina Road, Harcourt, Ontario (the Site; Figure 1). The proposed development includes two residential lot severances along the south edge of the Site, fronting on Birchview Road. A Preliminary Severance Review (PSR) was completed by the County of Peterborough, dated December 14, 2020. This Study considers the location of the proposed severances and adjacent lands within 120 m (Study Area).

PLANNING AND POLICY CONTEXT

The majority of the Site is currently zoned Rural (RU), with an area of approximately 0.5 ha at the shoreline zoned Commercial Tourist (CT) in the Township of Douro-Dummer Comprehensive Zoning By-law. The proposed severances are located in the Rural zone. The PSR noted that the Township of Douro-Dummer may require re-zoning of a portion of the Site south of Carveths Marina Road to better accommodate existing commercial uses; if required, this re-zoning will be addressed under separate cover.

The PSR identified the following natural heritage and/or hydrologic features on or within 120 m of the Site: Stoney Lake, Locally Significant Davis Island Wetland Complex (associated with Stoney Lake shoreline), and Unevaluated Wetlands (on adjacent lands, south of Birchview Road). The Davis Island Wetland Complex is located over 200 m northwest of the proposed severances; this



Environmental
Geotechnical
Building Sciences
Construction
Monitoring

Telephone
(866) 217.7900
(705) 742.7900

Facsimile
(705) 742.7907

Website
cambium-inc.com

Mailing Address
P O Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations
Peterborough
Kingston
Barrie
Oshawa

Laboratory
Peterborough



June 23, 2021

feature is not discussed further in this report. Mapped natural heritage/hydrologic features are shown on Figure 2.

The proposed development may be constrained by features protected by provincial natural heritage policies under the Provincial Policy Statement, 2020 (PPS) and the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH). Development includes the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act. As such, the County of Peterborough requires an NHE be prepared in consideration of provincial natural heritage policies.

Given the presence of mapped unevaluated wetlands south of Birchview Road, the Study Area overlaps with the Otonabee Region Conservation Authority (ORCA) regulated area. The *ORCA Regulation of Development, Interference with Wetlands and Alterations To Shorelines and Watercourses* (O.Reg. 167/06) under the *Conservation Authorities Act* and the ORCA Watershed Planning and Regulation Policy Manual (2015) provide policies regarding development within and adjacent to wetlands. As stated in Section 7.0 of the ORCA Policy Manual, development is not permitted within 30 m of a non-provincially significant wetland, unless it can be demonstrated through an Environmental Impact Study (equivalent to NHE) that such development will not have a negative impact on the natural features and the hydrologic functions of the wetland.

The *Endangered Species Act, 2007* (ESA) (Government of Ontario, 2018) protects endangered or threatened species and their habitats from harm or destruction. Habitat of endangered and threatened species is protected under provincial natural heritage policy; however, it is also the landowner's responsibility to ensure that no harm to these species occurs on their property. This EIS includes a habitat-based species at risk (SAR) screening to determine if the Site has suitable habitat for any provincially or federal listed at-risk species.

TERMS OF REFERENCE

Cambium contacted Matt Wilkinson, Planner at ORCA, to confirm the Terms of Reference for the subject study on May 7, 2021.



Environmental
Geotechnical
Building Sciences
Construction
Monitoring

Telephone
(866) 217.7900
(705) 742.7900

Facsimile
(705) 742.7907

Website
cambium-inc.com

Mailing Address
P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations
Peterborough
Kingston
Barrie
Oshawa

Laboratory
Peterborough



June 23, 2021

Correspondence received from ORCA (Matt Wilkinson, Planner), dated May 19, 2021 indicated agreeance of the Terms of Reference (ToR) for this project (enclosed).

FIELD INVESTIGATIONS AND FINDINGS

Field investigations were conducted during the growing season under early leaf-out conditions on May 19, 2021. During the field investigations, the weather was mostly clear and sunny with a few clouds in the morning, becoming overcast mid-day; air temperature was 24°C, reaching 28°C by mid-day; winds were light.

Site Location and Topography

The Site is located on the southern shore of Stoney Lake, which is part of the Trent Severn Waterway (TSW). Adjacent shoreline properties to the east and west consist of residential / cottage developments. Adjacent lands to the south include extensive forested areas.

The Site topography rises to the south (away from the shoreline). An escarpment feature runs east-west, dividing the Site roughly in half. The proposed severances are located in the forested area above the escarpment (on high topography). Contour lines are provided on Figure 3.

Ecological Land Classification

The Ecological Land Classification (ELC) System for Southern Ontario (Lee, 1998) was used to classify vegetation communities on the Site. Definitions of vegetation types are derived from the ELC for Southern Ontario First Approximation Field Guide and the revised 2008 tables. ELC units were initially identified by orthophoto interpretation during the desktop review. Field investigations served to confirm the type and extent of communities through vegetation inventory; where necessary, soil assessment is used to confirm wetland communities.

A total of six vegetation communities were identified within the Study Area and adjacent lands, as summarized in Table 1. The extent of the identified vegetation



Environmental
 Geotechnical
 Building Sciences
 Construction
 Monitoring

Telephone
 (866) 217 7900
 (705) 742 7900

Facsimile
 (705) 742 7907

Website
 cambium-inc.com

Mailing Address
 P.O. Box 325
 52 Hunter Street East
 Peterborough, ON
 K9H 1G5

Locations
 Peterborough
 Kingston
 Barrie
 Oshawa

Laboratory
 Peterborough



June 23, 2021

communities is illustrated on Figure 3. Corresponding plant species lists and representative photos are enclosed.

Table 1 Vegetation Communities

No.	ELC Code	Community Description	Community Type	S -Rank
1	CVC_1	Disturbed Area – Marina Facilities	Terrestrial	N/A
2	FOM2-2	Dry-Fresh White Pine-Sugar Maple Mixed Forest	Terrestrial	S5
3	FOD5-1	Dry-Fresh Sugar Maple Deciduous Forest	Terrestrial	S5
4	FOC2-2	Dry-Fresh White Cedar Coniferous Forest	Terrestrial	S5
5	FOC2-2	Dry-Fresh White Cedar Coniferous Forest	Terrestrial	S5
6	FODM4-4	Dry-Fresh Ironwood Deciduous Forest	Terrestrial	N/A

The proposed severances are comprised almost entirely of Community 6. This is a fairly young stand, dominated by young to mid-aged Eastern Hop-hornbeam (Ironwood). All of the vegetation communities identified are common/secure provincially (S5).

Unevaluated Wetlands

Unevaluated wetlands are mapped approximately 50 m south of the proposed severances, on the south side of Birchview Road. All mapped wetlands are shown on Figure 2.

Cambium staff confirm the presence of wetlands through field investigations during the growing season. Wetland boundaries are determined using the 50% wetland vegetation rule, as specified by the Ontario Wetland Evaluation System (OWES) for Southern Ontario, 3rd Edition (Ministry of Natural Resources, 2013). Where wetland communities extend off the Site, classification was done through observation from property boundaries and publically accessible lands. Fieldwork was carried out by provincially certified Cambium staff.

The area south of Birchview Road was scanned from the roadside using binoculars with 10x magnification. Visibility was fair and no wetland plants were



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

identified. The area consisted primarily of Sugar Maple and other upland forest species. Topography was gently rolling, with no obvious decline towards the mapped wetland area. No indication of wetland was visible within at least 30 m of the roadside.

Cambium Staff confirmed that no unmapped wetlands are present in the Study Area.

Stoney Lake, Drainage Features, and Fish Habitat

The shore of Stoney Lake is approximately 100 m away from the proposed severances. It is part of the Trent Severn Waterway, a route connecting Lake Ontario at Trenton to Georgian Bay, Lake Huron, at Port Severn. Stoney Lake is approximately 2,825 ha in size, with a maximum depth of 32 m and an average depth of 5.9 m. The fish community in Stoney Lake is fairly diverse, with at least 18 documented fish species, including Bluegill, Lake Whitefish, Muskellunge, Walleye, White Sucker, Yellow Perch, and various Bullhead and Bass species. The shoreline directly adjacent to the Site is actively used as a marina, and includes a concrete boat ramp, concrete shoreline reinforcements, and several docks. Natural habitat features on the shoreline in the vicinity of the Site are limited due to extensive shoreline cottage development.

No watercourses or drainage features were identified within the Study Area and no culverts were found along Birchview Road in the vicinity of the proposed severances.

Wildlife Habitat and Species at Risk Screening

Wildlife habitat within the Study Area is characterized primarily by deciduous forest, with some mixed and coniferous forest areas also present. Based on orthoimagery interpretation, extensive forests, and mapped unevaluated wetlands are present to the south of Birchview Road. The forested escarpment that runs east-west just north of the proposed severances may provide opportunities for reptile hibernation and/or mammal denning. Trees in the vicinity of the proposed severances are generally fairly young and would not provide suitable wildlife cavity tree habitat; one high quality cavity tree was identified near



Environmental
Geotechnical
Building Sciences
Construction
Monitoring

Telephone
(866) 217 7900
(705) 742 7900

Facsimile
(705) 742 7907

Website
cambium-inc.com

Mailing Address
P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations
Peterborough
Kingston
Barrie
Oshawa

Laboratory
Peterborough



June 23, 2021

Carveths Marina Road, approximately 120 m from the proposed severances, as shown on Figure 3.

A number of birds common to rural and forested habitats were observed during the field investigations, including American Crow (*Corvus brachyrhynchos*), American Robin (*Turdus migratorius*), Blue Jay (*Cyanocitta cristata*), Brown Thrasher (*Toxostoma rufum*), Chipping Sparrow (*Spizella passerina*), Common Grackle (*Quiscalus quiscula*), Eastern Phoebe (*Sayornis phoebe*), Great Crested Flycatcher (*Myiarchus crinitus*), House Wren (*Troglodytes aedon*), Red-eyed Vireo (*Vireo olivaceus*), Scarlet Tanager (*Piranga olivacea*), and Song Sparrow (*Melospiza melodia*).

In addition, evidence was observed of Eastern Gray Squirrel (*Sciurus carolinensis*), Raccoon (*Procyon lotor*), and Red Fox (*Vulpes vulpes*). American Toad (*Anaxyrus americanus*) was heard calling near the Marina storage facilities (likely breeding in near-shore areas beyond the Study Area).

A background review was conducted to assemble a list of SAR that have the potential to occur at the Site. A habitat-based screening was employed to identify suitable habitat for SAR located on or adjacent to the Study Area (see enclosed). The SAR list was aggregated from the following sources:

- Natural Heritage Areas: Make-a-map (Ministry of Natural Resources and Forestry, 2018)
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2018)
- Ontario Breeding Birds Atlas (2001-2005) (Bird Studies Canada, 2005)
- Previous studies conducted by Cambium in the region of the Site.

The NHIC database contains a restricted species occurrence record in the 1km grid square located directly south of the Study Area. Cambium conducted follow-up consultation with the NHIC and included the relevant field surveys. It was confirmed that this species does not present an issue for the proposed development.



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217.7900
(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P. O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

No Critical Habitat for aquatic species at risk listed under SARA was identified in Stoney Lake adjacent to the Site.

No SAR was confirmed on or adjacent to the Study Area through direct field observations.

The following SAR were found to have high or moderate potential for habitat on or adjacent to the Study Area and are presumed to be present for the purpose of this study:

- Eastern Wood-pewee (Special Concern)
- Blanding's Turtle (Threatened)
- Eastern Hog-nosed Snake (Threatened)

The Study Area has moderate habitat potential for Eastern Wood-pewee, which lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation. Potentially suitable habitat is present on the Study Area and adjacent lands; however, larger expanses of more preferable habitat is present in the extensive forested area located south of Birchview Road.

Blanding's Turtles spend the majority of their life cycle in the aquatic environment, usually in large wetlands or shallow lakes with high densities of water plants. They use terrestrial sites for travel between habitat patches and to lay clutches of eggs, often going hundreds of meters from their nearest water body. Blanding's Turtles nest in dry coniferous and mixed forest habitats, as well as fields and roadsides. Stoney Lake and associated shoreline wetlands would provide suitable habitat for this species; however, there is no suitable wetland habitat within the Study Area. Given the lack of wetland and sunny or south facing open areas in the proposed severance locations, the Study Area provides limited potential nesting habitat for Blanding's Turtle; it is possible Blanding's Turtle may move through the Study Area during the active season.

The Eastern Hog-nosed Snake prefers sandy well-drained habitats such as beaches and dry forests because they lay their eggs, hibernate and burrow in these areas. The main diet of this snake is toads and frogs, so they usually stay



Environmental
 Geotechnical
 Building Sciences
 Construction
 Monitoring

Telephone
 (866) 217.7900
 (705) 742.7900

Facsimile
 (705) 742.7907

Website
 cambium-inc.com

Mailing Address
 P. O. Box 325
 52 Hunter Street East
 Peterborough, ON
 K9H 1G5

Locations
 Peterborough
 Kingston
 Barrie
 Oshawa

Laboratory
 Peterborough



June 23, 2021

close to water including marshes and swamps, where they have an increased chance of finding their preferred prey. The escarpment running east-west to the north of the proposed severances may include below ground openings that provide suitable snake hibernation habitat. Given the lack of wetlands, the Study Area is unlikely to provide sufficient prey opportunities to support Eastern Hog-nosed Snake; it is possible for snakes to move through the Study Area during the active season. Larger expanses of forest located south of Birchview Road may contain wetlands, making them more favourable habita.

IMPACT ASSESSMENT AND RECOMMENDATIONS

The proposed development includes severance of two new residential lots to be developed with single residential dwellings. Both proposed severances are located on the southern edge of the Site, fronting on Birchview Road.

The following sections address potential impacts to protected features identified on and adjacent to the Site that may result from the proposed development and site alteration:

- Stoney Lake
- Fish Habitat
- Unevaluated wetlands
- Habitat of Threatened Species

No other natural heritage features protected by provincial policy were confirmed on or adjacent to the Site.

Mitigation measures and best management practices have been recommended to ensure that the integrity of the current existing natural features are protected and their functions are not negatively impacted during or following construction.

Stoney Lake and Fish Habitat

Given that Stoney Lake is located approximately 100m from the proposed severances, separated by other cottage development, a roadway, and well vegetated lands, there will be no direct impacts to the Lake. Given that there are



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217 7900

(705) 742 7900

Facsimile

(705) 742 7907

Website

cambium-inc.com

Mailing Address

P. O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

no watercourses or drainage pathways between the proposed severances and the shoreline, there are no anticipated indirect impacts to the Lake.

Unevaluated Wetlands

While no wetlands were visible from Birchview Road, a precautionary approach has been applied to the mapped unevaluated wetlands. The GPGGH and ORCA policies both require development be setback a minimum of 30 m from wetlands. As such, a 30 m setback has been applied to the mapped unevaluated wetlands and is shown on Figure 4. This setback is located entirely south of Birchview Road.

Given that the unevaluated wetlands south of Birchview Road are located over 30 m away, the proposed development will have no direct impacts on the wetlands. Given that there are no watercourses or drainage pathways between the proposed severances and the wetlands, and the severances are separated by a roadway and well vegetated lands, no indirect impacts to the wetlands are anticipated as part of the proposed development.

Potential Habitat of Threatened Species

The creation of lot lines will not impact Threatened species or their habitat.

Potential for impacts to Threatened species during the future construction of residential dwellings on the new lots is possible and is addressed below.

Blanding's Turtle is known to travel great distances into terrestrial habitats, including open fields and roadsides to reach their preferred nesting areas.

Eastern Hog-nosed snake uses a wide variety of habitats and may travel between upland forests on the Study Area and nearby wetlands. Furthermore, there is potential that exposed bedrock along the escarpment located north of the proposed severances could provide hibernation habitat for snakes. Both of these species are known to the area generally. The Study Area has potential be utilized by Blanding's Turtle and Eastern Hog-nosed Snake during their active season, and the escarpment may be used for snake hibernation from October to April. Turtles and snakes are particularly vulnerable to construction-related impacts.



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217 7900

(705) 742 7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

It is recommended that future development be located as far as possible from the escarpment feature. Given the potential for access to a hibernaculum in the Study Area, any future foundational work (e.g., rock blasting, excavation) be done outside of the snake hibernation season, which takes place in this region of Ontario from approximately October to April; all foundational work should take place from May to September to avoid potential impacts to hibernating Eastern Hog-nosed Snakes.

Wildlife Exclusion Fencing should be erected around the perimeter of future building envelopes on both severed lots. Wildlife Exclusion Fencing should be comprised of light-duty silt fence at least 60 cm high above ground, with an additional 10-20 cm buried. In addition it should be staked at regular intervals and checked regularly for maintenance needs. Fencing with synthetic mesh backing should be avoided as wildlife can be entangled and killed by such materials. Wildlife exclusion fencing should be properly installed around the construction area(s) prior to May 1 of the year of construction in order to keep turtles from entering the construction area.

During the construction phase, the work area should be actively checked for the presence of any wildlife, especially turtles and snakes. Workers should be aware of the turtle nesting season, which extends from May 15 to August 15, with hatchling emergence through until September 30. Should any nesting turtles be encountered, work should stop immediately and the turtle should be left to finish nesting undisturbed. The turtle should be photographed and the nest marked to ensure it is not disturbed during construction until it has hatched (late August – September). If a nest is laid in a stockpile or other area that requires disturbance, Cambium should be contacted to determine if the nest can be relocated.

Though not identified in the field inventories, any subsequently identified SAR discovered on the property will be left undisturbed as dictated by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harm's way. SAR observations should be reported to the Natural Heritage Information Centre.



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217 7900
(705) 742 7900

Facsimile

(705) 742 7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

Threats to the recovery of Eastern Hog-nosed Snake include persecution by humans and predation by feral pets, in part due to its Cobra-like defensive posture, which can be perceived as dangerous. It is recommended that educational information on the characteristics and habitat needs of Eastern Hog-Nosed Snake be distributed to future buyers of the severed lots in order to improve their perceptions of this often misunderstood species.

Best Management Practices

Avoiding Potential Hazard Lands

The natural escarpment that runs east-west just north of the proposed severances should be treated as a potential erosion hazard. ORCA regulates hazard lands and a permit is generally required for development within 15 m of an engineered confirmation of the stable top of bank. Under to the *Conservation Authorities Act*, development includes:

- the construction, reconstruction, erection or placing of a building or structure of any kind
- any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- site grading
- the temporary or permanent placing, dumping or removal of material, originating on the site or elsewhere

In order to avoid the cost of additional studies and engagement with the permitting process, Cambium recommends that all future site preparation, storage and stockpiling, and construction on the new severances be conducted at least 15 m away from the escarpment. A 15 m setback is shown on Figure 4. The 15 m setback does not impact the placement of severance lines on the Site.



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone
(866) 217.7900
(705) 742.7900

Facsimile
(705) 742.7907

Website
cambium-inc.com

Mailing Address
P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations
Peterborough
Kingston
Barrie
Oshawa

Laboratory
Peterborough



June 23, 2021

Vegetation Clearing

The future construction of new dwellings on the new severed lots will require clearing and grubbing of vegetation on the Site. Vegetation removal should be limited to the amount required for construction. No vegetation removal should occur within the 15 m escarpment setback; tree removal within the setback should be limited to the removal of hazard trees, if required.

The vegetation present has potential to provide nesting habitat for birds that utilize forest and edge habitats. Nesting birds are protected under the *Migratory Birds Convention Act, 1994*. Vegetation clearing at the Site should occur outside the peak breeding bird season, which extends from April 15 to August 15 in this area (as per Environment and Climate Change Canada Guidelines). If vegetation clearing is to occur between April 15 and August 15, the vegetation should be investigated by a qualified biologist to confirm if any nests are present.

Vegetation clearing can proceed provided there are no active nests. If active nests are confirmed, the nests should be left undisturbed until young have fledged or the nest is determined to be inactive.

In the event that construction is planned to proceed during the breeding season, the construction area should be investigated daily for the presence of breeding birds and nests containing eggs and/or young. It should be noted that some birds nest on man-made structures/machinery or in recently cleared areas, so these areas should be checked regularly. Nests discovered on Site should be left undisturbed until young have fledged or the nest is determined to be inactive.

SUMMARY OF RECOMMENDATIONS

1. All required permits and approvals should be obtained prior to any Site alterations or construction. Note that there are no wetlands within 30 m of the proposed severances, and they conform to provincial policy.
2. It is recommended that future development be located as far as possible from the escarpment feature.



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

3. All foundational work (e.g., rock blasting, excavation) should take place from May to September to avoid potential impacts to hibernating Eastern Hognosed Snakes.
4. Site plans developed for the proposed severances and residential dwellings should include the location of Wildlife Exclusion Fencing (around the perimeter of future building envelopes), and the location of the escarpment and 15 m hazard setback, as shown on (Figure 4).
5. Wildlife Exclusion Fencing should be erected prior to the earlier of May 1 or the commencement of any Site alteration or development. This should be maintained in proper working order until the Site has been successfully revegetated or all loose substrate have been stabilized. All fencing should be removed following construction.
6. Wildlife Exclusion Fencing should consist of light-duty silt fencing, staked at regular intervals, trenched in at least 20 cm, and with an above-ground height of at least 60 cm. Fencing with synthetic mesh backing should be avoided as wildlife can be entangled and killed by such materials.
7. Workers should be aware of the nesting season for turtles which extends from May 15 to August 15, with hatchling emergence through until September 30. Should any nesting turtles be encountered, work should stop immediately and the turtle should be left to finish nesting undisturbed. The turtle should be photographed and the nest marked to ensure it is not disturbed during construction until it has hatched (late August – September). If a nest is laid in a stockpile or other area that requires disturbance, Cambium should be contacted to determine if the nest can be relocated.
8. All future site preparation, storage and stockpiling, and construction on the new severances should be conducted at least 15 m away from the escarpment.
9. No vegetation removal should occur within the 15 m escarpment setback; tree removal within the setback should be limited to the removal of hazard trees, if required.



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone
(866) 217.7900
(705) 742.7900

Facsimile
(705) 742.7907

Website
cambium-inc.com

Mailing Address
P. O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations
Peterborough
Kingston
Barrie
Oshawa

Laboratory
Peterborough



June 23, 2021

10. Vegetation clearing at the Site should occur outside the peak breeding bird season, which extends from April 15 to August 15 in this area (as per Environment and Climate Change Canada Guidelines).
11. If vegetation clearing is to occur between April 15 and August 15, the vegetation should be investigated by a qualified biologist to confirm if any nests are present.
12. The construction area should be investigated daily for the presence of breeding birds and nests containing eggs and/or young. Nests discovered on Site should be left undisturbed until young have fledged or the nest is determined to be inactive.
13. Construction activities involving earthworks (i.e., grading, excavation) should be scheduled to avoid dates of heavy rainfall events and high runoff volumes (e.g., spring melt, spring/summer/fall rainstorms).
14. All machinery, equipment, construction materials, and stockpiles should be stored within the construction area throughout the construction period, outside of the escarpment setback and forested areas protected by the Wildlife Exclusion Fencing.
15. Though not identified in the field inventories, any subsequently identified SAR discovered on the property will be left undisturbed as dictated by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harm's way. SAR observations should be reported to the Natural Heritage Information Centre.
16. It is recommended that educational information on the characteristics and habitat needs of Eastern Hog-Nosed Snake be distributed to future buyers of the severed lots in order to improve their perceptions of this often misunderstood species.

CLOSING

In conclusion, potential negative impacts associated with the proposed severances and future development and site alteration can be appropriately



Environmental

Geotechnical

Building Sciences

Construction
Monitoring

Telephone

(866) 217.7900
(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325
52 Hunter Street East
Peterborough, ON
K9H 1G5

Locations

Peterborough
Kingston
Barrie
Oshawa

Laboratory

Peterborough



June 23, 2021

minimized, provided that the recommendations outlined above are adhered to. The information presented herein demonstrates that the proposed development complies with the applicable natural heritage policies and can be carried out in a way that will not adversely impact natural heritage features and function identified on or adjacent to the Site.

Best regards,

Cambium Inc.

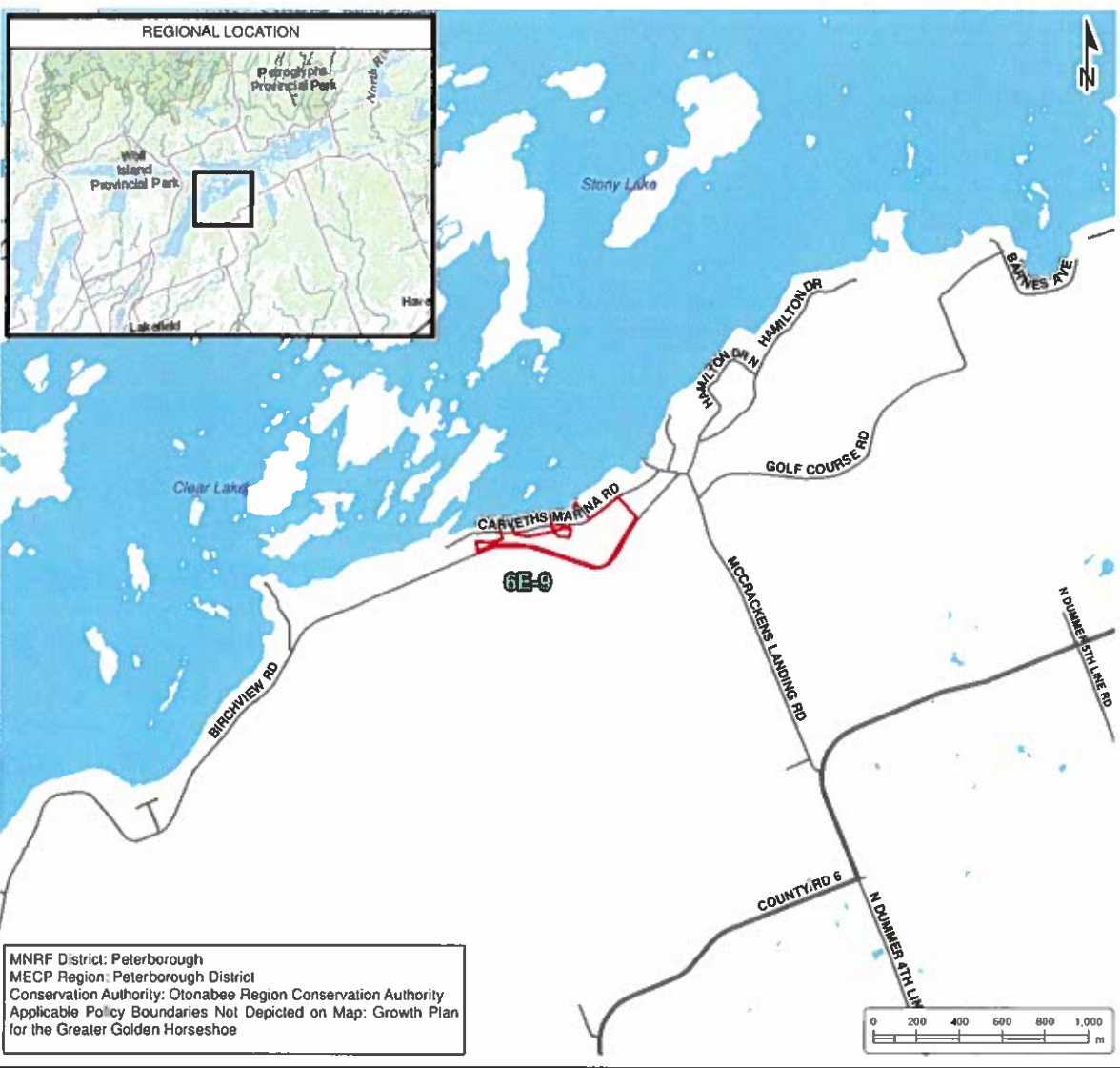
Kristina Domsic, B.E.S.
Ecologist / Project Coordinator

Ernie Silhanek, F&W Dipl.,
Senior Ecologist

KD/es/ah

- Encl. Figure 1 Site Location and Special Planning Areas
 Figure 2 Local Natural Heritage Features
 Figure 3 Site Natural Heritage Features
 Figure 4 Natural Heritage Constraints
 Terms of Reference
 Ecological Land Classification Data Sheets

© OS 12/21/2016 12:00:00 PM - MFC - 426 Carveths Marina North/2021-05-21/FIG.1 - Site Location and Regional Map/Map/Feedbacks.mxd



MNRF District: Peterborough
 MECP Region: Peterborough District
 Conservation Authority: Otonabee Region Conservation Authority
 Applicable Policy Boundaries Not Depicted on Map: Growth Plan for the Greater Golden Horseshoe

ENVIRONMENTAL IMPACT STUDY
CARVETHS MARINA
 426 Carveths Marina Road,
 Pt. Lots 28 & 29, Concession 3,
 Dummer, Ontario

- LEGEND**
- Major Road
 - Minor Road
 - Water Area
 - Ecodistrict
 - Site (9.79 ha) (approximate)

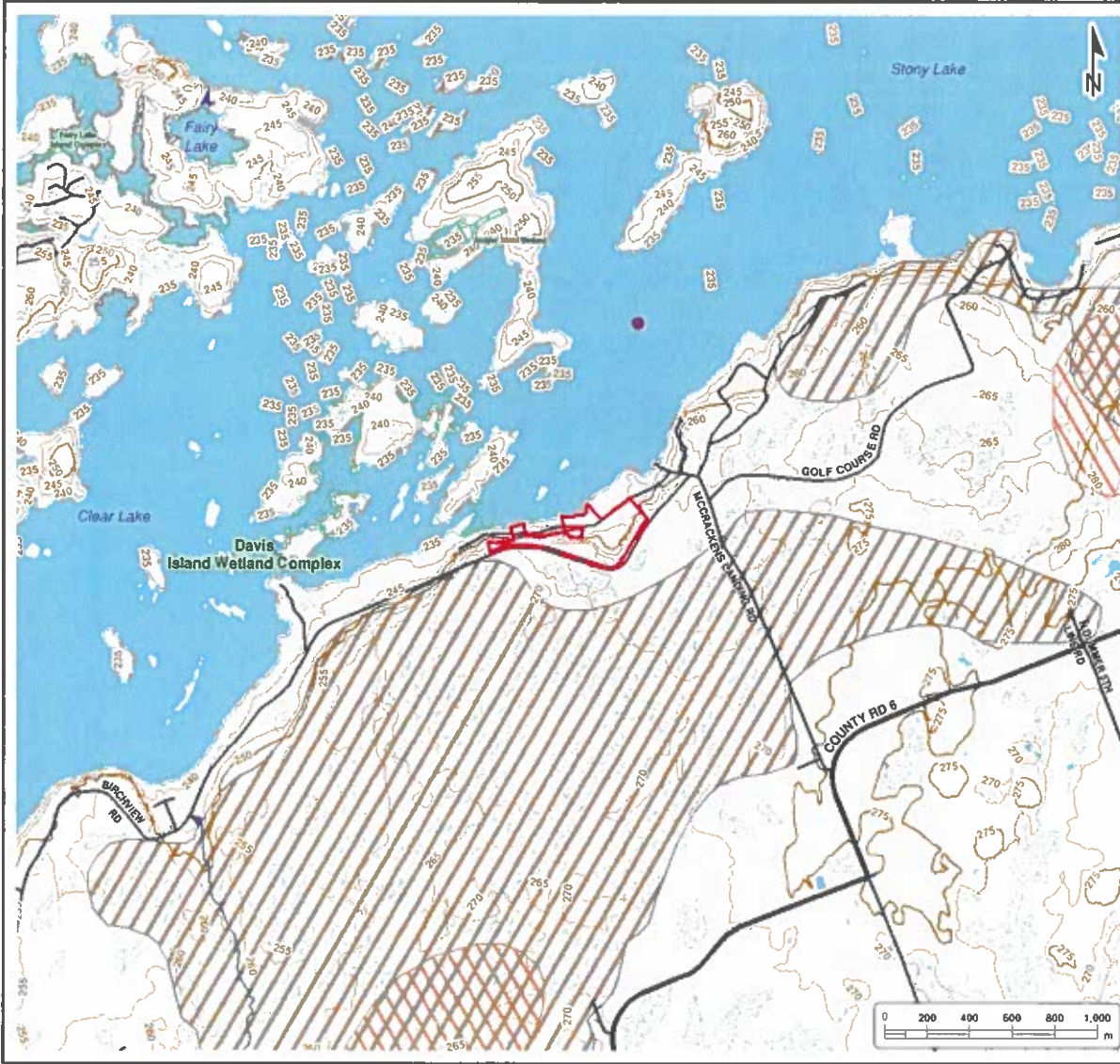
Notes:
 Base mapping features are © Queen's Printer of Ontario, 2019 this does not constitute an endorsement by the Ministry of Natural Resources and Forestry or the Ontario Government.
 Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
 Cambium inc. makes every 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.



PO Box 325, 52 Hunter Street East
 Peterborough, Ontario, K9H 1G5
 Tel: (705) 742 7900 Fax: (705) 742 7907
 www.cambium-inc.com

SITE LOCATION AND SPECIAL PLANNING AREAS

Project No:	12908-001	Date:	May 2021
Scale:	1:25,000	Rev:	
Created by:	MAT	Projection:	NAD 1983 UTM Zone 17N
Checked by:	KD	Figure:	1



**ENVIRONMENTAL
IMPACT STUDY
CARVETHS MARINA**
426 Carveths Marina Road,
Pt. Lots 28 & 29, Concession 3,
Dummer, Ontario

LEGEND

- Aquatic Resources Survey Point
- Major Road
- Minor Road
- Watercourse Intermittent
- Watercourse Permanent
- Contour 5m interval (Major)
- Contour 5m interval (Minor)
- Unevaluated Wetlands
- Locally Significant Wetlands
- Provincially Significant Wetlands
- Water Area
- Deer Wintering Area (Stratum 1)
- Deer Wintering Area (Stratum 2)
- Site (9.79 ha) (approximate)

Notes:
Base mapping is shown as © Queen's Printer of Ontario 2019; this does not constitute an endorsement by the Ministry of Natural Resources and Forestry of the Ontario Government.
Distances on this plan are in meters, and can be converted to feet by dividing by 0.3048.
Cambiium 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.



P.O. Box 325, 52 Hunter Street East
Peterborough, Ontario, K9A 1G5
Tel: (705) 742-7500 Fax: (705) 742-7907
www.cambiium-inc.com

**LOCAL NATURAL
HERITAGE FEATURES**

Project No. 12908-001	Date May 2021
Scale 1:25,000	Rev.: NAD 1983 UTM Zone 17N
Created by MAT	Checked by: KD
Figure: 2	

© 2015 AMBA/2000-12908-001 Carve's Marina, Inc. 426 Carve's Marina, Hamilton, Ontario L8M 1G5. All rights reserved. No part of this document may be reproduced without the prior written consent of Carve's Marina, Inc.



VEGETATION COMMUNITIES	
1:	CVC_1; Disturbed Areas- Marina
2:	FOM2-2; Dry-Fresh White Pine-Sugar Maple Mixed Forest
3:	FOD5-1; Dry-Fresh Sugar Maple Deciduous Forest
4:	FOC2-2; Dry-Fresh White Cedar Coniferous Forest
5:	FODM4-4; Dry-Fresh Ironwood Deciduous Forest
6:	FOC3-1; Fresh-Moist Hemlock Coniferous Forest
FOD:	Deciduous Forest

**ENVIRONMENTAL
IMPACT STUDY**
CARVETHS MARINA
426 Carveths Marina Road,
Pt. Lots 28 & 29, Concession 3,
Dummer, Ontario

LEGEND

- Cavity Tree
- Fox Den
- 120m Adjacent Lands
- Contour 5m Interval (Major)
- Contour 5m Interval (Minor)
- Escarpment
- Vegetation Community
- Unevaluated Wetlands
- Proposed Severance (0.4 ha each)
- Site (9.79 ha) (approximate)

Notes:
Base mapping features are © Queen's Printer of Ontario, 2019 and does not constitute an endorsement by the Ministry of Natural Resources and Forestry or the Ontario Government.
Distances on the 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, just to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.

PO Box 325, 52 Hunter Street East
Peterborough, Ontario, K9H 1G5
Tel: (705) 742-7900 Fax: (705) 742-7907
www.cambium-inc.com

**SITE NATURAL
HERITAGE FEATURES**

Project No.:	12908-001	Date:	June 2021
Scale:	1:2,000	Rev.:	
Created by:	MAT	Checked by:	KD
Projection:	NAD 1983 UTM Zone 17N		
Figure:	3		

© 2008 CAMBIUM INC. 12908-001 Carveths Marina, N.E., 426 Carveths Marina Road, Concession 3, Pt. Lots 28 & 29, Dummer, Ontario, Canada



**ENVIRONMENTAL
IMPACT STUDY
CARVETHS MARINA**
426 Carveths Marina Road,
Pt. Lots 28 & 29, Concession 3,
Dummer, Ontario

LEGEND

- Cavity Tree
- Fox Den
- - - 15m Escarpment Setback
- - - 30m Wetland Setback
- - - 30m Shoreline Setback
- - - 120m Adjacent Lands
- Contour 5m Interval (Major)
- Contour 5m Interval (Minor)
- Escarpment
- Unevaluated Wetlands
- Developable Area
- Proposed Severance (0.4 ha each)
- Site (9.79 ha) (approximate)

Notes:
 * Base mapping features are © Crown's Printer of Ontario, 2010 (this does not constitute an endorsement by the Ministry of Natural Resources and Forestry or the Ontario Government).
 * Distances on this plan are in meters 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 omission. This map should not be used for navigation or legal purposes. It is intended for general reference use only.

 P.O. Box 325, 52 Hunter Street East
 Peterborough, Ontario, K9A 1G5
 Tel: (705) 742-7900 Fax: (705) 742-7907
 www.cambium-inc.com

**NATURAL HERITAGE
CONSTRAINTS**

Project No.: 12908-001	Date: June 2021
Scale: 1:2,000	Revision: NAD 1983 UTM Zone 17N
Created by: MAT	Checked by: KD
Figure: 4	

Kristina Domsic

From: Matt Wilkinson <mwilkinson@otonabeeconservation.com>
Sent: May 19, 2021 6:36 AM
To: Kristina Domsic
Cc: Jasmine Gibson
Subject: RE: Terms of Reference for NHE at 426 Carveths Marina Rd, Harcourt (12908-001)

Hi Kristina,

Ontario Make a Natural Heritage Map has identified the contiguous tree cover as part of a larger woodland, and has identified occurrences of species at risk including five-lined skink and turtles.

We can agree in principle to the ToRs with respect to the Growth Plan and regulatory policies.

Please note, the Consent Applications must also be consistent with the 2020 Provincial Policy Statement.

Given the extent of woodland, technical staff recommends coordinating a site visit during the breeding bird season to rule out "habitat" and to review the woodland as per the NHRM significance criteria to address relevant policies.

If there are any changes proposed to the marina in proximity to the lake, please review these changes in context of fish habitat, re: PPS 2.1.6 and the Fisheries Act.

Best,
Matt



Matt Wilkinson
Planner
705-745-5791 x213
mwilkinson@otonabeeconservation.com

ARE YOU PLANNING AN UPCOMING CONSTRUCTION PROJECT ON YOUR PROPERTY? Submit a [Property Inquiry Form](#) so we can help you understand how natural hazards may affect your property.

This e-mail is confidential. If you are not an addressee named above, please immediately delete and notify the sender. Thank you.

From: Kristina Domsic <Kristina.Domsic@cambium-inc.com>
Sent: May 7, 2021 1:28 PM
To: Matt Wilkinson <mwilkinson@otonabeeconservation.com>
Cc: Ernie Silhanek <Ernie.Silhanek@cambium-inc.com>; Cambium File <file@cambium-inc.com>
Subject: Terms of Reference for NHE at 426 Carveths Marina Rd, Harcourt (12908-001)

Good afternoon Matt,

Cambium was retained by Randy Hauth (the Client) to conduct a Natural Heritage Evaluation (NHE) at 426 Carveths Marina Road, Harcourt, ON (the Site; map attached). The Site is currently occupied by an existing residence and commercial development (marina). We understand that the Client is pursuing two residential lot severances of the property (approximate location outlined in purple on the attached map), and that re-zoning of a portion of the lot may be required to better accommodate existing commercial uses. The Preliminary Severance Review (PSR) completed by the County of Peterborough has identified the following natural heritage and/or hydrologic features on or within 120 m of the Site: Stoney Lake; Locally Significant Wetland (associated with Stoney Lake shoreline); Unevaluated Wetlands (south of Birchview Road).

Based on our initial review, the following Terms of Reference (ToR) for the study have been developed:

One Site visit in spring 2021 to document natural features on the property, including:

- Delineate the boundaries of the wetland based on the Ontario Wetland Evaluation System (OWES) for Southern Ontario (MNR, 2013). The Site visit will capture appropriate wetland delineation characteristics, including vegetation species and wetted limits.
- Documentation of shoreline and drainage characteristics including riparian vegetation, erosion prone areas, and special habitat features.
- Classification of existing vegetation communities on the Site, according to the Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998), and evaluate them for sensitivity, rarity, and botanical quality. This includes a survey for Butternut (*Juglans cinerea*; provincially Endangered).
- Record of all observations of wildlife occurrences and assessment of wildlife habitat function on the Site. Any evidence of breeding, forage, shelter or nesting sites, and/or travel corridors were noted. A habitat-based screening for SAR will be completed.

A letter report will be prepared based on information collected through the background review and field studies. The report will include detailed mapping of natural features present on the Site. Recommendations included in the report will illustrate how the proposed development and site alteration can be carried out in a manner that ensures the protection of these features and their hydrologic functions and conformance to GPPGH, Official Plan, and ORCA policies, including appropriate setbacks from verified features. Should any endangered or threatened SAR or their habitat be identified, environmental constraint areas will be developed to protect the habitat of these species, as required under the Endangered Species Act, 2007.

Please confirm your acceptance of these terms and let me know if you have any other input to provide with respect to this project. Your prompt response would be much appreciated.

Kind Regards,

Kristina



Kristina Domsic, B.E.S
Project Coordinator / Ecologist

Cambium Inc. - Peterborough

Environmental | Building Sciences | Geotechnical | Construction Monitoring
p: 705.742.7900 x 217 | c: 705.559.2136 | toll: 866.217.7900 | w: cambium-inc.com

Under modified work conditions in response to the current pandemic and government directives, Cambium continues to provide the professional services you have come to expect to guide good decisions. The well-being and safety of our teams, clients, and communities are a top priority. We ask



VEGETATION
COMMUNITY CLASSIFICATION: CVC_1 – Disturbed Area (Marina)

COMMUNITY #: 1

LOCATION: 426 Carveth's Marina Rd

COORDINATES: 44.5866798, - 78.1534978

PROJECT NUMBER: 12908-001

DATE: May 19, 2021

PROJECT MANAGER: Kristina Domsic

FIELD STAFF: Ernie Silhanek

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Common Dandelion	<i>Taraxacum officinale</i>	Asteraceae	3				SNA
Common Plantain	<i>Plantago major</i>	Plantaginaceae	3				SNA
English Plantain	<i>Plantago lanceolata</i>	Plantaginaceae	3				SNA
Kentucky Bluegrass	<i>Poa pratensis ssp. pratensis</i>	Poaceae	3				SNA
Red Clover	<i>Trifolium pratense</i>	Fabaceae	3				SNA
Tall Goldenrod	<i>Solidago altissima</i>	Asteraceae	3	1			S5
White Clover	<i>Trifolium repens</i>	Fabaceae	3				SNA
Wild Strawberry	<i>Fragaria virginiana ssp. virginiana</i>	Rosaceae	3	2			S5

NOTES: Areas around existing buildings - mostly manicured / mowed; No trees or shrubs present.

VEGETATION COMMUNITY PHOTOS:





VEGETATION
COMMUNITY
CLASSIFICATION:

FOM2-2: Dry-Fresh White
Pine-Sugar Maple Mixed
Forest

COMMUNITY #: 2

LOCATION: 426 Carveth's
Marina Rd

COORDINATES: 44.5310959, -
78.1479388

PROJECT NUMBER: 12908-001

DATE: May 19,
2021

PROJECT
MANAGER: Kristina Domsic

FIELD STAFF: Ernie Silhanek

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Chokecherry	<i>Prunus virginiana var. virginiana</i>	Rosaceae	3	2			S5
Eastern Hop-hornbeam	<i>Ostrya virginiana</i>	Betulaceae	3	4			S5
Eastern White Cedar	<i>Thuja occidentalis</i>	Cupressaceae	-3	4			S5
Eastern White Pine	<i>Pinus strobus</i>	Pinaceae	3	4			S5
Large False Solomon's Seal	<i>Maianthemum racemosum</i>	Liliaceae	3	4			S5
Large-toothed Aspen	<i>Populus grandidentata</i>	Salicaceae	5	5			S5
Paper Birch	<i>Betula papyrifera</i>	Betulaceae	3	2			S5
Rose Twisted-stalk	<i>Streplopus lanceolatus</i>	Liliaceae	3	7			S5
Round-leaved Dogwood	<i>Cornus rugosa</i>	Comaceae	5	6			S5
Sugar Maple	<i>Acer saccharum</i>	Aceraceae	3	4			S5
White Ash	<i>Fraxinus americana</i>	Oleaceae	3	4			S4
White Trillium	<i>Trillium grandiflorum</i>	Liliaceae	3	5			S5
Wild Lily-of-the-valley	<i>Maianthemum canadense ssp. canadense</i>	Liliaceae	3	5			S5
Yellow Trout-lily	<i>Erythronium americanum ssp. americanum</i>	Liliaceae	5	5			S5

NOTES: White Pine dominant with Sugar Maple

VEGETATION COMMUNITY PHOTOS:





VEGETATION
COMMUNITY
CLASSIFICATION:

FOD5-1: Dry-Fresh Sugar
Maple Deciduous Forest

COMMUNITY #: 3

LOCATION: 426 Carveth's
Marina Rd

COORDINATES: 44.5273556, -
78.1372807

PROJECT NUMBER: 12908-001

DATE: May 19,
2021

PROJECT
MANAGER: Kristina Domsic

FIELD STAFF: Ernie Silhanek

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Alternate-leaved Dogwood	<i>Cornus alternifolia</i>	Comaceae	3	6			S5
Basswood	<i>Tilia americana</i>	Tiliaceae	3	4			S5
Bitternut Hickory	<i>Carya cordiformis</i>	Juglandaceae	0	6			S5
Blue Cohosh	<i>Caulophyllum thalictroides</i>	Berberidaceae	5	5			S5
Butternut	<i>Juglans cinerea</i>	Juglandaceae	3	6	END	END	S2?
Eastern Hop-hornbeam	<i>Ostrya virginiana</i>	Betulaceae	3	4			S5
Evergreen Wood Fern	<i>Dryopteris intermedia</i>	Dryopteridaceae	0	5			S5
Herb-Robert	<i>Geranium robertianum</i>	Geraniaceae	3	2			S5
Large False Solomon's Seal	<i>Maianthemum racemosum</i>	Liliaceae	3	4			S5
Large-leaved Aster	<i>Eurybia macrophylla</i>	Asteraceae	5	5			S5
Maple-leaved Viburnum	<i>Viburnum acerifolium</i>	Caprifoliaceae	5	6			S5
Paper Birch	<i>Betula papyrifera</i>	Betulaceae	3	2			S5
Pennsylvania Sedge	<i>Carex pennsylvanica</i>	Cyperaceae	5	5			S5
Red Columbine	<i>Aquilegia canadensis</i>	Ranunculaceae	3	5			S5
Red Elderberry	<i>Sambucus racemosa</i> ssp. <i>pubens</i> var. <i>pubens</i>	Caprifoliaceae	3	5			S5
Rose Twisted-stalk	<i>Streptopus lanceolatus</i>	Liliaceae	3	7			S5
Sharp-lobed Hepatica	<i>Hepatica acutiloba</i>	Ranunculaceae	5	8			S5
Sugar Maple	<i>Acer saccharum</i>	Aceraceae	3	4			S5
Tall Meadow-rue	<i>Thalictrum pubescens</i>	Ranunculaceae	-3	5			S5
Two-leaved Mitrewort	<i>Mitella diphylla</i>	Saxifragaceae	3	5			S5
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	Vitaceae	3	6			S4?
White Ash	<i>Fraxinus americana</i>	Oleaceae	3	4			S4
White Baneberry	<i>Actaea pachypoda</i>	Ranunculaceae	5	6			S5
Wild Lily-of-the-valley	<i>Maianthemum canadense</i> ssp. <i>canadense</i>	Liliaceae	3	5			S5
Wild Sarsaparilla	<i>Aralia nudicaulis</i>	Araliaceae	3	4			S5
Wild Strawberry	<i>Fragaria virginiana</i> ssp. <i>virginiana</i>	Rosaceae	3	2			S5

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Yellow Trout-lily	<i>Erythronium americanum</i> ssp. <i>americanum</i>	Liliaceae	5	5			S5
Zigzag Goldenrod	<i>Solidago flexicaulis</i>	Asteraceae	3	6			S5

NOTES: Dominated by Sugar Maple

VEGETATION COMMUNITY PHOTOS:





VEGETATION
COMMUNITY CLASSIFICATION: FOC2-2: Dry-Fresh White Cedar Coniferous Forest

COMMUNITY #: 4

LOCATION: 426 Carveth's Marina Rd

COORDINATES: 44.5866798, -78.1534978

PROJECT NUMBER: 12908-001

DATE: May 19, 2021

PROJECT MANAGER: Kristina Domsic

FIELD STAFF: Ernie Silhanek

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Alternate-leaved Dogwood	<i>Cornus alternifolia</i>	Comaceae	3	6			S5
Blue Cohosh	<i>Caulophyllum thalictroides</i>	Berberidaceae	5	5			S5
Eastern Hop-hornbeam	<i>Ostrya virginiana</i>	Betulaceae	3	4			S5
Eastern White Cedar	<i>Thuja occidentalis</i>	Cupressaceae	-3	4			S5
Fragile Fern	<i>Cystopteris fragilis</i>	Dryopteridaceae	3	7			S4
Herb-Robert	<i>Geranium robertianum</i>	Geraniaceae	3	2			S5
Jack-in-the-pulpit	<i>Arisaema triphyllum ssp. triphyllum</i>	Araceae	-3	5			S5
Large False Solomon's Seal	<i>Maianthemum racemosum</i>	Liliaceae	3	4			S5
Rose Twisted-stalk	<i>Streptopus lanceolatus</i>	Liliaceae	3	7			S5
Sugar Maple	<i>Acer saccharum</i>	Aceraceae	3	4			S5
White Trillium	<i>Trillium grandiflorum</i>	Liliaceae	3	5			S5

NOTES: located along limestone ridge/escarpment. Dominant cover layer: trees. Dominant species: Eastern White Cedar, Sugar Maple, Eastern Hop-hornbeam

VEGETATION COMMUNITY PHOTOS:





VEGETATION
COMMUNITY
CLASSIFICATION:

FOC2-2: Dry-Fresh White
Cedar Coniferous Forest

COMMUNITY #: 5

LOCATION: 426 Carveth's
Marina Rd

COORDINATES: 44.5311574, -
78.1446703

PROJECT NUMBER: 12908-001

DATE: May 19,
2021

PROJECT
MANAGER: Kristina Domsic

FIELD STAFF: Ernie Silhanek

FIELD SHEET -- Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Basswood	<i>Tilia americana</i>	Tiliaceae	3	4			S5
Chokecherry	<i>Prunus virginiana var. virginiana</i>	Rosaceae	3	2			S5
Common Dandelion	<i>Taraxacum officinale</i>	Asteraceae	3				SNA
Eastern Prickly Gooseberry	<i>Ribes cynosbati</i>	Grossulariaceae	3	4			S5
Eastern White Cedar	<i>Thuja occidentalis</i>	Cupressaceae	-3	4			S5
European Buckthorn	<i>Rhamnus cathartica</i>	Rhamnaceae	0				SNA
Kentucky Bluegrass	<i>Poa pratensis ssp. pratensis</i>	Poaceae	3				SNA
Kidney-leaved Violet	<i>Viola renifolia</i>	Violaceae	-3	7			S5
Large False Solomon's Seal	<i>Maianthemum racemosum</i>	Liliaceae	3	4			S5
Marginal Wood Fern	<i>Dryopteris marginalis</i>	Dryopteridaceae	3	5			S5
Rose Twisted-stalk	<i>Streptopus lanceolatus</i>	Liliaceae	3	7			S5
Sugar Maple	<i>Acer saccharum</i>	Aceraceae	3	4			S5
Tatarian Honeysuckle	<i>Lonicera tatarica</i>	Caprifoliaceae	3				SNA
White Ash	<i>Fraxinus americana</i>	Oleaceae	3	4			S4
White Trillium	<i>Trillium grandiflorum</i>	Liliaceae	3	5			S5
Woodland Strawberry	<i>Fragaria vesca ssp. vesca</i>	Rosaceae	3				SNA
Yellow Trout-lily	<i>Erythronium americanum ssp. americanum</i>	Liliaceae	5	5			S5

NOTES: located along escarpment. Dominant layer: trees.

VEGETATION COMMUNITY PHOTOS





VEGETATION
COMMUNITY FODM4-4: Dry-Fresh Ironwood
CLASSIFICATION: Deciduous Forest

COMMUNITY #: 6

LOCATION: 426 Carvelts
Marina Rd

COORDINATES: 44.5273556, -
78.1372807

PROJECT NUMBER: 12908-001

DATE: May 19,
2021

PROJECT
MANAGER: Kristina Domsic

FIELD STAFF: Ernie Silhanek

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Basswood	<i>Tilia americana</i>	Tiliaceae	3	4			S5
Eastern Hop-hornbeam	<i>Ostrya virginiana</i>	Betulaceae	3	4			S5
Eastern Red Cedar	<i>Juniperus virginiana</i>	Cupressaceae	3	4			S5
Jack-in-the-pulpit	<i>Arisaema triphyllum ssp. triphyllum</i>	Araceae	-3	5			S5
Large False Solomon's Seal	<i>Maianthemum racemosum</i>	Liliaceae	3	4			S5
Large-flowered Bellwort	<i>Uvularia grandiflora</i>	Liliaceae	5	6			S5
Marginal Wood Fern	<i>Dryopteris marginalis</i>	Dryopteridaceae	3	5			S5
Pennsylvania Sedge	<i>Carex pennsylvanica</i>	Cyperaceae	5	5			S5
Sharp-lobed Hepatica	<i>Hepatica acutiloba</i>	Ranunculaceae	5	8			S5
Sugar Maple	<i>Acer saccharum</i>	Aceraceae	3	4			S5
Tataran Honeysuckle	<i>Lonicera tatarica</i>	Caprifoliaceae	3				SNA
White Ash	<i>Fraxinus americana</i>	Oleaceae	3	4			S4
White Trillium	<i>Trillium grandiflorum</i>	Liliaceae	3	5			S5

NOTES: Dominant layer: Trees (CVR > 60%). Dominant species: Eastern Hop-hornbeam.

VEGETATION COMMUNITY PHOTOS:

