



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections

Telephone

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3

Locations

Peterborough
Kingston
Barrie
Ottawa
Whitby

Laboratory

Peterborough



December 12, 2025

Mike Craigen
1670 County Road 40,
Norwood, ON K0L 2V0

**Re: Natural Heritage Constraints Analysis – 1670 County Road 40,
Township of Douro-Dummer, County of Peterborough, Ontario
Cambium Reference: 24608-001**

Dear Mr. Craigen,

Cambium Inc. (Cambium) is pleased to provide Mike Craigen (the Client) with a Natural Heritage Constraints Analysis (NHCA, the Study) for 1670 County Road 40, Township of Douro-Dummer, County of Peterborough, Ontario . The purpose of this Study is to provide a preliminary but informed understanding of development constraints and opportunities on the Site.

The property is approximately 47.2 hectares (ha) in size; however, the Study focuses on smaller portion at the southeast corner, herein referred to as ‘the Site’ (Figure 1). The Site is approximately 4.65 ha, and is currently developed with a residential dwelling and associated outbuildings. Based on our initial review, the Site contains and/or is adjacent to (i.e., within 120 m of) the following mapped natural heritage and/or hydrologic features:

- Woodlands
- Unevaluated wetlands (on Site and adjacent lands)

A Site investigation was completed on September 19, 2025, to confirm the presence and delineation of natural heritage and hydrologic features on and adjacent to the Site. The findings are described and synthesized in this report, in order to provide an understanding of the current natural heritage policy context of the Site and associated constraints to development. Discussion regarding potential opportunities and constraints to development are included herein.

NATURAL HERITAGE POLICY CONTEXT

The Study has been completed with consideration of relevant federal and provincial policies and regulations, including:



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections

Telephone
(866) 217.7900
(705) 742.7900

Facsimile
(705) 742.7907

Website
cambium-inc.com

Mailing Address
P.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3

Locations
Peterborough
Kingston
Barrie
Ottawa
Whitby

Laboratory
Peterborough



December 12, 2025

- County of Peterborough Official Plan, (2025) and Township of Douro-Dummer Zoning By-law 2000-21 (2025)
- Conservation Authorities Act, 1990 and Ontario Regulation 41/24, as administered locally by the Otonabee Region Conservation Authority (ORCA)
- Provincial Planning Statement, 2024 (PPS)
- Endangered Species Act, 2007 (ESA) and associated Regulations (changes to species at risk (SAR) conservation are expected to occur in 2026 with the ascent of the Species Conservation Act (SCA) and will be considered to the extent possible, based on ongoing legislative and regulatory developments)
- Species at Risk Act, 2002
- Migratory Birds Convention Act, 1994 (MBCA) and associated Regulations
- Fisheries Act, 2019

Municipal Official Plan land use mapping and zoning designations are detailed in Table 1.

Table 1 Official Plan and Zoning By-law Designations

Source	Designation / Zoning
County of Peterborough Official Plan	Schedule A Land Use: Rural
Township of Douro-Dummer Zoning By-law	Schedule A2: Rural (RU)

TECHNICAL APPROACH AND DATA COLLECTION METHODS

A desktop review of the Site and adjacent lands was completed through the use of industry standard publicly accessible information, including but not limited to: land use of the Site and adjacent properties; geological and soils records; watercourses and surface drainage mapping; fish community records; SAR records; and, the location of any provincially identified features such as wetlands, woodlands, and/or Areas of Natural and Scientific Interest (ANSI). Recent and historical orthoimagery was utilized to further develop an understanding of the natural heritage context of the Site, including preliminary identification of previously unmapped features (if present), and linkages to adjacent features that



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

may affect the development potential of the Site. The desktop review for this Site included the following resources:

- Land Information Ontario (LIO) database via the online Natural Heritage Areas: Make-a-Map tool (Ministry of Natural Resources and Forestry, 2025)
- Natural Heritage Information Center (NHIC) database: species at risk (SAR) occurrence records
- Aquatic Species at Risk distribution maps (Fisheries and Oceans Canada, 2025)
- Aquatic Resource Area Summary Data (Government of Ontario, 2025)
- Fish ON-Line (Ministry of Natural Resources and Forestry, 2025)

Following the desktop review, the Site was visited on September 19, 2025. The Site investigation was conducted by qualified Cambium staff, in accordance with standard industry practices and protocols, as outlined in Table 2.

Table 2 Terrestrial and Aquatic Field Investigations

Activity	Details
Vascular Plant Survey and Community Classification	Single-season vegetation survey; Ecological Land Classification (ELC) System for Southern Ontario.
Wetland Boundary Delineation	One survey during the growing season; MNR Ontario Wetland Evaluation System (OWES) protocol; boundary to be marked with hand-held GPS.
Aquatic and Drainage Feature Mapping	One survey under ice-free conditions; confirmation of mapping and identification of unmapped watercourses, waterbodies, springs/seeps, and other surface drainage features
General Wildlife Habitat Surveys	Visual encounter surveys for evidence of breeding, foraging, sheltering, nesting, and/or movement.

RESULTS

Data acquired through the desktop background information review is summarized in the following subsections.



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

DESKTOP REVIEW

Supporting 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.

Mapped natural heritage features present in the general area of the Site are shown on Figure 2. A summary of background review results is provided in Table 3.

Table 3 Summary of Natural Heritage and Hydrologic Features

Feature Type	Feature Description	On-Site / Adjacent Lands
Hydrologic Features	Unevaluated wetlands, regulated by ORCA	On Site and adjacent lands
Woodlands	Significant Woodlands Other woodlands	On Site and adjacent lands
Endangered and Threatened SAR Records - NHIC Database 1 km grid squares: 17QK3332 17QK3333 17QK3432 17QK3433	None	N/A
Potential SAR Habitat	Bat habitat Snake habitat Vegetation habitat	On Site and adjacent lands

Note: THR = Threatened species on SARO list; END = Endangered species on SARO list; SC = Special concern species on SARO list.

It is worth noting, the Dummer Swamp Provincially Significant Wetland (PSW) and Clarina Extension PSW Complex overlaps the western property boundary but is located over 120 m west of the Site. The Dummer Moraine Area of Natural and Scientific Interest (ANSI) – Earth Science is located on the east side of County Road 40 (adjacent the property entrance) but is over 120 m east of the Site. No PSW or ANSI characteristics were documented or observed on Site during field investigations. As such, these features are not discussed further herein.



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

RESULTS OF SITE INVESTIGATION

The topography of the Site ranged from approximately 259 metres above seal level (masl) to 265 masl and was defined by undulating forest floor characteristics. Drainage at the Site was generally south toward unevaluated wetlands.

The Site is located within the Mixedwood Plains Ecozone: Lake Simcoe Rideau Ecoregion 6E. A preliminary classification of vegetation communities in accordance with the Ecological Land Classification System for Southern Ontario (ELC) identified eight individual vegetation community types overlapping the Site, as detailed in Table 4 below. A comprehensive photographic inventory is provided in enclosed.

Table 4 Preliminary Vegetation Community Classifications

No.	ELC Code	Community Description	S -Rank
1	CVR	Residential	SNA
2	CUM1	Mineral Cultural Meadow	SNA
3	CUT1	Mineral Cultural Thicket	SNA
4	FOD5-3	Dry – Fresh Sugar Maple – Oak Deciduous Forest Type	S5
5	FOM2	Dry – Fresh White Pine – Maple – Oak Mixed Forest Type	S5
6	FOM5-2	Dry – Fresh Poplar Mixed Forest Type	S5
7	SWM1-1	White Cedar – Mixed Mineral Swamp Type	S5
8	SWM3-2	Poplar – Conifer Mineral Mixed Swamp Type	S5

The area containing the existing residential dwelling and outbuildings includes some natural tree cover, but is generally maintained (Community 1). The proposed second dwelling footprint is in a small clearing, where vegetation typical of old fields and roadsides has emerged (Community 2). The majority of the Site was best classified as deciduous and mixed forest types (Communities



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**(866) 217.7900
(705) 742.7900**Facsimile**

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

4, 5, 6) characterized by common native tree species including Eastern White Pine (*Pinus strobus*), Northern Red Oak (*Quercus rubra*), Sugar Maple (*Acer saccharum*), and Trembling Aspen (*Populus tremuloides*). Frequent areas of blowdown and canopy gaps were observed throughout Communities 5 and 6. No wetland indicator species were documented on Site. Wetlands were only observed on adjacent lands to the west and southeast of the Site. Wetland boundaries were determined based on the OWES 50% wetland vegetation rule and further corroborated through soil characterization.

The wetland southeast of the Site was primarily located on private property and was verified from the laneway associated with the Site. This area was dominated by a mix of poplars and Eastern White Cedar (*Thuja occidentalis*) (Community 7). The soil profile (SP1) in the nearest part of the Site (in an area provincially mapped as wetland contiguous with Community 7) was difficult to sample due to abundant rock fragments near the surface; several spots were attempted and the deepest profile attainable was 30 cm deep. No mottles, gley, or water table were encountered; however, due to the profile depth limitation, moisture regime resulted as MR 5 (moist) or drier. No wetland vegetation species were present in this area; thus it was classified as terrestrial forest (Community 5B).

The wetland west of the Site was more accessible due to its location on the subject property. This feature was found to be strongly dominated by Eastern White Cedar (Community 8). The soil profile (SP2) in the nearest part of the Site (in an area provincially mapped as wetland contiguous with Community 8) was sampled to a depth of 73 cm. No mottles, gley, or water table were encountered; moisture regime resulted as MR 3 (very fresh) or drier. No wetland vegetation species were present in this area; thus it was classified as terrestrial forest (Community 5B).

A search for two provincially endangered SAR trees, Black Ash (*Fraxinus nigra*) and Butternut (*Juglans cinerea*) was completed as part of the vegetation survey; no Black Ash or Butternut trees were identified on the Site.

Field verification of existing conditions on the Site and adjacent lands within the subject property led to confirmation of several natural heritage features that may



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections

Telephone
(866) 217.7900
(705) 742.7900

Facsimile
(705) 742.7907

Website
cambium-inc.com

Mailing Address
P.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3

Locations
Peterborough
Kingston
Barrie
Ottawa
Whitby

Laboratory
Peterborough

December 12, 2025

have implications for future development. A summary of the features observed during the field investigation is provided in Table 5 and illustrated on Figure 2.

Table 5 Summary of Observed Natural Heritage and Hydrologic Features

Feature	Detailed Description
Unevaluated wetlands	Unevaluated wetlands are provincially mapped along the western and southern Site boundaries, as shown on Figure 1. The field investigations confirmed that unevaluated wetlands are located entirely outside of the Site boundary to the west and southeast of the Site.
Significant Woodlands	Significant woodlands are not mapped by the county of Peterborough Official Plan schedules. However, based on provincial criteria (MNRF, 2010), the forest communities on Site are contiguous with a larger surrounding woodland area, which is connected to the off-Site PSW and ANSI. Therefore, the forest communities on Site meet the woodland size and ecological function criteria for significance.
SAR Habitat	The off-Site wetlands may provide foraging habitat for snakes including the Threatened Eastern Hog-nosed Snake (<i>Heterodon platirhinos</i>). No cavity trees are present within the proposed development footprint (Community 2) and none were observed on Site during the field investigations; however, the forested landscape has potential to provide maternity roost habitat for Endangered bat species.
Significant Wildlife Habitat (Confirmed)	White-tailed Deer Stratum 2 Wintering Area SWH is mapped by the Ministry of Natural Resources (MNR) as overlapping the eastern portion of the Site (outside the proposed development footprint – Community 2) and adjacent lands to the east. Minimal White-tailed Deer activity was observed on Site during field investigations. No dense conifer cover, abundance of browse, or year-round water source (e.g., ponds, springs) are present on the Site. Small-scale residential developments, as currently proposed, are typically regarded as compatible with ongoing deer use of surrounding forested areas.

CONSTRAINTS ANALYSIS

The natural heritage and surface water policies of the PPS (2024), Township of Douro-Dummer Zoning By-law, and O. Reg. 41/24, as administered by ORCA,





Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

restrict development within natural heritage and hydrologic features, including wetlands, watercourses, SWH, and habitat of endangered or threatened species.

No threatened or endangered SAR records were revealed during the background review; however, based on local knowledge, SAR bats, snakes and vegetation were considered and were screened for their potential to occur in the general vicinity of the Site.

Development setbacks are also imposed under municipal policies. Table 6 summarizes confirmed and candidate features across the Site and applicable or interim buffers.

Development constraints, which include the natural heritage feature and required setback, are illustrated on Figure 2.

Table 6 Summary of Development Constraints

Feature	Preliminary Setback	Opportunity for Refinement
Wetlands (non-PSW)	30 m – O. Reg. 41/24 30 m – County of Peterborough Official Plan Ontario Regulation 41/24 prohibits development activities (i.e., the building footprint as well as all site preparation and construction activities, grading, etc.) within 30 m of a wetland. A 30 m setback from the wetland is also anticipated to be sufficient to protect the general form and function of the wetland. As such, the surveyed wetland boundary and a 30 m setback from the wetland boundary are shown on Figure 3.	Yes
Significant Woodlands	Significant woodlands are present across the Site and surrounding forested landscape. Development within the woodland may be permitted where impact is avoided. No setbacks are required on significant woodlands; tree removals should be limited to the extent possible;	No
SAR Habitat	No SAR were confirmed to be present on Site.	N/A – impacts can be avoided and/or



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

Feature	Preliminary Setback	Opportunity for Refinement
	Potential SAR habitat on Site includes: <ul style="list-style-type: none"> Bat maternity roost habitat Snake habitat 	appropriately managed through standard mitigation measures
Significant Wildlife Habitat (Confirmed)	White-tailed Deer Stratum 2 Wintering Area. Development within the deer wintering SWH may be permitted where impact is avoided. No setbacks are required on deer wintering SWH.	No

Note: 1 = in some cases, development may be permitted within 30 m of non-significant wetlands with approval from the local Conservation Authority; 5 = SWH and associated setbacks may be refined through subsequent detailed study.

The setbacks identified in Table 6 represent a conservative approach (i.e., maximum applicable wetland setback) that may be refined through further detailed study. Opportunities for refinement of feature boundaries or setbacks have been identified, where applicable.

OPPORTUNITIES FOR CONSTRAINT REFINEMENT

Based on the conservative approach depicted on Figure 2, the entirety of the Site is 'developable' (i.e., located outside of all protected features and their setbacks). As such, no further studies are recommended to refine constraints.

DEVELOPMENT OPPORTUNITIES

The developable area on the Site and adjacent lands within the subject property is 10.41 ha, as shown on Figure 3.

RECOMMENDED IMPACT AVOIDANCE AND MITIGATION MEASURES

It is anticipated that the proposed development can be carried out without posing any negative impact on any local natural heritage or hydrologic features, provided the recommendations outlined in Table 7 below are implemented.



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough



December 12, 2025

Table 7 Best Management Practice Recommendations

Potential Impact	Recommended Best Practice
Erosion and Sedimentation	<p>Prior to any construction activities taking place, it is essential that perimeter sediment fencing be installed around construction areas. Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced ≤ 2 m apart. This key control measure will help prevent sediment from entering surface water features (i.e., wetlands) in the surrounding landscape. All sediment fencing should be regularly maintained and kept in good working condition, until the area has been stabilized and/or successfully revegetated. Any observed overland drainage channels originating from Site, that may or may not have arisen as a result of erosion, should be directed to a check dam structure, prior to discharging to off-site areas.</p> <p>Construction activities that require earthworks (e.g., grading, excavation, etc.) should be scheduled to avoid dates of heavy rainfall events and times of high runoff volumes.</p>
Wildlife: Birds (Disturbance and Harm)	<p>Nesting birds and their nests, eggs, and young are protected under the <i>Migratory Birds Convention Act, 1994</i>. Vegetation clearing on the Site should occur outside the breeding bird season, which extends from April 1 to August 31 in the local area (as per Environment and Climate Change Canada Guidelines).</p> <p>If vegetation clearing or construction is to occur between April 1 to August 31, the vegetation should be investigated by a qualified biologist to confirm if any active nests are present, prior to site alteration. 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. Note that some birds nest on the ground and in low-lying vegetation and shrubs; therefore, all habitat types should be inspected prior to ground disturbance if removals are to occur during the breeding season.</p>
Wildlife: Bats (Disturbance and Harm)	<p>Tree removal should be limited to the building envelope to the extent possible. Small scale tree removal will not result in impairing or eliminating the function of habitat to support bat life processes provided the tree removal avoids the active bat season (March 14 – November 30).</p>



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections

Telephone

(866) 217.7900
(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3

Locations

Peterborough
Kingston
Barrie
Ottawa
Whitby

Laboratory

Peterborough



December 12, 2025

Potential Impact	Recommended Best Practice
Wildlife: Reptiles (Disturbance and Harm)	<p>Sediment fencing can function as wildlife exclusion fencing. To exclude wildlife from the Site, sediment fencing should be installed around the entire perimeter of the construction area prior to the earlier of May 1 or commencement of Site preparation to keep turtles and snakes from entering the construction area. This fencing should be made of heavy-duty sediment fence, staked at regular intervals, trenched-in at least 10-20 cm below surface of the ground, with an above-ground height of at least 60 cm. The sediment fence should be inspected regularly to ensure that it remains in good condition: and any downed areas, rips, or holes should be repaired or replaced immediately. A designated point of ingress/egress should be identified, and a moveable barrier be constructed, to allow for the Site to fully remain enclosed while allowing vehicular access to the Site as needed.</p> <p>The construction area should also be actively inspected for turtles and snakes each day prior to the start of work throughout the duration of construction.</p> <p>As the Site is located adjacent to potential habitat for turtles, workers should be aware of the nesting season for turtles, which extends from May 15 to August 15. All stockpiled materials should be kept inside the exclusion fencing area and ideally should be covered and well secured around the base, to prevent turtles from nesting in loose substrates. 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, or until eggs have 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.</p> <p>If any individuals are encountered, they should be photographed and allowed time to move out of harm's way.</p>
Species at Risk (SAR; Threatened and Endangered)	<p>SAR observations, including most species of snakes and turtles, should be reported to the Natural Heritage Information Centre (NHIC).</p> <p>If any individuals are encountered, they should be photographed and allowed time to move out of harm's way. SAR should not be handled by unauthorized individuals.</p>



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections

Telephone

(866) 217.7900
(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3

Locations

Peterborough
Kingston
Barrie
Ottawa
Whitby

Laboratory

Peterborough

Professional Engineers
Ontario



December 12, 2025

Potential Impact	Recommended Best Practice
Spread of Invasive Species	<p>Invasive species are becoming problematic throughout Ontario and can adversely impact our natural landscapes, including wetlands, woodlands, and watercourses. Best management practices to reduce the spread of invasive species include:</p> <ol style="list-style-type: none"> 1. Revegetate with species native to the local area. 2. Request fill and compost from reputable sources that are conscious of the potential for the spread of invasive species via these media. 3. Get to know the most common invasive species in the area. 4. Brush off or clean any shoes, boots and equipment that have encountered invasive species before returning to the property. Equipment and vehicles coming into the work area should be free of soil and seeds that could introduce non-native and invasive species following the Clean Equipment Protocol for Industry: Inspecting and Cleaning Equipment for the Purposes of Invasive Species Prevention (Halloran, 2013) 5. Immediately eradicate invasive species if they are observed on the property. 6. Do not compost invasive species; put them in plastic bags and dispose of them in the garbage. 7. Do not dispose of lawn or garden clippings in the forest or wetlands to avoid species introductions. <p>An excellent resource for identifying and controlling invasive species can be found through the Ontario Invasive Plant Council: Home - Ontario Invasive Plant Council (ontarioinvasiveplants.ca) (OIPC, 2022)</p>
Anthropogenic Impacts – Noise	<p>Noise is not expected to increase significantly because of the proposed development as it is consistent with the land use on the surrounding properties. Maintaining the wooded areas surrounding the natural features on the Site will serve to buffer wildlife within the natural areas from noise-related impacts.</p> <p>Temporary acute noise may occur during construction activities and should follow appropriate local noise by-laws. All equipment should be equipped with appropriate mufflers to mitigate noise levels during construction.</p>
Anthropogenic Impacts – Lighting	<p>Artificial lighting can have an impact on nocturnal movement of wildlife within natural areas. To minimize impacts to wildlife, it is recommended that outdoor lights be operated on timers, rather than by motion detection.</p>



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough

December 12, 2025

Potential Impact	Recommended Best Practice
	Outdoor lighting associated with the development should be directed at the ground, rather than into the adjacent natural areas. Bulb wattage should be as low as practical while meeting the safety intent of the lighting.

CONCLUSION

The Study has identified a development area of 10.41 ha. These results are the best approximation of development potential based on information gathered to date and current policies.

We trust that this letter report meets your needs at this time. If you have any questions or require clarification of any aspect of this report, please do not hesitate to contact the undersigned at 1-866-217-7900. We appreciate the opportunity to provide services for this project.

Best regards,

Cambium Inc.

Signed by:

29EC8ECFB08446D

Kristina Domsic, B.E.S.
Coordinator - Ecologist

DocuSigned by:

F6D1CA3840F04E6

Jaclyn Rodo, B.Sc.
Project Manager - Senior Ecologist

MH/KD/jr

Encl. *Cambium Qualifications & Limitations*
 Figure 1 Landscape Setting and Policy Areas
 Figure 2 Natural Heritage Features and Ecological Survey Stations
 Figure 3 Natural Heritage Constraints
 Representative Site Photos

\\cambiumincstorage.file.core.windows.net\projects\24600 to 24699\24608-001 Mike Craigen - 1670 County Rd 40\09-Deliverables\LTR - Constraints\2025-12-12 LTR - NHCA 1670 CR40, Douro-Dummer.docx





Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections

Telephone

(866) 217.7900
(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing Address

P.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3

Locations

Peterborough
Kingston
Barrie
Ottawa
Whitby

Laboratory

Peterborough



December 12, 2025

REFERENCES

County of Peterborough . (2025). *County of Peterborough Official Plan*.

Fisheries and Oceans Canada. (2025). *Aquatic Species at Risk Map*. Retrieved November 2025, from Fisheries and Oceans Canada: <http://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>

Government of Ontario. (2025). *Aquatic Resource Area Summary*. Retrieved November 2025, from Land Information Ontario: <https://www.ontario.ca/data/aquatic-resource-area-survey-point>

Halloran, J. (2013). *Clean Equipment Protocol for Industry: Inspecting and Cleaning Equipment for the Purposes of Invasive Species Prevention*. Peterborough: Ontario Invasive Plant Council.

Ministry of Natural Resources and Forestry. (2025). Retrieved November 2025, from Make a Map: Natural Heritage Areas: http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US

Ministry of Natural Resources and Forestry. (2025). *Fish ON-Line*. Retrieved November 2025, from <https://www.gisapplication.lrc.gov.on.ca/FishONLine/Index.html?locale=en-US&site=FishONLine&viewer=FishONLine>

MNRF. (2010). *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005 Second Edition*. Ministry of Natural Resources and Forestry.

OIPC. (2022, August 2). *Ontario Invasive Plant Council*. Retrieved from Best Management Practices: <https://www.ontarioinvasiveplants.ca/resources/best-management-practices/>

Township of Douro-Dummer. (2025). *Township of Douro-Dummer Zoning By-law 2000-21*.



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspections**Telephone**

(866) 217.7900

(705) 742.7900

Facsimile

(705) 742.7907

Website

cambium-inc.com

Mailing AddressP.O. Box 325,
Peterborough, Ontario
Canada, K9J 6Z3**Locations**Peterborough
Kingston
Barrie
Ottawa
Whitby**Laboratory**

Peterborough

December 12, 2025

CAMBIUM QUALIFICATIONS AND LIMITATIONSLimited Warranty

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

Reliance on Materials and Information

The findings and results presented in reports prepared by Cambium are based on the materials and information provided by the client to Cambium and on the facts, conditions and circumstances encountered by Cambium during the performance of the work requested by the client. In formulating its findings and results into a report, Cambium assumes that the information and materials provided by the client or obtained by Cambium from the client or otherwise are factual, accurate and represent a true depiction of the circumstances that exist. Cambium relies on its client to inform Cambium if there are changes to any such information and materials. Cambium does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Cambium will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Cambium during the provision of services, work or reports.

Facts, conditions, information and circumstances may vary with time and locations and Cambium's work is based on a review of such matters as they existed at the particular time and location indicated in its reports. No assurance is made by Cambium that the facts, conditions, information, circumstances or any underlying assumptions made by Cambium in connection with the work performed will not change after the work is completed and a report is submitted. If any such changes occur or additional information is obtained, Cambium should be advised and requested to consider if the changes or additional information affect its findings or results.

When preparing reports, Cambium considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Cambium is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations, governmental guidelines and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

Site Assessments

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

Only conditions at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site chosen for study by the client, or any other matter not specifically addressed in a report prepared by Cambium, are beyond the scope of the work performed by Cambium and such matters have not been investigated or addressed.

Reliance

Cambium's services, work and reports may be relied on by the client and its corporate directors and officers, employees, and professional advisors. Cambium is not responsible for the use of its work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Cambium without Cambium's express written consent. Any party that relies on services or work performed by Cambium or a report prepared by Cambium without Cambium's express written consent, does so at its own risk. No report of Cambium may be disclosed or referred to in any public document without Cambium's express prior written consent. Cambium specifically disclaims any liability or responsibility to any such party for any loss, damage, expense, fine, penalty or other such thing which may arise or result from the use of any information, recommendation or other matter arising from the services, work or reports provided by Cambium.

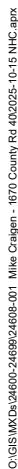
Limitation of Liability

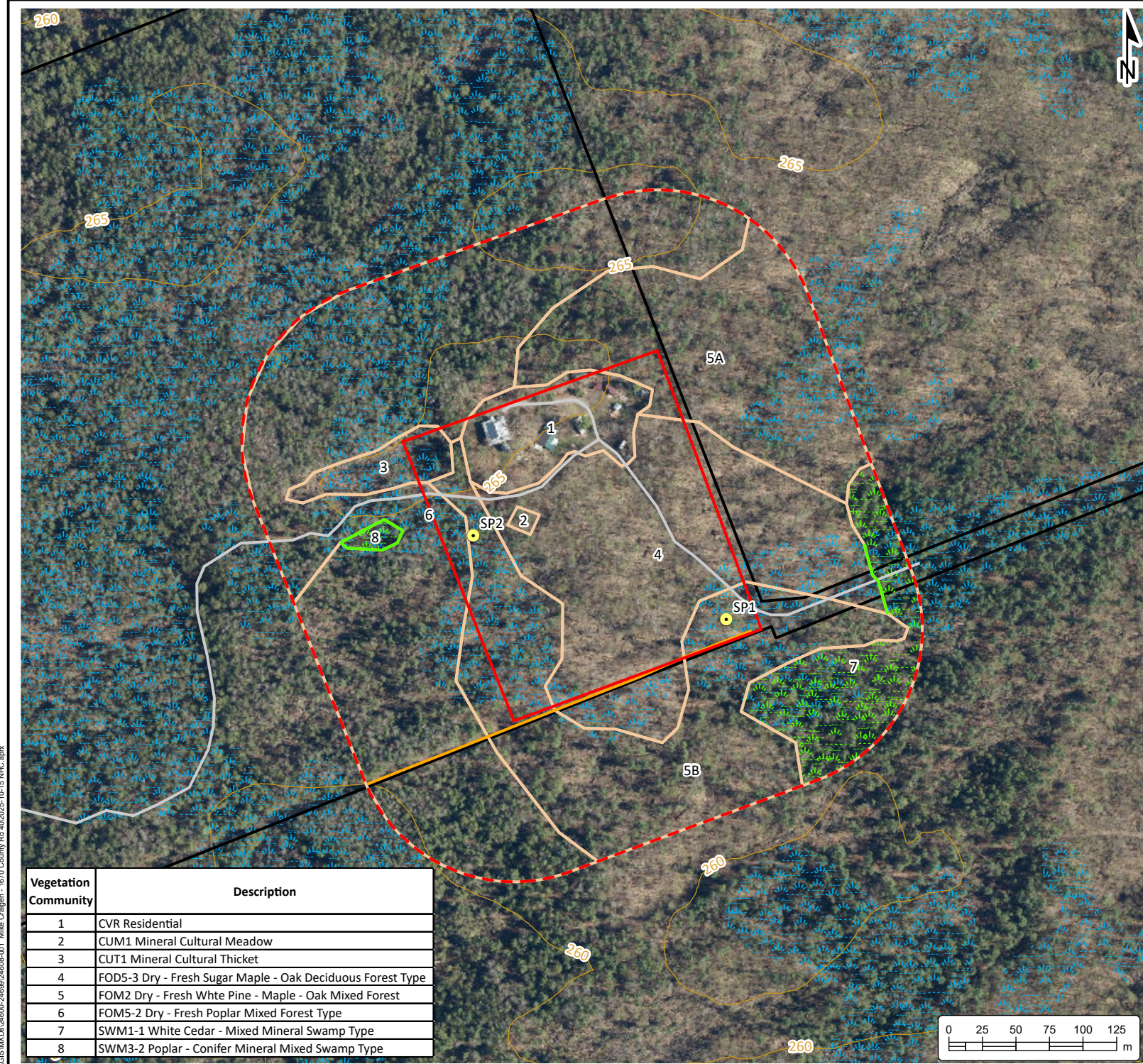
Potential liability to the client arising out of the report is limited to the amount of Cambium's professional liability insurance coverage. Cambium shall only be liable for direct damages to the extent caused by Cambium's negligence and/or breach of contract. Cambium shall not be liable for consequential damages.

Personal Liability

The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.







Vegetation Community	Description
1	CVR Residential
2	CUM1 Mineral Cultural Meadow
3	CUT1 Mineral Cultural Thicket
4	FOD5-3 Dry - Fresh Sugar Maple - Oak Deciduous Forest Type
5	FOM2 Dry - Fresh White Pine - Maple - Oak Mixed Forest
6	FOM5-2 Dry - Fresh Poplar Mixed Forest Type
7	SWM1-1 White Cedar - Mixed Mineral Swamp Type
8	SWM3-2 Poplar - Conifer Mineral Mixed Swamp Type

**NATURAL HERITAGE
CONSTRAINTS
ASSESSMENT**
MIKE CRAIGEN
1670 County Road 40
Norwood, Ontario

LEGEND

- Soil Point
- Contour (5m Interval)
- Field Verified Wetland Boundary
- Gravel Laneway
- Trail
- Unevaluated Wetland
- Field Verified Wetland
- Vegetation Community
- Adjacent Lands (120m)
- Site (approximate)
- Subject Property

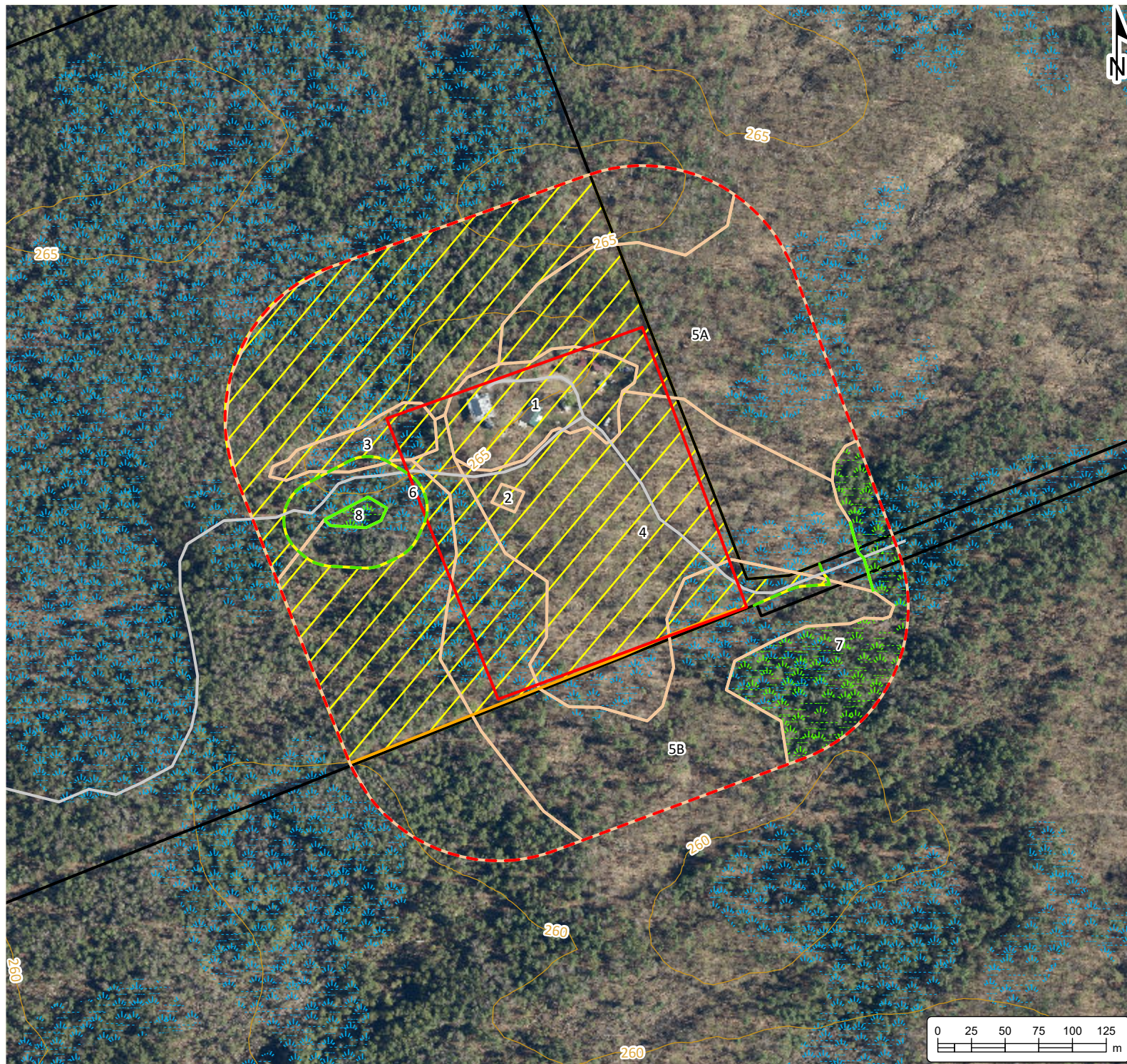
Notes:
- Imagery from the South Central Ontario Orthophotography Project (SCOOP) 2023. Source: Ontario Ministry of Natural Resources and Forestry. © Copyright: 2023 King's Printer of Ontario. All Rights Reserved.
- This document contains information licensed under the Open Government License - Ontario.
- 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.



194 Sophia Street
Peterborough, Ontario, K9H 1E5
Tel: (705) 742.7900 Fax: (705) 742.7907
www.cambium-inc.com

**NATURAL HERITAGE
FEATURES AND ECOLOGICAL
SURVEY STATIONS**

Project No.: 24608-001		Date: December 2025	
Scale: 1:4,000		Projection: NAD 1983 UTM Zone 17N	
Created by: DS	Checked by: JR	Figure: 2	



NATURAL HERITAGE CONSTRAINTS ASSESSMENT

MIKE CRAIGEN
1670 County Road 40
Norwood, Ontario

LEGEND

- Contour (5m Interval)
- Field Verified Wetland Boundary
- Gravel Laneway
- Trail
- - - 30m Wetland Setback
- - - Unevaluated Wetland
- Vegetation Community
- Field Verified Wetland
- ▨ Developable Area (10.41 ha)
- - - Adjacent Lands (120m)
- Site (approximate)
- Subject Property

Notes:
 - Imagery from the South Central Ontario Orthophotography Project (SCOOP) 2023. Source: Ontario Ministry of Natural Resources and Forestry.
 © Copyright: 2023 King's Printer of Ontario. All Rights Reserved.
 - This document contains information licensed under the Open Government License - Ontario.
 - 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.



194 Sophia Street
 Peterborough, Ontario, K9H 1E5
 Tel: (705) 742.7900 Fax: (705) 742.7907
 www.cambium-inc.com

NATURAL HERITAGE CONSTRAINTS

Project No.:	24608-001	Date:	December 2025
Scale:	1:4,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	DS	Checked by:	JR
Figure:	3		



Photo 1 Community 1: CVR, September 2025.



Photo 2 Community 2: CUM1, the proposed new building footprint, September 2025.



Photo 3 Community 3: CUT1, with sparse tree cover, September 2025.



Photo 4 Community 4: FOD5-2, September 2025.



Photo 5 Community 5: FOM2, September 2025.



Photo 6 Community 6: FOM5-2, September 2025.

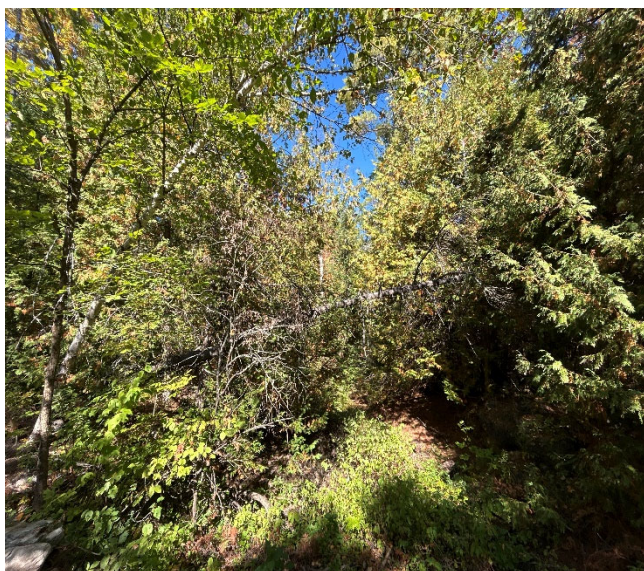


Photo 7 Community 7: SWM1-1, September 2025.



Photo 8 Community 8: SWM3-2, September 2025.