

ENVIRONMENTAL IMPACT STUDY



August 6, 2026

430 Raglan Street
Town of Collingwood

Prepared for: Tin Shack Ltd.



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1 INTRODUCTION

Roots Environmental Inc. ('Roots') has been retained by Tin Shack Ltd. to complete an Environmental Impact Study (EIS) in support of a Site Plan application for development of a property located at 430 Raglan Street in the Town of Collingwood, County of Simcoe as illustrated in *Figure 1 – Site Location*.

The purpose of the EIS is to identify the presence of any natural heritage features on the site or adjacent lands of 120 metres, assess any impacts resulting from the proposed development, and identify any preventative, mitigative or remedial measures to ensure no negative impacts.

The subject property has a total area of 2.2 hectares (ha) and is currently vacant. The Study Area for this EIS includes the development area and adjacent lands of 120 metres as illustrated in *Figure 2 – Study Area*.

2 RELEVANT ENVIRONMENTAL POLICIES AND LEGISLATION

A detailed review of relevant environmental legislation and policies will be included in Section 8 of this EIS. This review will include the Provincial Planning Statement, County of Simcoe Official Plan, Town of Collingwood Official Plan, *Species Conservation Act* (SCA) and *Migratory Birds Convention Act*. We note that part of the property is governed by Ontario Regulation 41/24 under the *Conservation Authorities Act*.

3 METHODOLOGY

Preparation for the EIS involves a desktop review of available information, field investigations and consultation with applicable agencies. The following provides a summary of tasks completed for the EIS.

3.1 Consultation with Agencies

Terms of Reference for the EIS were submitted to the Town of Collingwood dated April 19, 2026. The Town, through its peer reviewer, provided comments dated June 5, 2026. The Terms of Reference and Town comments are included as Appendix A.



Legend

 Property Boundary

ENVIRONMENTAL IMPACT STUDY

Figure 1
Site Location

430 Raglan Street
Town of Collingwood
County of Simcoe



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community





Legend

- - - Adjacent Lands (120m)
- ▬ Property Boundary

ENVIRONMENTAL IMPACT STUDY

Figure 2
Study Area

430 Raglan Street
Town of Collingwood
County of Simcoe



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



50 25 0 50 100 150 200
Meters

3.2 Desktop Review

A desktop review was completed to identify previously known natural features and occurrences of rare species or SAR in the Study Area. Sources included the following:

- The Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC) Make A Map: Natural Heritage Areas;
- Ontario Nature Reptile and Amphibian Atlas;
- Ontario Breeding Bird Atlas;
- Ontario Mammal Atlas;
- Ontario Butterfly Atlas;
- iNaturalist; and
- County of Simcoe and Town of Collingwood Official Plans.

3.3 Field Investigations

Site investigations were completed in 2026 based on a desktop review, habitats present in the Study Area, and the Terms of Reference for the EIS submitted to the Town. Table 1 provides a summary of dates and tasks completed.

Table 1: Summary of Surveys in 2026

Task	Survey Dates (Duration)	Weather Conditions	Personnel
Breeding Bird Surveys	June 9, 2026 (0652-0755) June 24, 2026 (0732-0825)	17°C; 1 wind; 80% CC 16°C; 0 wind; 0% CC	Kyle Fleming (Roots Environmental Inc.)
Vascular Plants & Ecological Land Classification	June 9, 2026 (0755-1010) July 23, 2026 (0915-1145) October 6, 2025 (1325-1530)	17°C; 1 wind; 80% CC 17°C; 1 wind; 0% CC 23°C; 2 wind; 0% CC	Kyle Fleming
Bat Maternity Roost Tree Survey	April 24, 2026 (1155-1325)	11°C; 1 wind; 100% CC	Kyle Fleming

3.3.1 Vascular Plants

Vascular plant surveys were completed in the spring, summer and fall growing seasons using roving transects through all habitats and areas planned for development. Particular attention was paid during field investigations for rare species and Species at Risk listed in the *Species Conservation Act*. Incidental observations were also completed during other surveys on site.

The significance of vascular plants sampled was assessed based on the Natural Heritage Information Centre's rankings (S-rank) for provincial rarity.

3.3.2 Vegetation Communities

Vegetation communities were identified using the Ecological Land Classification (ELC) for Southern Ontario, First Approximation (Lee et al., 1998). Polygons were delineated using aerial photography, field sampled and classified as the most appropriate vegetation type. The polygons were identified based on vegetative cover, soils, and landscape features.

The significance of the vegetation communities was assessed based on the Natural Heritage Information Centre's provincial rankings where applicable.

3.3.3 Species At Risk

3.3.3.1 BAT MATERNITY ROOST HABITAT

All treed areas within the subject property were surveyed for the presence of any cavity/snag trees that could support maternity roosting habitat for SAR bat species (*Myotis* spp.) using general criteria in the Species at Risk Bats Survey Note (MECP 2022). The locations of survey stations are illustrated in *Figure 3 – Survey Station Locations*.

Surveys included counting trees that contained suitable snags and/or cavities at each station within a 12.6-m radius. An overall snag density was then calculated using the total number of snags and survey plots completed for treed habitats.

3.3.4 Breeding Birds

Two surveys for breeding bird species were completed using general protocols in the Ontario Forest Breeding Bird Program and Ontario Breeding Bird Survey Guide for Participants (2021 version).

Two pre-determined point count sampling stations were spaced to ensure coverage of all habitats. Stations were positioned to ensure site conditions (i.e., topography) did not reduce chances of affecting detections, and to minimize noise influence from adjacent anthropogenic areas. Survey stations are illustrated on *Figure 3 – Survey Station Locations*.

Surveys were completed early in the morning between 0500-1000hrs, in calm weather conditions. Each survey lasted approximately 10 minutes in duration, where all species detected (auditory and visual) were documented. Additional observations were made during transit between survey stations.

3.3.5 Incidental Wildlife Observations

Incidental observations were made for mammals and herptiles (amphibians and reptiles) during field investigations through observations of physical evidence (scats, tracks) and for shelter, feeding and breeding sites (e.g., vernal pools, rock piles, etc.).



Legend

-  Property Boundary
-  Bat Tree Roost Survey Stations
-  Bird Point Count Stations

ENVIRONMENTAL IMPACT STUDY

Figure 3
Survey Station Locations

430 Raglan Street
Town of Collingwood
County of Simcoe



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS. © OpenStreetMap contributors, and the GIS User Community



4 EXISTING CONDITIONS

4.1 Desktop Review

4.1.1 MNRF NHIC Make-A-Map: Natural Heritage Areas

A search was completed using the MNR NHIC Make-A-Map: Natural Heritage Areas online geographic query tool for occurrence square 17NK6326. Occurrences documented by NHIC may include those beyond the subject property and on habitats suitable to those species. A copy of the query is provided in Appendix B.

This review found occurrences of the tracked wildlife habitats and species:

- Red-headed Woodpecker (*Melanerpes erythrocephalus*) (S3)
- Snapping Turtle (*Chelydra serpentina*) (Special Concern) (SC)
- Butternut (*Juglans cinerea*) (Endangered) (END)

No natural heritage features (e.g. Provincially Significant Wetlands, Areas of Natural and Scientific Interest) are identified within the subject property or adjacent lands as illustrated in *Figure 4- NHIC Mapping*.

4.1.2 Ontario Nature Reptile and Amphibian Atlas

A geographic query of occurrence square 17NK72 was completed using the Ontario Natural Reptile and Amphibian Atlas for observations of species collected from 1970-2019. Occurrences will include those beyond the subject property and on habitats suitable to those species.

The following records for SAR were found in the search:

- Snapping Turtle (SC)
- Eastern Massasauga (*Sistrurus catenatus*) (Threatened) (THR)

Other species noted in the search are common to Ontario. A copy of the query is provided in Appendix B.

4.1.3 Ontario Breeding Bird Atlas

A geographic query was completed using the Nature Counts online database for records within the study area. These records include the Atlas Breeding Birds of Ontario and e-Bird. It is noted that these occurrence records may include those beyond the subject property and on habitats suitable to those species. No rare species or Protected Species were identified in available records. All species noted in the search are common to Ontario.

4.1.4 iNaturalist

A geographic query was completed for iNaturalist records within the site and adjacent lands. All species were found to be common (S4 or higher) and non-at-risk in Ontario.



Figure 4: NHIC Mapping (property boundary illustrated in red border).

4.1.5 Ontario Mammal Atlas

A geographic query was completed using the Ontario Mammal Atlas for species location records in the general study area. These occurrence records may include those beyond the subject property and on habitats suitable to those species. Based on our review, the following Protected Species and/or rare species may be present in the study area:

- Eastern Small-footed Myotis (*Myotis leibii*) (END)
- Little Brown Myotis (*Myotis lucifugus*) (END)
- Northern Myotis (*Myotis septentrionalis*) (END)
- Silver-haired Bat (*Lasionycteris noctivagans*) (END)

- Eastern Red Bat (*Lasiurus borealis*) (END)
- Hoary Bat (*Lasiurus cinereus*) (END)
- Tri-colored Bat (*Perimyotis subflavus*) (END)

All remaining species noted in the search are common to Ontario.

4.1.6 Ontario Butterfly Atlas

A geographic query of square 17NK62 was completed using the Ontario Butterfly Atlas for occurrences records in the area of the property. Occurrences will include those beyond the subject property and on habitats suitable to those species.

The following records for SAR were found in the search:

- Monarch (*Danaus Plexippus*) (SC)

Other species noted in the search are common to Ontario. A copy of the query is provided in Appendix B.

4.1.7 Town of Collingwood Official Plan

The subject property is primarily designated General Employment and Environmental Protection (Greenlands System) on Schedule 2 to the Town of Collingwood Official Plan (Modified January 20, 2026).

The Environmental Protection Designation includes the Pretty River and a 30-metre buffer. Woodlands on the property beyond the 30-metre buffer are not designated Environmental Protection on Schedule 2.

4.2 Field Investigations

4.2.1 Vegetation Communities

Vegetation communities were identified on site using ELC to the vegetation type within the proposed development area. Adjacent lands are classified to the community level where possible.

Provided below are descriptions of communities, which are shown on *Figure 5 – Existing Conditions* and *Table 2 – Site Photos*.

FOM5: Dry – Fresh White Birch-Poplar-Conifer Mixed Forest Ecosite

This community is the result of past disturbance and is undergoing naturalized regeneration. The majority of the site appears to have been cleared between 1954-1978 based on historic imagery. The canopy is a mix of young to semi-mature native and exotic (non-native) species, including White Pine (*Pinus strobus*), Balsam Fir (*Abies balsamifera*), Eastern White Cedar (*Thuja occidentalis*), Scots Pine (*Pinus sylvestris*), Trembling Aspen (*Populus tremuloides*), Crack Willow (*Salix fragilis*), Manitoba Maple (*Acer negundo*), White Birch (*Betula papyrifera*), Black Locust (*Robinia pseudoacacia*) and Black Walnut (*Juglans nigra*). The understory was found to be largely young growth of canopy tree species and Green Ash (*Fraxinus pennsylvanica*), Buffaloberry (*Shepherdia canadensis*) and Common Buckthorn (*Rhamnus cathartica*). Groundcover included



Legend

- Property Boundary
- Adjacent Lands (120m)
- Pretty River
- Top of Bank (Pretty River)
- Other Woodlands
- ELC Communities

ENVIRONMENTAL IMPACT STUDY

Figure 5
Existing Conditions

430 Raglan Street
Town of Collingwood
County of Simcoe



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

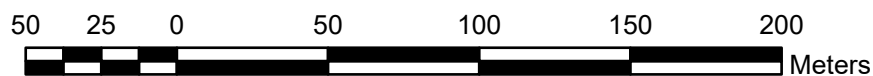


Table 2: Site Photos (2026)

	
CUP3-3 in the east part of the property.	CUP3-2 in the central part of the property.
	
FOM5 in the west part of the property.	CUP3-8 in the northwest part of the property.
	
Example of anthropogenic disturbance on site.	Trail along the top of the Pretty River dyke in the west part of the property. This location is also recommended for restoration (tree planting) (see Section 6).

Poison Ivy (*Rhus radicans*), Fibrous-root sedge (*Carex communis*), Garlic Mustard (*Alliaria petiolata*), Yellow Avens (*Geum aleppicum*), Kentucky Bluegrass (*Poa pratensis*), Great Burdock (*Arctium lappa*), Herb Robert (*Geranium robertianum*) and Dame's Rocket (*Hesperis matronalis*).

This ELC Ecosite includes an inclusion of FOD7-3 (Fresh-Moist Willow Lowland Deciduous Forest Type) in the west part of the site that may have been excavated for construction of the Pretty River dyke (berm). Smaller inclusions of Dry-Moist Old Field Meadow Type (CUM1-1) were also found associated with informal trails, refuse piles and areas of anthropogenic disturbance.

Trails are prevalent throughout the site, linking to what appears to be a main trail along the top of the Pretty River dike in the west part of the site that travels in a north-south direction. Extensive dumping of refuse was also present.

CUP3-3: Scots Pine Coniferous Plantation Type

A cultural plantation of Scots Pine was found in the east part of the site that appears to have been planted sometime between 1978-1989. Associate species, mainly found along the edges, included Trembling Aspen, Eastern White Cedar, White Spruce (*Picea glauca*), White Pine, and White Birch. A dense understory is present with species including Common Buckthorn, Buffaloberry, Green Ash (*Fraxinus pennsylvanica*) and Alternate-leaved Dogwood (*Cornus alternifolia*). Groundcover included Mayflower (*Maianthemum canadense*), Kentucky Bluegrass (*Poa pratensis*), mats of Periwinkle (*Vinca minor*), Orchard Grass (*Dactylis glomerata*), St. John's Wort (*Hypericum prolificum*), Cypress Spurge (*Euphorbia cyparissias*), and Lily-of-the-Valley (*Convallaria majalis*).

CUP3-2: White Pine Coniferous Plantation Type

In the south-central part of the site, a conifer plantation of mainly White Pine was found, which similar to CUP3-3, was planted sometime between 1978-1989. Rows of White Pine were dominant, but inclusions of Scots Pine, Balsam Fir (*Abies balsamifera*) and White Spruce were also observed. Shrub and groundcover included Green Ash, Chokecherry (*Prunus virginiana*), Virginia Creeper (*Parthenocissus quinquefolia*), European Mountain Ash (*Sorbus aucuparia*), Garlic Mustard, Lily-of-the-Valley, Periwinkle, Herb Robert and Kentucky Bluegrass. Along the edges of this community, smaller openings were present from past disturbance and where it transitions to FOM5.

At the eastern edge of this community, abutting CUP3-3, a linear vernal pool was found that appears to collect drainage from the open meadow area to the south of the property. This feature was excavated in the past. No culvert could be found under a private access road to the south, however, there is evidence of drainage into this pool. The pool were measured in-field and found to have a total area of 96m². Species in this pool included Narrow-leaved Cattail (*Typha latifolia*), American Bugleweed (*Lycopus americanus*), Soft-stem Bulrush (*Schoenoplectus tabernaemontani*), and Red-osier Dogwood (*Cornus sericea*). No amphibian use was noted during any field investigations, including visual observations for frog species or egg masses.

CUP3-8: White Spruce – European Larch Coniferous Plantation Type

Found in the northwest part of the site is a conifer plantation of White Spruce that extends off-site to the north. White Spruce formed the canopy with small associates of Green Ash, European Mountain Ash and Trembling Aspen present along the edges. Shrub and groundcover included Tall Thimbleweed (*Anemone virginiana*), Poison Ivy, Garlic Mustard, Canada Mayflower, Herb Robert and Yellow Avens.

CUW1: Mineral Cultural Woodland

Found along the valley slope of the Pretty River, this community is the result of past realignment of the river. Natural regeneration has become established, with canopy species including Eastern White Cedar, Manitoba Maple, White Mulberry (*Morus alba*), Eastern Redcedar (*Juniperus virginiana*), Black Walnut, Staghorn Sumac (*Rhus typhina*) and White Birch. Dense groundcover is present, with species including Orchard Grass, Red Raspberry (*Rubus idaeus*), Garlic Mustard, Yellow Avens, Field Brome (*Bromus arvensis*) and Kentucky Bluegrass. A trail along the top of the dyke is present in a north-south direction.

OW: Open Water

This area is comprised of the Pretty River along the west boundaries of the property.

4.2.2 Botanical Inventory

105 vascular plant species were found on site. A single endangered Butternut tree was found in the west part of the site, which is further discussed in Section 4.2.3.2. No other rare species or other SAR were found. All species were found to be common to similar habitats found in Ontario or are listed as non-native/exotic species. A list of species observed is included in Appendix C.

4.2.3 Species at Risk

4.2.3.1 BAT MATERNITY ROOST HABITAT

A bat maternity roost tree survey completed for the development area found an overall density of 2 snag trees/ha.

Based on the limited number of suitable trees present, and anthropogenic uses bordering all sides of the property, we conclude that the habitat present would be considered low-quality. As habitat was found to be low-quality below the threshold of 10 snags/ha to be considered high-quality habitat, further acoustic monitoring was not warranted and mitigation measures to be recommended in this report will mitigate impacts to the species.

4.2.3.2 BUTTERNUT

One Butternut tree was identified in the west part of the site as illustrated in Figure 5. O. Reg. 61/26 to the SCA states that contravention of Section 16 activities that would kill or harm this species only applies to a Butternut that is at the nut stage of development. Based on the small diameter of this tree (3.5cm), it is not in the nut stage of development and therefore, Section 16 activities do not apply and no permit or registration for removal is required.

4.2.4 Breeding Birds

A total of 23 bird species were detected within the subject property. Species were consistent with urban and rural areas, which included Northern Cardinal (*Cardinalis cardinalis*), Song Sparrow (*Melospiza melodia*), Yellow Warbler (*Setophaga petechia*), House Wren (*Troglodytes aedon*), Mourning Dove (*Zenaida macroura*) and Baltimore Oriole (*Icterus galbula*).

All other species were found to be common within this area and Ontario. A list of species observed is included in Appendix C.

4.2.5 Incidental Wildlife

Incidental wildlife observations made during site visits included the Raccoon (*Procyon lotor*), Eastern Grey Squirrel (*Sciurus carolinensis*) and Red Squirrel (*Tamiasciurus hudsonicus*). No significant species were noted. A list of species observed is included in Appendix C.

4.2.6 Aquatic Habitat

A watercourse known as the Pretty River is found along the west border of the subject property. This watercourse is contained to a man-made valley land known as the Pretty River dye. It was realigned between 1954-1978 based on available historic imagery. This watercourse is identified as Fish Habitat (warmwater) in the Town's Official Plan.

5 ANALYSIS OF NATURAL HERITAGE FEATURES

Identification of natural heritage features is based on the PPS, the MNR "Natural Heritage Reference Manual" (2nd Edition) (MNRF 2010), Town of Collingwood Official Plan, "Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E" (MNRF January 2015), supporting technical criteria, and listings and habitat descriptions for species listed in the SCA.

5.1 Wetlands (Provincially Significant, Coastal, Non-Provincially Significant and Unevaluated Wetlands)

A review of the MNRF NHIC mapping identifies no Provincially Significant Wetlands on site or within adjacent lands to the subject property. No other wetlands (Coastal, Non-PSW or Unevaluated) were mapped or found during field investigations.

5.2 Significant Woodlands

Section 7.3 of the Natural Heritage Reference Manual (OMNR 2010) states that planning authorities should undertake comprehensive studies to identify significant woodlands in their planning area. Section 5.6.1.3 of the Town of Collingwood Official Plan identifies Provincially Significant Woodlands on Schedule 2 to the Official Plan as an Environmental Protection Designation. Woodlands on the property and adjacent lands are not identified on Schedule 2 as an Environmental Protection Designation and are not included in the Town's Natural Heritage System (Schedule 3).

Section 5.6.1.3 vii) also includes “*Other natural heritage features (i.e., woodlands that are less than 4 hectares, locally significant wetlands, treed slopes, and cultural habitat features).*” While not mapped on Schedules 2 or 3, woodlands within the site are <4ha in size and would be considered as an *Other natural heritage feature*.

Due to the presence of these woodlands, an impact assessment is provided in Section 6 of this report.

5.3 Significant Valleylands

No significant valley land features were identified during the desktop review or field investigations. A man-made valleyland is present to the west of the development associated with the Pretty River. Schedules to the Town of Collingwood Official Plan do not identify this valleyland as significant given its primary purpose as a flood control structure.

5.4 Significant Wildlife Habitat

An assessment of candidate Significant Wildlife Habitat (SWH) has been completed using the “*Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*” (MNRF 2015) utilizing the results of the desktop review and field investigations. The results of this assessment are provided in Appendix D in this report.

Based on this assessment, no SWH is present within the subject property and adjacent lands.

5.5 Significant Areas of Natural and Scientific Interest

A desktop review of available mapping finds no ANSI within the subject property or adjacent lands.

5.6 Fish Habitat

The Pretty River is present to the west of the proposed development area. As the proposed development will occur within adjacent lands to this feature, an impact assessment is provided in Section 6 of this report.

5.7 Habitat of Endangered Species and Threatened Species

A SAR Assessment was completed based on existing records obtained through the desktop review, habitats present within the development area and field investigations. The results of the SAR Assessment are provided in Appendix E.

Habitat for four species, the Little Brown Myotis, Silver-haired Bat, Northern Myotis, Eastern Red Bat and Hoary Bat may be present on site based on the presence of low-quality woodland habitat. As the proposed development has the potential to impact these species and their habitats, an impact assessment is provided in Section 6 of this report.



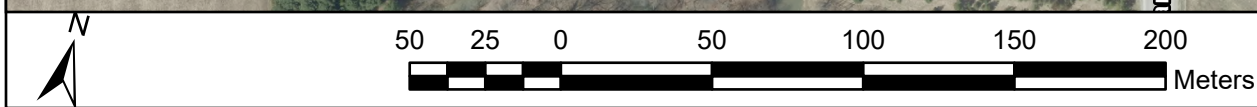
Legend

- Property Boundary
- Adjacent Lands (120m)
- Pretty River
- Top of Bank (Pretty River)
- Other Woodlands

ENVIRONMENTAL IMPACT STUDY
Figure 6 Natural Heritage Features
430 Raglan Street Town of Collingwood County of Simcoe



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



6 IMPACT ASSESSMENT AND MITIGATION

Two provincially recognized natural heritage features have been identified within the development area and adjacent lands: Fish Habitat and Habitat of Endangered Species and Threatened Species.

This section will assess potential impacts to these features and ecological functions resulting from the proposed development and provides mitigation measures to ensure no negative impacts. This report utilizes the definition of a “negative impact” in the PPS (Page 48) *“in regard to other natural heritage features and areas, degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities.”*

In addition, a woodland that is not classified as significant has been identified by the Town in its Official Plan.

6.1 Proposed Development

The proposed development is illustrated on *Figure 7 – Site Plan*. The development includes light industrial uses, with a warehouse, storage areas, loading areas, parking, Stormwater Management (SWM) facility, and entrance from Raglan Street. The SWM facility will include an outlet to the Pretty River, that will achieve enhanced-level water quality treatment. The site will be on municipal services (sanitary and water).

A 30-metre undisturbed setback from the top of bank of the Pretty River will remain undisturbed. Woodlands within the setback area will be retained, and building setbacks in the north, south and east parts of the property will be restored and replanted post-grading.

6.2 Impact Assessment

6.2.1 Woodlands

The Town Official Plan identifies woodlands <4ha as an ‘*other natural heritage feature*’ in the Environmental Protection Designation. Woodlands on site are not mapped on Schedule 2 or 3 of the Official Plan. Development of the site will include the removal of 1.70 ha of woodland habitats. Based on field investigations completed in 2026, no significant ecological functions associated with this woodland were found. Over half of the woodland area is cultural plantation (CUP), with trails, refuse and invasive species noted throughout.

A 30-metre setback from the top of bank of the Pretty River in the west part of the site will retain 0.44 ha of woodland cover. This retained cover will maintain any corridor functions along the River, which is consistent with other development along the Pretty River corridor. Additionally, building setbacks along the north, south and eastern limits of the property totaling 0.26 ha will be restored post-grading. This restoration shall include a native seed mix and plantings of native trees/shrubs. A planting plan for the restoration areas is recommended as a condition of Site Plan approval to the satisfaction of the Town.

ZONING STATISTICS

Legal Description: Part of Lot 43, Concession 5
ZONE M2

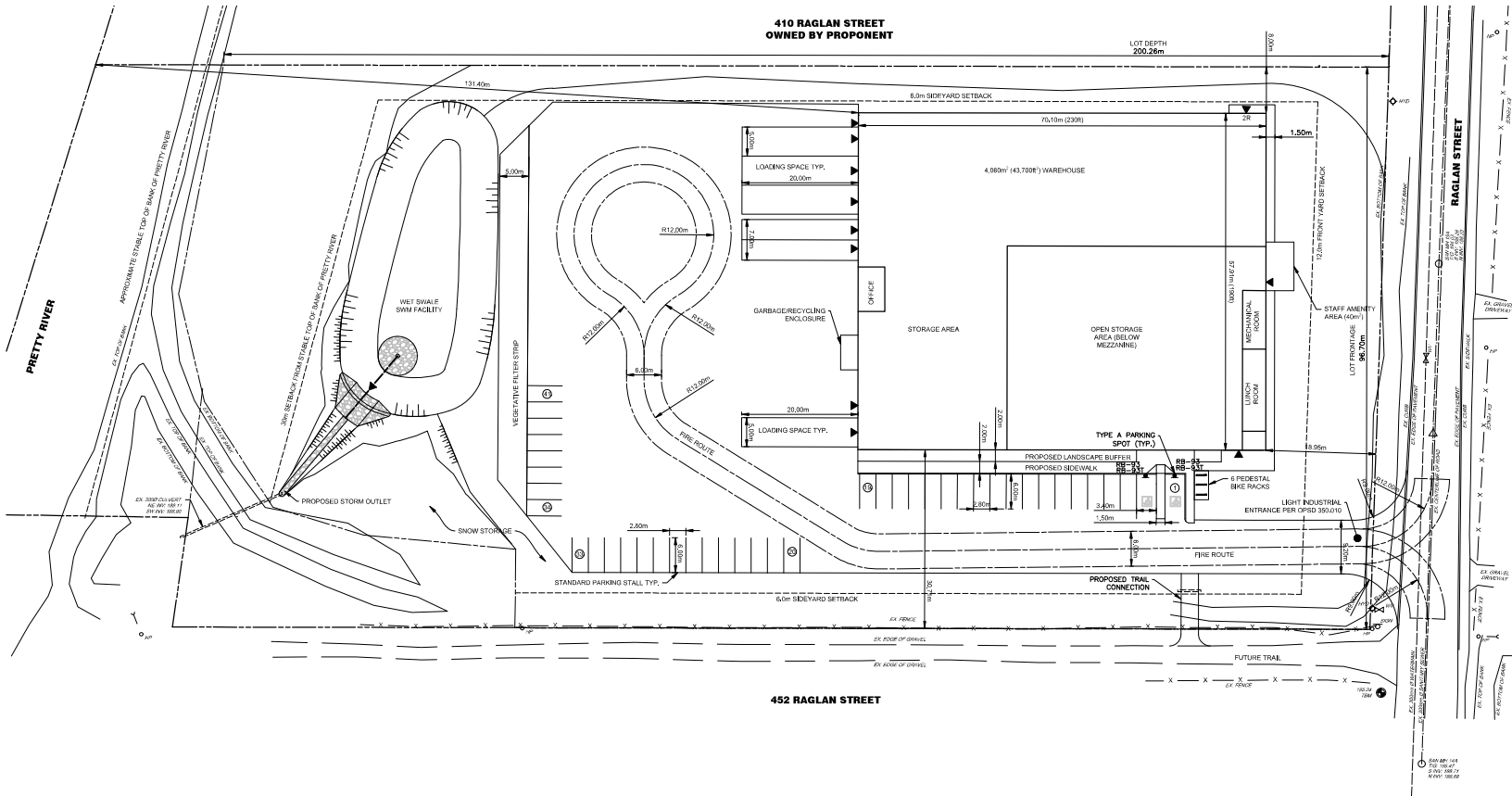
	REQUIRED	PROVIDED
MINIMUM LOT AREA (m ²)	3000	21890
MINIMUM LOT FRONTAGE (m)	30.0	95.72
MINIMUM FRONT YARD (m)	12.0	19.00
MINIMUM INTERIOR SIDE YARD (NORTH) (m)	6.0	6.55
MINIMUM INTERIOR SIDE YARD (SOUTH) (m)	6.0	32.16
MINIMUM REAR YARD (m)	7.5	131.52
MAXIMUM LOT COVERAGE (%)	50.0	19.00
MINIMUM LANDSCAPED OPEN SPACE (%)	15.0	54.00
BUILDING HEIGHT (m)	15.0	≤15
BUILDING FOOTPRINT AREA (m ²)	-	4060

PARKING MATRIX

USE	REQUIRED	PROVIDED
WAREHOUSE (1 SPACE/100m ²)	41	41
BARRIER FREE	2	2
BIKE PARKING (10% OF PARKING)	4	6



KEY PLAN
NTS



DISCLAIMER AND COPYRIGHT

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BENCHMARKS

COORDINATES ARE NAD83 UTM/11N (CSRS). ELEVATIONS ARE GEODETIC: CGVD08, DERIVED FROM CANMET GNSS NETWORK.

TBM1 - ELEVATION 195.24m
TOP OF BB ON SE SIDE OF EXISTING GRAVEL DRIVEWAY ON SOUTH SIDE OF SITE.

NOTES

RAGLAN STREET INFRASTRUCTURE INFORMATION TAKEN FROM DRAWING Q-2336-PFS PREPARED BY GREENLAND CONSULTING ENGINEERS DATED JANUARY 11, 2011.

No.	REVISION DESCRIPTION	DATE
1.	DRAFT FOR COORDINATION	MAY 2026

ENGINEER STAMP

DRAFT FOR COORDINATION
JULY 29 2026

TIN SHACK LTD.
430 RAGLAN STREET
TOWN OF COLLINGWOOD

SITE PLAN



DESIGN: JBAG	FILE: 118108	DWG: SP-1
DRAWN: EJW	DATE: MAR 2026	
CHECK: AD	SCALE: 1:400	

Supplemental plantings of native trees and shrubs (further documented in Section 6.2.2) will be completed within openings in the 30-m setback area to enhance canopy cover. The general locations of these restoration areas are illustrated in *Figure 8 – Setbacks and Mitigation*.

Retained and restored woodlands on site, and those present on adjacent properties to the south and north will continue to provide a woodland <4ha (4.65 ha) per policies of the Official Plan.

To mitigate impacts to the edge of the setback and retained woodland, an edge management plan is recommended. Measures to be included in that plan shall include the following:

- Establish a Tree Protection Limit along the limit of development that shall be clearly marked prior to and during construction to ensure no incidental intrusion in this area.
- Silt fencing shall be installed along the limit of development to assist in delineating the limit of all construction and to capture any sediments that may leave the construction area.
- Installation of a fencing (i.e., chain-link) along the setback to ensure no intrusion once construction is completed.
- All external lighting includes deflectors to direct light downward and/or away from the retained woodlands.

Based on the retention of woodlands on site and adjacent woodlands, and the implementation of mitigation measures to reduce indirect impacts pre-to-post-development, no negative impacts are anticipated resulting from the proposed development.

6.2.2 Fish Habitat

Within the study area, one watercourse, the Pretty River, is found on adjacent lands to the west of the proposed development as illustrated on Figures 8. There will be no direct alterations to this watercourse or in-water works resulting from the proposed development.

As illustrated in Figure 8, all development on the subject property will be setback 30-metres from the top of bank as required in Section 5.6.3.6 (i) to the Official Plan. All existing woodland cover within the setback will be retained.

To reduce any potential for sediments leaving the construction area, it is recommended that sediment control fencing be installed along the development limit and be maintained until all construction and landscaping is completed.

A “*Functional Servicing & Stormwater Management Report*” (Tatham Engineering July 2026) has been completed for the development. Low Impact Development (LID) measures have been recommended to ensure water quality controls and peak flow attenuation. These measures include wet swales that will convey drainage and provide enhanced-level water quality controls to an outlet pipe and spillway that will discharge to the Pretty River to match existing levels.



Legend

- Property Boundary
- Adjacent Lands (120m)
- Pretty River
- Top of Bank (Pretty River)
- Setback (30m)
- Other Woodlands (post-development)
- Woodland Restoration Areas
- Valley Restoration Areas

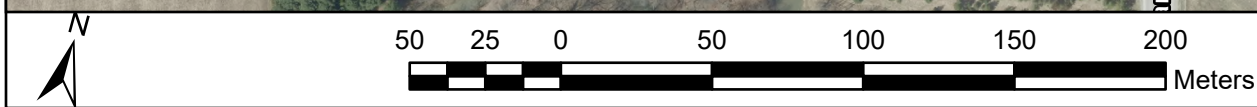
ENVIRONMENTAL IMPACT STUDY

Figure 8
Setbacks and Mitigation

430 Raglan Street
Town of Collingwood
County of Simcoe



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Section 5.6.3.6 (f) of the Official Plan requires the preparation of an Ecological Restoration Plan (ERP) to identify the areas within the Pretty River Corridor that require protection and the areas that require enhancement, restoration or stabilization of the valley slope. Based on inspections of the setback area in 2026, there are no visible signs of any erosion or instability of the slope (see Table 2 – Site Photos). The majority of this setback area, including the valley slope, is treed or contains naturalized cultural meadow and thicket. There is a pedestrian trail in the setback that runs along the top of the slope in a north-south direction that will be maintained. As there are limited restoration opportunities, we propose that the ERP be scoped to the following:

- Establish a Tree Protection Limit along the limit of development that shall be clearly marked prior to and during construction to ensure no incidental intrusion in this area.
- Silt fencing shall be installed along the limit of development to assist in delineating the limit of all construction and to capture any sediments that may leave the construction area.
- Installation of a fencing (i.e., chain-link) along the setback to ensure no intrusion once construction is completed. Alternatively, high-density planting of coniferous tree species (i.e., Eastern White-Cedar) can be used.
- Supplemental native tree and shrub plantings are completed in the areas identified on Figure 8 to provide shading and additional wildlife habitat.

Based on the required 30-m setback to this Pretty River valley, no adverse changes to hydrological or hydrogeological patterns/inputs and the implementation of recommendations for sediment control and enhancements to the setbacks, no negative impacts on fish habitat are anticipated resulting from the proposed development.

6.2.3 Habitat of Endangered Species and Threatened Species

Based on the low number of suitable trees present and corresponding poor-quality habitat, removal of a small number of bat snags in the appropriate seasonal period is unlikely to represent a negative impact to habitat for the species in accordance with MECP guidance (i.e. Bat Survey Standards Note - 2022). To avoid any potential for direct impacts to Species at Risk bat species, it is recommended that no clearing of treed areas occur during the active season of April 1 – September 30th.

6.1 Additional Recommendations

To avoid potential direct impacts to bird species (i.e. destruction of nests) protected under the *Migratory Birds Convention Act*, it is recommended that no clearing of vegetation occurs between April 1 – August 31st.

7 COMPLIANCE WITH PLANNING POLICIES

The following tables provide a summary of planning policies and rationale for consistency/conformity with the Provincial Planning Statement, Town of Collingwood Official Plan and Simcoe County Official Plan for the proposed development. This environmental policy analysis was undertaken by Charles F. Burgess, MCIP, RPP of Burgess Gleason Environmental Inc.

Table 3: Provincial Planning Statement (2024)

Section	Policy	Policy Consistency
4.1.3	Natural heritage systems shall be identified in Ecoregions 6E and 7E ¹ recognizing that they will vary in size and form in settlement areas, rural areas, and prime agricultural areas.	The Natural Heritage System (NHS) or Greenlands System is illustrated by the Province or by the governing municipalities. Based on Schedule 2 of the Town's Official Plan, the subject property is located partially within and adjacent to a Greenlands System.
4.1.4	Development and site alteration shall not be permitted in significant wetlands and coastal wetlands.	Based on mapping and field inspections, there are no provincially significant wetlands on the subject property.
4.1.5	Development and site alteration shall not be permitted in valleylands, woodlands, wildlife habitat, and ANSI that are significant including coastal wetlands unless it has been demonstrated that there will be no negative impacts on the natural feature and their ecological functions.	Based on mapping, field investigations, and analysis, the subject property is devoid of any natural heritage features identified in Policy 4.1.5.
4.1.6	Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.	The Pretty River which contains fish habitat is located to the west of the subject lands. All new development will be setback a minimum of 30 metres from this fish habitat.
4.1.7	Development and site alteration shall not be permitted in habitat of endangered species and threatened species except in accordance with provincial and federal requirements.	The field inspections have shown that the habitat of endangered or threatened species exists on the property. However, it has been determined based on Section 6.2.3 of this EIS that the provisions of the <i>Species Conservation Act</i> will be met through this planning process.
4.1.8	Development and site alteration shall not be permitted on adjacent lands to features identified in 4.1.4, 4.1.5, and 4.1.6 unless it has been demonstrated that there will be no negative impacts.	The proposed development will be located adjacent to fish habitat in the Pretty River. A setback of 30m from the Pretty River will be established that will ensure that there will be no negative impacts on the adjacent fish habitat.

Table 4: Town of Collingwood Official Plan (2024)

Schedule	Designation/Policy	Conformity
Schedule 2 Land Use Plan	The subject property is primarily designated General Employment according to this land use Schedule. The Pretty River and its associated buffer are designated Environmental Protection.	All new development will be located away from the Pretty River and its buffer including the Environmental Protection designation.
Schedule 3 Natural Heritage System	This Schedule illustrates the Natural Heritage System (NHS) within the Town. The western part of the property is within the Town's NHS and Adjacent Lands Overlay designation.	All new development will be directed away from the Town's NHS. A development setback of 30 metres will be established from the Pretty River which will help maintain the ecological function of the NHS.
Schedule 3.1 Natural Hazards	Schedule 3.1 illustrates that a flood susceptible area is associated with the Pretty River located to the west of the property.	The Pretty River Dyke was constructed to help alleviate flooding in the Town of Collingwood. All new development will be setback a minimum of 30 metres from this flood control structure. In addition, any development on the subject lands may require permit approval from the NVCA as it relates to the Pretty River and associated natural hazards.
5.6.1.3	This section defines the components of the Environmental Protection designation.	The Pretty River, its hazard lands, and the woodland that is <4ha (Other Natural Heritage Features) would be classified as components of the Environmental Protection designation.
5.6.1.4. Subsection D	This section provides a framework for the preparation of Environmental Impact Studies.	This EIS has been prepared in the context of this policy.
5.6.1.4 Subsection I	This policy identifies the need to demonstrate no negative impact on natural heritage features.	It has been demonstrated that there will be no negative impacts on the site's natural heritage features. Further, all new development will be setback a minimum of 30 metres from the Pretty River and its fish habitat.
5.6.2	Section 5.6.2 provides a policy framework for development within the Adjacent Lands Overlay designation including	This EIS including its analysis and results have been prepared in the context of Section 5.6.2.

	the requirement for Environmental Impact Studies.	
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Table 5: County of Simcoe Official Plan (Consolidation 2023)

Section	Designation	Conformity
Schedule 5.1 to the Official Plan (OP)	The subject property is designated Settlements according to the Land Use Schedule to the Official Plan.	The Settlements designation in the County Official Plan is intended to reflect Settlement Areas. The Town of Collingwood is a defined Settlement Area where growth and development should be directed. On this basis, the proposed urban development within the Settlement Area of Collingwood complies with the County of Simcoe Official Plan. It should be noted that the County's Greenlands System and policies do not apply in Settlement Areas.
Schedule 5.2.2	This Schedule shows the streams and evaluated wetlands within the County.	Based on this Schedule, there are no wetlands on the subject property. However, a watercourse (Pretty River) is shown to the west of the property. All new development will be located a minimum of 30m from this watercourse.
Schedule 5.2.3	Schedule 5.2.3 illustrates the ANSI within the County.	There are no ANSI on the subject property based on this Schedule and provincial mapping (NHIC).
Schedule 5.2.5	Schedule 5.2.5. identifies the Highly Vulnerable Aquifers (HVA) in the County.	The subject property is located inside a HVA according to Schedule 5.2.5. Given that technical engineering studies will be undertaken as part the planning and development process, it is anticipated that there will be no negative impacts on the quality and quantity of surface and ground water resources.
Schedule 5.2.6	This Schedule shows the Significant Groundwater Recharge Areas (SGRA) within the County's jurisdiction.	Based on Schedule 5.2.6, the property is within a SGRA. The function of the SGRA will be maintained through proper stormwater management, grading, and drainage plans as part of the development process.
3.3.15v)	Development and site alteration shall not be permitted in the habitat	The field inspections have shown that the habitat of endangered or threatened species

	of endangered and threatened species except in accordance with federal and provincial requirements.	exists on the property. However, it has been determined based on Section 6.2.3 of this EIS that the provisions of the <i>Species Conservation Act</i> will be met through this planning process.
3.3.15 vi)	Development and site alteration shall not be permitted on adjacent lands unless it has been demonstrated that there will be no negative impact on the natural feature or its ecological function. Adjacent lands are generally defined as 120 metres dependent upon the feature.	The proposed development will be located adjacent to fish habitat within the Pretty River located to the west of the subject property. All new development will be located a minimum of 30 metres from this watercourse and fish habitat.

8 CONCLUSIONS

Roots Environmental Inc. has been retained by Tin Shack Ltd. to complete an Environmental Impact Study in support of a Site Plan application for the proposed development of a property located at 430 Raglan Street the Town of Collingwood, County of Simcoe.

Three natural heritage features were identified within the subject property and adjacent lands: Woodlands, Fish Habitat and Habitat of Endangered and Threatened Species. Provided development occurs as illustrated on the Site Plan and mitigation measures recommended in this EIS are implemented, no negative impacts to natural heritage features or their ecological functions are anticipated resulting from the proposed development. In addition, it has been demonstrated that the proposed development is consistent with and conforms to the applicable environmental policies of the Provincial Planning Statement, Town of Collingwood Official Plan, and County of Simcoe Official Plan.

Respectively submitted by Roots Environmental Inc.:



Kyle Fleming, BSc. (Wildlife)
Senior Ecologist

Copy: Burgess Gleason Environmental Inc.

REFERENCES

Dobbyn, Jon Sandy. 1966. Atlas of the mammals of Ontario.

Government of Ontario. 2024. Provincial Planning Statement. Queen's Printer of Ontario.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P.Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Natural Heritage Information Centre (NHIC) Database. 2021. Provincial Status of Plants, Wildlife and Vegetation Communities Database. Ministry of Natural Resources and Forestry, Peterborough.

Ontario Ministry of Natural Resources and Forestry. January 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.

Ontario Ministry of Natural Resources and Forestry. March 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005.

Tatham Engineering. July 2026. 430 Raglan Street: Functional Servicing & Stormwater Management Report.

APPENDIX A

EIS Terms of Reference

April 19, 2026

Building and Planning Services
Town of Collingwood
PO Box 157
Collingwood, ON L9Y 3Z5

RE: Terms of Reference - Environmental Impact Study
430 Raglan Street
Town of Collingwood
County of Simcoe

1. Introduction/Background

Roots Environmental Inc. ('Roots') has been retained by Tin Shack Ltd. to complete an Environmental Impact Study (EIS) in support of development applications for the above-mentioned property. The location of the property is illustrated in Figure 1. The property is currently vacant woodland.

This Terms of Reference (TOR) is provided to confirm the proposed work plan for the EIS with the Town. The TOR will be appended to the EIS.

The property is currently designated Industrial and Environmental Protection in Schedule A to the Town of Collingwood Official Plan (Consolidated 2019) and has any overlay of Category 1 Valleylands in Schedule B (Environmental Protection–Natural Heritage Resource Areas). We understand that natural heritage sections of the updated (2024) Official Plan are currently under appeal. The Pretty River is found abutting the west limits of the property. Per requirements of the Official Plan, no development will occur 30 metres from the stable top of the bank or the 1:100 Year floodplain, whichever is greater.

Field investigations, analysis, and consultation with applicable agencies as part of the EIS will confirm the extent of existing mapped natural areas and any other unmapped natural features within or adjacent to the property. Adjacent lands include 120 metres from the subject property.

The purpose of this EIS will be to identify all natural heritage features and ecological functions that could be impacted by the proposed development, assess those impacts and provide mitigation measures as necessary to ensure compliance with all policies in the applicable municipal and Provincial plans, and legislation.



Figure 1: Subject property (Red border)

2. Work Plan

The following work plan is recommended based on requirements in the Town of Collingwood Official Plan and a preliminary review of habitats and natural features present within the subject property and adjacent lands. The work plan includes a summary of information to be reviewed as part of a Desktop Review, Field Investigations to be completed in 2026 and draft Table of Contents for the EIS.

1. Desktop Review:

- Current aerial photography.
- Land Information Ontario (LIO).
- Natural Heritage Information Centre.
- Wildlife Atlases.
- Citizen Science Databases.
- Watershed and Natural Heritage Reports where available (e.g., EIS reports for the area, etc.).
- Town of Collingwood Official Plan.

2. Field Investigations:

- *Botanical Surveys*: Three surveys to take place during spring (May to early June), summer (July to August) and fall (late August to October) to identify any rare species or Species at Risk (SAR).
- *Breeding Birds*: Two surveys will be conducted (May 24 – July 10) during the breeding bird season at an appropriate time of day in appropriate weather conditions following generally accepted scientific protocols (i.e. the 2021 Ontario Breeding Bird Survey Guide for Participants).
- *Ecological Land Classification (ELC)*: The vegetation communities on the properties will be identified during the spring/summer using the Ecological Land Classification (ELC) for Southern Ontario (1st Approximation) to vegetation type, where possible.
- *SAR Bat Maternity Roost (Treed) Surveys*: Complete surveys per MECP protocols in the Species at Risk Bats Survey Note (2022).
- *Incidental Wildlife Observations*: Incidental observations for mammals and herptiles (amphibians and reptiles) during field investigations through observations of physical evidence (scats, tracks) and for shelter, feeding and breeding sites (e.g., wetlands, rock piles, etc.).

3. Table of Contents

1. Introduction
2. Policy and Legislation Overview
3. Methodology
4. Existing Conditions
 - 4.1. Desktop Review
 - 4.2. Physiography
 - 4.3. Vegetation
 - 4.3.1. Ecological Land Classification (ELC)
 - 4.3.2. Botanical Inventory
 - 4.4. Wildlife
 - 4.4.1. Breeding Birds
 - 4.4.2. Incidental Observations
 - 4.5. Aquatic Habitats
 - 4.6. Species at Risk
5. Assessment of Natural Heritage Features/Areas
 - 5.1. Wetlands (Provincially Significant, Evaluated Non-Provincially Significant and Unevaluated)
 - 5.2. Significant Wildlife Habitat
 - 5.3. Significant Woodlands
 - 5.4. Areas of Natural and Scientific Interest (ANSI)
 - 5.5. Significant Valleylands
 - 5.6. Fish Habitat/Hydrological Features

- 5.7. Significant Habitat of Endangered and Threatened Species
- 6. Impact Assessment
 - 6.1. Proposed Development
 - 6.2. Impact Assessment
 - 6.3. Summary of Recommendations
- 7. Policy Compliance
- 8. Conclusions

Technical studies beyond the EIS, such as but not limited to, stormwater management, grading plan, erosion and sediment control plans will be reviewed to identify any potential impacts and to ensure recommendations in those reports are consistent with those in the EIS.

We ask that you provide any comments that should be incorporated into this Terms of Reference or provide confirmation at your earliest convenience.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kyle Fleming", with a stylized flourish at the end.

Kyle Fleming, BSc. (Wildlife)
Senior Ecologist

cc: Loft Planning Inc.
 Burgess Gleason Environmental Inc.
 Tin Shack Ltd.

APPENDIX B

Desktop Review Documentation

NHIC Data

To work further with this data select the content and copy it into your own word or excel documents.

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	Last Observation Date	ATLAS NAD83 IDENT	COMMENTS
968370	SPECIES	Butternut	Juglans cinerea	S2?	END	END	2016-10-31	17NK6326	
968370	SPECIES	Red-headed Woodpecker	Melanerpes erythrocephalus	S3	END	END	2021-06-27	17NK6326	
968370	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	2024-06-01	17NK6326	

Species list in taxonomic order for square
17NK62



All species

Number of rows of data displayed below: 42.

Species #	Common Name	Scientific Name	# of Records	Earliest in Yr (adults)	Latest in Yr (adults)	Earliest Yr	Latest Yr
6	Silver-spotted Skipper	Epargyreus clarus	5	June 10	July 14	1991	2024
19	Wild Indigo Duskywing	Erynnis baptisiae	6	July 25	Oct. 2	2013	2025
23	Arctic Skipper	Carterocephalus mandan	1	June 22	June 22	2022	2022
28	Dun Skipper	Euphyes vestris	3	July 15	July 24	2024	2025
29	Delaware Skipper	Anatrytone logan	1	July 10	July 10	2022	2022
32	Crossline Skipper	Polites origenes	1	June 30	June 30	2005	2005
37	Little Glassywing	Vernia verna	1	July 12	July 12	2022	2022
40	Leonard's Skipper	Hesperia leonardus	1	Aug. 16	Aug. 16	2005	2005
41	Indian Skipper	Hesperia sassacus	2	June 1	June 2	1991	1991
50	European Skipper	Thymelicus lineola	2	June 10	July 6	1959	1991
58	Black Swallowtail	Papilio polyxenes	12	May 22	July 27	1991	2025
62	Midsummer Tiger Swallowtail	Pterourus solstitialis	1	July 13	July 13	2019	2019
63	Canadian Tiger Swallowtail	Pterourus canadensis	4	May 29	June 11	1991	2021
70	Clouded Sulphur	Colias philodice	3	Aug. 19	Oct. 7	2005	2016
71	Orange Sulphur	Colias eurytheme	1	Aug. 19	Aug. 19	2014	2014
83	Cabbage White	Pieris rapae	15	May 16	Sep. 9	1991	2024
106	Banded Hairstreak	Satyrion calanus	3	July 3	July 14	2020	2021
108	Acadian Hairstreak	Satyrion acadica	2	July 5	July 16	2022	2022
112	Silvery Blue	Glaucopsyche lygdamus	3	June 1	June 5	1991	2021
113	Northern Azure	Celastrina lucia	1	May 25	May 25	2024	2024
115	Summer Azure	Celastrina neglecta	2	June 29	July 11	2021	2024
116	Azure sp.	Celastrina sp.	1	July 30	July 30	2012	2012
117	Eastern Tailed Blue	Cupido comyntas	5	July 10	Aug. 19	2013	2022
125	Monarch	Danaus plexippus	43	June 1	Oct. 5	1979	2025
135	Great Spangled Fritillary	Argynnis cybele	2	July 6	July 17	1959	2023
138	Viceroy	Limenitis archippus	4	June 1	Aug. 27	1991	2025
140	White Admiral	Limenitis arthemis arthemis	7	June 11	Aug. 14	1974	2024
149	Compton Tortoiseshell	Nymphalis l-album	6	Apr. 14	Oct. 11	2020	2022
151	Mourning Cloak	Nymphalis antiopa	9	Mar. 30	Sep. 26	2014	2025
152	Question Mark	Polygonia interrogationis	2	July 10	July 11	2022	2024
153	Eastern Comma	Polygonia comma	2	July 18	Aug. 9	2021	2024
158	American Lady	Vanessa virginiensis	9	May 9	Sep. 23	2023	2025
159	Painted Lady	Vanessa cardui	3	June 4	Sep. 18	2019	2020
160	Red Admiral	Vanessa atalanta	13	Apr. 14	Aug. 25	2023	2024
161	Common Buckeye	Junonia coenia	1	July 30	July 30	2012	2012
166	Pearl Crescent	Phyciodes tharos	2	July 8	Aug. 14	2013	2024
167	Northern Crescent	Phyciodes cocyta	2	June 1	July 10	1991	2021
169	Crescent sp.	Phyciodes sp.	2	May 24	July 16	2022	2024
171	Common Ringlet	Coenonympha californica	8	June 1	Aug. 19	1979	2025
172	Northern Pearly-Eye	Lethe anthedon	3	June 22	June 30	2018	2022
173	Eyed Brown	Lethe eurydice	2	July 5	Aug. 14	2013	2024
174	Appalachian Brown	Lethe appalachia	1	July 22	July 22	2024	2024

[TEA home page](#) | [Main atlas page](#)



Species list in taxonomic order for square 17NK62

All species

Number of rows of data displayed below: 14.

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
3	Midland Painted Turtle	6	2017	2019
6	Snapping Turtle	17	1994	2019
12	Eastern Gartersnake	1	1960	1960
14	Eastern Massasauga	7	1991	1994
15	Eastern Milksnake	2	2012	2014
25	American Bullfrog	1	2017	2017
28	Gray Treefrog	24	1994	2019
29	Green Frog	125	1994	2018
30	Mink Frog	3	1994	1999
31	Northern Leopard Frog	23	1960	2017
33	Spring Peeper	124	1987	2015
34	Western Chorus Frog	5	1999	2012
35	Wood Frog	2	1999	2013
36	American Toad	257	1960	2019

APPENDIX C

Species Lists

Vascular Plant List (2025/2026)
430 Raglan Street - Collingwood

SCIENTIFIC NAME	COMMON NAME	S RANK	SARO	SARA	G RANK
<i>Abies balsamea</i>	Balsam Fir	S5			G5
<i>Acer negundo</i>	Manitoba Maple	S5			G5
<i>Acer saccharum</i>	Sugar Maple	S5			G5
<i>Actaea pachypoda</i>	White Baneberry	S5			G5
<i>Alliaria petiolata</i>	Garlic mustard	SNA			GNR
<i>Ambrosia trifida</i>	Great Ragweed	S5			G5
<i>Amelanchier laevis</i>	Smooth Serviceberry	S5			G5
<i>Anemonastrum canadense</i>	Canada Anemone	S5			G5
<i>Anemone virginiana</i>	Anemone virginiana	S5			G5
<i>Apocynum androsaemifolium</i>	Spreading Dogbane	S5			G5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5			G5
<i>Arctium lappa</i>	Great Burdock	SNA			GNR
<i>Asclepias syriaca</i>	Common Milkweed	S5			G5
<i>Betula papyrifera</i>	Paper Birch	S5			G5
<i>Bromus arvensis</i>	Field Brome	SNA			GNR
<i>Carex arctata</i>	Drooping Woodland Sedge	S5			G5
<i>Carex communis</i>	Fibrous-root Sedge	S5			G5
<i>Carex rosea</i>	Rosy Sedge	S5			G5
<i>Cerastium arvense</i>	Field Chickweed	S4			G5
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade	S5			G5
<i>Clematis occidentalis</i>	Purple Clematis	S4			G5
<i>Convallaria majalis</i>	European Lily-of-the-Valley	SNA			GNR
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	S5			G5
<i>Cornus rugosa</i>	Round-leaved Dogwood	S5			G5
<i>Cornus sericea</i>	Red-osier Dogwood	S5			G5
<i>Dactylis glomerata</i>	Orchard Grass	SNA			GNR
<i>Daucus carota</i>	Wild Carrot	SNA			GNR
<i>Desmodium canadense</i>	Canada Tick-trefoil	S4			G5
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	S5			G5
<i>Echinocystis lobata</i>	Wild Cucumber	S5			G5
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	SNA			GNR
<i>Equisetum arvense</i>	Field Horsetail	S5			G5
<i>Erigeron philadelphicus</i>	Philadelphia Fleabane	S5			G5
<i>Erythronium americanum</i>	Yellow Trout-lily	S5			G5
<i>Euphorbia cyparissias</i>	Cypress Spurge	SNA			GNR
<i>Eurybia macrophylla</i>	Large-leaved Aster	S5			G5
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	S5			G5
<i>Fragaria virginiana</i>	Field Strawberry	S5			G5
<i>Fraxinus americana</i>	White Ash	S4			G5
<i>Fraxinus pennsylvanica</i>	Red Ash	S4			G5
<i>Galium odoratum</i>	Sweet-scented Bedstraw	SNA			GNR
<i>Geranium robertianum</i>	Herb-Robert	S5			G5
<i>Geum aleppicum</i>	Yellow Avens	S5			G5

SCIENTIFIC NAME	COMMON NAME	S RANK	SARO	SARA	G RANK
<i>Hesperis matronalis</i>	Dame's Rocket	SNA			GNR
<i>Hylodesmum glutinosum</i>	Large Tick-trefoil	S4			G5
<i>Hypericum perforatum</i>	Common St. John's-wort	SNA			GNR
<i>Juglans cinerea</i>	Butternut	S2?	END	END	G3
<i>Juglans nigra</i>	Black Walnut	S4?			G5
<i>Juniperus communis</i>	Common Juniper	S5			G5
<i>Juniperus virginiana</i>	Eastern Red-Cedar	S5			G5
<i>Lapsana communis</i>	Nipplewort	SNA			GNR
<i>Leucanthemum vulgare</i>	Oxeye Daisy	SNA			GNR
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	SNA			GNR
<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil	SNA			GNR
<i>Lycopus americanus</i>	American Water-horehound	S5			G5
<i>Lysimachia borealis</i>	Starflower	S5			G5
<i>Maianthemum canadense</i>	Wild Lily-of-the-valley	S5			G5
<i>Maianthemum stellatum</i>	Star-flowered False Solomon's Seal	S5			G5
<i>Malus pumila</i>	Common Apple	SNA			GNR
<i>Melilotus albus</i>	White Sweet-clover	SNA			G5
<i>Morus alba</i>	White Mulberry	SNA			GNR
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	S4?			G5
<i>Petasites frigidus</i> var. <i>palmatus</i>	Palmate Coltsfoot	S5			G5T5
<i>Phalaris arundinacea</i>	Reed Canary Grass	S5			G5
<i>Phlox paniculata</i>	Garden Phlox	SNA			GNR
<i>Picea glauca</i>	White Spruce	S5			G5
<i>Pilosella aurantiaca</i>	Yellow Hawkweed	SNA			GNR
<i>Pinus strobus</i>	Eastern White Pine	S5			G5
<i>Pinus sylvestris</i>	Scots Pine	SNA			GNR
<i>Plantago major</i>	Common Plantain	SNA			G5
<i>Poa pratensis</i>	Kentucky Bluegrass	S5			G5
<i>Populus balsamifera</i>	Balsam Poplar	S5			G5
<i>Populus grandidentata</i>	Large-toothed Aspen	S5			G5
<i>Populus tremuloides</i>	Trembling Aspen	S5			G5
<i>Potentilla anserina</i>	Silverweed	S5			G5
<i>Potentilla anserina</i>	Silverweed	S5			G5
<i>Prunella vulgaris</i>	Common Self-heal	S5			G5
<i>Prunus virginiana</i>	Chokecherry	S5			G5
<i>Pteridium aquilinum</i>	Bracken Fern	S5			G5
<i>Ranunculus acris</i>	Common Buttercup	SNA			G5
<i>Rhamnus cathartica</i>	European Buckthorn	SNA			GNR
<i>Rhus typhina</i>	Staghorn Sumac	S5			G5
<i>Ribes cynosbati</i>	Eastern Prickly Gooseberry	S5			G5
<i>Robinia pseudoacacia</i>	Black Locust	SNA			GNR
<i>Rubus idaeus</i>	Red Raspberry	S5			G5
<i>Rudbeckia hirta</i>	Black-eyed Susan	S5			G5
<i>Salix euxina</i>	Crack Willow	SNA			GNR
<i>Schoenoplectus tabernaemontani</i>	Soft-stemmed Bulrush	S5			G5
<i>Shepherdia argentea</i>	Buffaloberry	SNA			GNR

SCIENTIFIC NAME	COMMON NAME	S RANK	SARO	SARA	G RANK
<i>Solidago canadensis</i>	Canada Goldenrod	S5			G5
<i>Sorbus aucuparia</i>	European Mountain-ash	SNA			GNR
<i>Symphyotrichum lateriflorum</i>	Calico Aster	S5			G5
<i>Symphyotrichum puniceum</i>	Purple-stemmed Aster	S5			G5
<i>Syringa vulgaris</i>	Common Lilac	SNA			GNR
<i>Taraxacum officinale</i>	Common Dandelion	SNA			G5
<i>Thuja occidentalis</i>	Eastern White Cedar	S5			G5
<i>Tilia americana</i>	Basswood	S5			G5
<i>Toxicodendron radicans</i>	Poison Ivy	S5			G5
<i>Trifolium pratense</i>	White Clover	SNA			GNR
<i>Typha angustifolia</i>	Narrow-leaved Cattail	SNA			GNR
<i>Utricularia vulgaris</i>	Common Bladderwort	S5			G5
<i>Verbascum thapsus</i>	Common Mullein	SNA			GNR
<i>Vicia americana</i>	American Vetch	S5			G5
<i>Vinca minor</i>	Lesser Periwinkle	SNA			GNR
<i>Vitis riparia</i>	Riverbank Grape	S5			G5

Breeding Bird and Incidental Wildlife List (2026)

430 Raglan Street - Wasaga Beach

SCIENTIFIC NAME	COMMON NAME	S RANK	PRO	SARA	G RANK
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	S5			G5
<i>Cardinalis cardinalis</i>	Northern Cardinal	S5			G5
<i>Corvus brachyrhynchos</i>	American Crow	S5B			G5
<i>Cyanocitta cristata</i>	Blue Jay	S5B			G5
<i>Dumetella carolinensis</i>	Gray Catbird	S5B,S3N			G5
<i>Haemorhous purpureus</i>	Purple Finch	S5			G5
<i>Icterus galbula</i>	Baltimore Oriole	S4B			G5
<i>Melospiza melodia</i>	Song Sparrow	S5B			G5
<i>Molothrus ater</i>	Brown-headed Cowbird	S5			G5
<i>Passer domesticus</i>	House Sparrow	SNA			G5
<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak	S5B			G5
<i>Poecile atricapillus</i>	Black-capped Chickadee	S5B			G5
<i>Quiscalus quiscula</i>	Common Grackle	S5			G5
<i>Setophaga petechia</i>	Yellow Warbler	S5B			G5
<i>Setophaga ruticilla</i>	American Redstart	S5B			G5
<i>Sitta carolinensis</i>	White-Breasted Nuthatch	S5			G5
<i>Spinus tristis</i>	American Goldfinch	S5			G5
<i>Spizella passerina</i>	Chipping Sparrow	S5B,S3N			G5
<i>Sturnus vulgaris</i>	European Starling	SNA			G5
<i>Troglodytes aedon</i>	House Wren	S5B			G5
<i>Turdus migratorius</i>	American Robin	S5B			G5
<i>Vireo olivaceus</i>	Red-eyed Vireo	S5B			G5
<i>Zenaida macroura</i>	Mourning Dove	S5			G5
Mammals					
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	S5			G5
<i>Procyon lotor</i>	Northern Raccoon	S5			G5
<i>Mephitis mephitis</i>	Striped Skunk	S5			G5
<i>Tamiasciurus hudsonicus</i>	Red Squirrel	S5			G5

APPENDIX D

Significant Wildlife Habitat Assessment

Seasonal Concentration of Areas of Animals				
Type	ELC Codes	Habitat Criteria	Defining Criteria	Presence/Absence of Candidate SWH?
Waterfowl Stopover and Staging Areas (Terrestrial)	CUM1 CUT1 *With evidence of annual flooding from melt water or run-off	Fields with sheet water during Spring (mid-March to May). Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available.	Any mixed species aggregations of 100 or more individuals required. The flooded field ecosite habitat plus a 100-300m radius area, dependant on local site conditions and adjacent land use is the significant wildlife habitat.	Not present – no flooding and habitat is not suitable.
Waterfowl Stopover and Staging Areas (Aquatic)	MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment ponds and storm water ponds do not qualify as a SWH, however a reservoir managed as a large wetland or pond/lake does qualify. These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water)	Aggregations of 100 or more of listed species for 7 days, results in > 700 waterfowl use days. Areas with annual staging of ruddy ducks, canvasbacks, and redheads are SWH. The combined area of the ELC ecosites and a 100m radius area is the SWH.	Not present – Suitable ecosites not present in the development area or adjacent lands.
Shorebird Migratory Stopover Area	BBO1 BBO2 BBS1 BBS2 BBT1 BBT2 SDO1 SDS2 SDT1 MAM1 MAM2 MAM3 MAM4 MAM5	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as a SWH.	Presence of 3 or more of listed species and > 1000 shorebird use days during spring or fall migration period. Any site with >100 Whimbrel used for 3 years, or more is significant. The area of significant shorebird habitat includes the mapped ELC shoreline ecosites plus a 100m radius area.	Not present – Ecosites not present in the development area or adjacent lands.
Raptor Wintering Area	<u>Hawks/Owls</u> : Combination of ELC Community Series; need to have present one Community Series from each land class: Forest: FOD FOM FOC Upland: CUM CUT CUS CUW <u>Bald Eagle</u> : Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Raptor wintering sites (hawk/owl) need to be > 20 ha with a combination of forest and upland. Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands. Field area of the habitat is to be wind swept with limited snow depth or accumulation. Eagle sites have open water, large trees and snags available for roosting.	One or more Short-eared Owls or one or more Bald Eagles or At least 10 individuals and two of the listed hawk/owl species. To be significant a site must be used regularly (3 in 5 years) for a minimum of 20 days by the above number of birds. The habitat area for an Eagle winter site is the shoreline forest ecosites directly adjacent to the prime hunting area.	Not present – woodland habitats are not large enough to meet size requirements for significance.
Bat Hibernacula	CCR1 CCR2 CCA1 CCA2 Buildings are not considered to be SWH.	Hibernacula may be found in caves, mine shafts, underground foundations and Karsts. Active mine sites should not be considered as SWH	All sites with confirmed hibernating bats are SWH. The habitat area includes a 200m radius around the entrance of the hibernaculum for most development types.	Not present – no hibernacula are found on site.
Bat Maternity Colonies	FOD FOM SWD SWM	Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH).	Maternity Colonies with confirmed use by; >10 Big Brown Bats >5 Adult Female Silver- haired Bats	Not present – treed habitats do not have > 10 or 21 snags/ha.

		Maternity colonies located in Mature deciduous or mixed forest stands with >10/ha large diameter (>25cm dbh) wildlife trees. Female Bats prefer wildlife tree (snags) in early stages of decay, class 1-3. Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.	The area of the habitat includes the entire woodland or a forest stand ELC Ecosite or an Eco element containing the maternity colonies.	
Turtle Wintering Areas	Snapping and Midland Painted Turtles; ELC Community Classes; SW, MA, OA and SA, ELC Community Series; FEO and BOO. Northern Map Turtle: Open Water areas such as deeper rivers or streams and lakes with current can also be used as over-wintering habitat.	For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate Dissolved Oxygen. Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH.	Presence of 5 over-wintering Midland Painted Turtles is significant. One or more Northern Map Turtle or Snapping Turtle over- wintering within a wetland is significant. The mapped ELC ecosite area with the over wintering turtles is the SWH. If the hibernation site is within a stream or river, the deep-water pool where the turtles are over wintering is the SWH.	Not present – No suitable ELC units found within the subject property.
Reptile Hibernaculum	For all snakes, habitat may be found in any ecosite other than very wet ones. For Five-lined Skink, ELC Community Series of FOD and FOM and Ecosites: FOC1 FOC3	For snakes, hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH. Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures.	Presence of snake hibernacula used by a minimum of five individuals of a snake sp. or individuals of two or more snake spp. Congregations of a minimum of five individuals of a snake sp. or individuals of two or more snake spp. near potential hibernacula (e.g. foundation or rocky slope) on sunny warm days in Spring (Apr/May) and Fall (Sept/Oct) If there are Special Concern Species present, then site is SWH. The feature in which the hibernacula is located plus a 30 m radius area is the SWH.	Not present – No burrows, fissures, crevices or anthropogenic habitats (i.e., rock piles) were present. There are no records for five-lined skink in the immediate area and rock outcrops are not present.
Colonially - Nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles. Cliff faces, bridge abutments, silos, barns. Habitat found in the following ecosites: CUM1 CUT1 CUS BLO1 BLS1 BLT1 CLO1 CLS1 CLT1	Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area. Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. Does not include a licensed/permitted Mineral Aggregate Operation.	Presence of 1 or more nesting sites with 8 or more cliff swallow pairs and/or rough- winged swallow pairs during the breeding season. A colony identified as SWH will include a 50m radius habitat area from the peripheral nests.	Not present – suitable habitats (i.e., banks, hills, etc.) not present on site.
Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs)	SWM2 SWM3 SWM5 SWM6 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7 FET1	Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. Most nests in trees are 11 to 15 m from ground, near the top of the tree.	Presence of 5 or more active nests of Great Blue Heron or other listed species. The habitat extends from the edge of the colony and a minimum 300m radius or extent of the Forest Ecosite containing the colony or any island <15.0ha with a colony is the SWH.	Not present – suitable ELC units not found within the subject property or adjacent lands.

Colonially - Nesting Bird Breeding Habitat (Ground)	Any rocky island or peninsula (natural or artificial) within a lake or large river. Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird) MAM1 – 6 MAS1 – 3 CUM CUT CUS	Nesting colonies of gulls and terns are on islands or peninsulas associated with open water or in marshy areas. Brewer's Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands.	Presence of > 25 active nests for Herring Gulls or Ring-billed Gulls, >5 active nests for Common Tern or >2 active nests for Caspian Tern. Presence of 5 or more pairs for Brewer's Blackbird. Any active nesting colony of one or more Little Gull, and Great Black-backed Gull is significant. The edge of the colony and a minimum 150m radius area of habitat, or the extent of the ELC ecosites containing the colony or any island <3.0ha with a colony is the SWH.	Not present – islands and peninsulas not present. Suitable Ecosites are not present.
Migratory Butterfly Stopover Areas	Combination of ELC Community Series; need to have present one Community Series from each land class: Field: CUM CUT CUS Forest: FOC FOD FOM CUP	Minimum of 10 ha in size with a combination of field and forest habitat present and will be located within 5 km of Lake Ontario. Habitat is typically a combination of field and forest. The habitat should not be disturbed, fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements for this habitat.	The presence of Monarch Use Days (MUD) during fall migration (Aug/Oct). MUD of >5000 or >3000 with the presence of Painted Ladies or Red Admiral's is to be considered significant.	Not present – site not within 5km of Lake Ontario.
Landbird Migratory Stopover Areas	FOC FOM FOD SWC SWM SWD	Woodlots need to be >10 ha in size and within 5 km of Lake Ontario. If multiple woodlands are located along the shoreline those Woodlands <2km from Lake Ontario are more significant. Woodlots and forest fragments are important habitats to migrating birds, these features located along the shore and located within 5km of Lake Ontario are Candidate SWH cxlviii.	Use of the habitat by >200 birds/day and with >35 spp. with at least 10 bird spp. recorded on at least 5 different survey dates.	Not present - site not within 5 km of Lake Ontario.
Deer Yarding Areas	OMNRF to determine this habitat. FOM FOC SWM SWC CUP2 CUP3 FOD3 CUT	The yard is composed of two areas referred to as Stratum I and Stratum II. Stratum II covers the entire winter yard area and is usually a mixed or deciduous forest with plenty of browse available for food.	Deer Yards are mapped by MNR District offices.	Not present – MNR does not identify this site as part of a Deer Yard.
Deer Winter Congregation Areas	FOC FOM FOD SWC SWM SWD Conifer plantations much smaller than 50 ha may also be used.	Woodlots will typically be >100 ha in size. Woodlots <100ha may be considered as significant based on MNR studies or assessment.	Deer winter congregation areas considered significant will be mapped by MNR.	Not present – MNR does not identify this site as part of a Deer Yard.
Rare Vegetation Communities				
Cliffs and Talus Slopes	TAO CLO TAS CLS TAT CLT	A Cliff is vertical to near vertical bedrock >3m in height. Most cliff and talus slopes occur along the Niagara Escarpment.	ELC Vegetation Type for Cliffs or Talus Slopes.	Not present – applicable ELC units are not present on site.
Sand Barren	SBO1 SBS1 SBT1	A sand barren area >0.5ha in size	ELC Vegetation Type for Sand Barrens. Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.)	Not present – applicable ELC units are not present on site.
Alvar	ALO1 ALS1 ALT1 FOC1 FOC2 CUM2 CUS2 CUT2-1 CUW2	An Alvar site > 0.5 ha in size.	Field studies that identify four of the five Alvar Indicator Species at a Candidate Alvar site is Significant.	Not present – applicable ELC units are not present on site.

			Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	
Old Growth Forest	FOD FOC FOM SWD SWC SWM	Woodland areas 30 ha or greater in size or with at least 10 ha interior habitat assuming 100 m buffer at edge of forest .	If dominant trees species of the are >140 years old, then the Ecosite or eco-element within an ecosite containing these trees is SWH. The forested area containing the old growth characteristics will have experienced no recognizable forestry activities.	Not present – Woodlands on site are not > 30ha and trees on site are not > 140 years in age.
Savannah	TPS1 TPS2 TPW1 TPW2 CUS2	A Savannah is a tallgrass prairie habitat that has tree cover between 25 – 60%. No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH.	Confirm one or more of the Savannah indicator species. Area of the ELC Ecosite is the SWH. Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	Not present – applicable ELC units are not present on site.
Tallgrass Prairie	TPO1 TPO2	An open Tallgrass Prairie habitat has < 25% tree cover. No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH.	Field studies confirm one or more of the Prairie indicator species. Area of the ELC Ecosite is the SWH. Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	Not present – applicable ELC units are not present on site.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities.	The MNR/NHIC will have up to date listing for rare vegetation communities.	Area of the ELC Vegetation Type polygon is the SWH.	Not present – ELC units found on site are not provincially rare (S1-S3).
Specialized Habitat for Wildlife				
Waterfowl Nesting Area	All upland habitats located adjacent to these wetland ELC Ecosites are Candidate SWH: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SWT1 SWT2 SWD1 SWD2 SWD3 SWD4	A waterfowl nesting area extends 120 m from a wetland (> 0.5 ha) or a wetland (>0.5ha) and any small wetlands (0.5ha) within 120m or a cluster of 3 or more small (<0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur. Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. Wood Ducks and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites.	Presence of 3 or more nesting pairs for listed species excluding Mallards, or; Presence of 10 or more nesting pairs for listed species including Mallards. Any active nesting site of an American Black Duck is considered significant.	Not present – applicable ELC units not found on site.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	ELC Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. Nests located on man-made objects are not to be included as SWH (e.g. telephone poles and constructed nesting platforms).	For an Osprey, the active nest and a 300 m radius around the nest or the contiguous woodland stand is the SWH. For a Bald Eagle the active nest and a 400-800 m radius around the nest is the SWH. Area of the habitat from 400-800m. To be significant a site must be used annually. When found inactive, the site must be known to be inactive for > 3 years or suspected of not being used for >5 years before being considered not significant.	Not present – woodland communities on site are not adjacent to larger rivers, lakes or wetlands. No raptor nests were observed in April 2026.

Woodland Raptor Nesting Habitat	May be found in all forested ELC Ecosites.	All natural or conifer plantation woodland/forest stands >30ha with >10ha of interior habitat. Interior habitat determined with a 200m buffer.	Presence of 1 or more active nests from species list is considered significant. Red-shouldered Hawk and Northern Goshawk – A 400m radius around the nest or 28 ha area of habitat is the SWH. Barred Owl – A 200m radius around the nest is the SWH. Broad-winged Hawk and Coopers Hawk – A 100m radius around the nest is the SWH. Sharp-Shinned Hawk – A 50m radius around the nest is the SWH.	Not present – woodland communities are not large enough to meet criteria. No raptor nests observed on site.
Turtle Nesting Areas	Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within the following ELC Ecosites: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 BOO1 FEO1	Must provide sand and gravel that turtles are able to dig in and are in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH.	Presence of 5 or more nesting Midland Painted Turtles. One or more Northern Map Turtle or Snapping Turtle nesting is a SWH. The area or collection of sites within an area of exposed mineral soils where the turtle's nest, plus a radius of 30-100m around the nesting area is the SWH. Travel routes from wetland to nesting area are to be considered within the SWH as part of the 30-100m area of habitat.	Not present – applicable ELC units are not present within adjacent areas to the site.
Seeps and Springs	Seeps/Springs are areas where ground water comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs.	Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system.	Presence of a site with 2 or more seeps/springs should be considered SWH. The area of a ELC forest ecosite or an Eco element within ecosite containing the seeps/springs is the SWH.	Not present – no seeps/springs were observed on site.
Amphibian Breeding Habitat (Woodland)	FOC FOM FOD SWC SWM SWD	Presence of a wetland, pond or woodland pool (including vernal pools) >500m2 within or adjacent (within 120m) to a woodland (no minimum size). Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.	Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3. The habitat is the wetland area plus a 230m radius of woodland area.	Not present – no vernal pools >500m2 were found within the subject property.
Amphibian Breeding Habitat (Wetlands)	Classes SW, MA, FE, BO, OA and SA.	Wetlands>500m2 (about 25m diameter). Bullfrogs require permanent water bodies with abundant emergent vegetation.	Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog/toad species with Call Level Codes of 3; or; Wetland with confirmed breeding Bullfrogs are significant.	Not present – applicable ELC Units are not present on site.

			The ELC ecosite wetland area and the shoreline are the SWH.	
Area-Sensitive Bird Breeding Habitat	FOC FOM FOD SWC SWM SWD	Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha. Interior forest habitat is at least 200 m from forest edge habitat.	Presence of nesting or breeding pairs of 3 or more of the listed wildlife species. Any site with breeding Cerulean Warblers or Canada Warblers is to be considered SWH.	Not Present – woodland habitats contain no interior habitat of > 200 m from an edge.
Habitat for Species of Conservation Concern (not including Endangered or Threatened Species.)				
Marsh Breeding Bird Habitat	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SAS1 SAM1 SAF1 FEO1 BOO1 For Green Heron: All SW, MA and CUM1 sites.	All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present. For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees.	Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or or 1 pair of Sandhill Cranes; or breeding by any combination of 5 or more of the listed species. Any wetland with breeding of 1 or more Black Terns, Trumpeter Swan, Green Heron or Yellow Rail is SWH. Area of the ELC ecosite is the SWH.	Not present – no applicable ELC units found on site or adjacent lands.
Open Country Bird Breeding Habitat	CUM1 CUM2	Large grassland areas (includes natural and cultural fields and meadows) >30 ha. Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e. no row cropping or intensive hay or livestock pasturing in the last 5 years).	Presence of nesting or breeding of 2 or more of the listed species. A field with 1 or more breeding Short-eared Owls is to be considered SWH.	Not present – no applicable ELC units found on site or adjacent lands.
Shrub/Early Successional Bird Breeding Habitat	CUT1 CUT2 CUS1 CUS2 CUW1 CUW2	Large field areas succeeding to shrub and thicket habitats >10ha in size. Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (i.e. no row-cropping, haying or live-stock pasturing in the last 5 years).	Presence of nesting or breeding of 1 of the indicator species and at least 2 of the common species. Habitat with breeding Yellow-breasted Chat or Golden-winged Warbler is to be considered as SWH. The area of the SWH is the contiguous ELC ecosite field/thicket area.	Not present – no applicable ELC units found on site or adjacent lands.
Terrestrial Crayfish	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 MAS1 MAS2 MAS3 SWD SWT SWM CUM1 with inclusions of above meadow marsh or swamp ecosites can be used by terrestrial crayfish.	Wet meadow and edges of shallow marshes (no minimum size).	Presence of 1 or more individuals of species listed or their chimneys (burrows) in suitable meadow marsh, swamp or moist terrestrial sites. Area of ELC ecosite or an Eco element area of meadow marsh or swamp within the larger ecosite area is the SWH.	Not present – no applicable ELC units found on site or adjacent lands.
Special Concern and Rare Wildlife Species	All plant and animal element occurrences (EO) within a 1 or 10km grid.	When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially Rare species; linking candidate habitat on the site needs to be completed to ELC Ecosites.	The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH.	Not present – No Special Concern or rare species were found during field investigations.
Animal Movement Corridors				
Amphibian Movement Corridors	Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat.	Movement corridors between breeding habitat and summer habitat. Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH.	Corridors should consist of native vegetation, with several layers of vegetation. Corridors unbroken by roads, waterways or bodies, and undeveloped areas are most significant.	Absent – no Amphibian Breeding Habitat was identified within the subject property.

			Corridors should have at least 15m of vegetation on both sides of waterway or be up to 200m wide of woodland habitat and with gaps <20m.	
Deer Movement Corridors	Corridors may be found in all forested ecosites.	Movement corridor must be determined when Deer Wintering Habitat is confirmed as SWH.	Corridors that lead to a deer wintering habitat should be unbroken by roads and residential areas. Corridors should be at least 200m wide with gaps <20m and if following riparian area with at least 15m of vegetation on both sides of waterway.	Not present – no deer wintering habitat has been identified on site by MNRF.
Exceptions for EcoRegion 6E				
6E-14 Mast Producing Areas for Black Bear	FOM FOD	Woodland ecosites >30ha with mast-producing tree species, either soft (cherry) or hard (oak and beech).	All woodlands > 30 ha with a 50% composition of these ELC Vegetation Types are considered significant: FOM1-1 FOM2-1 FOM3-1 FOD1-1 FOD1-2 FOD2-1 FOD2-2 FOD2-3 FOD2-4 FOD4-1 FOD5-2 FOD5-3 FOD5-7 FOD6-5	N/A
6E- 17 Lek for Sharp-tailed Grouse	CUM CUS CUT	Grasslands (field/meadow) are to be >15ha when adjacent to shrubland and >30ha when adjacent to deciduous woodland. Grasslands are to be undisturbed with low intensities of agriculture (light grazing or late haying).	Any site confirmed with sharp-tailed grouse courtship activities is considered significant. The field/meadow ELC ecosites plus a 200 m radius area with shrub or deciduous woodland is the lek habitat.	N/A

APPENDIX E

Species at Risk Assessment

Protected Species Assessment (THR and END)
430 Raglan Street - Collingwood

Species	Source	Status (SARO)	Habitat Preferences	Presence/Absence
Eastern Massasauga (<i>Sistrurus catenatus</i>)	ONRAA	THR	Massasaugas live in different types of habitats throughout Ontario, including tall grass prairie, bogs, marshes, shorelines, forests and alvars. Massasaugas hibernate underground in crevices in bedrock, sphagnum swamps, tree root cavities and animal burrows where they can get below the frost line but stay above the water table.	Absent – records are historic, with no observations since 1994 in that occurrence square. Area is largely developed and road networks would act as a barrier to movement.
Butternut (<i>Juglans cinerea</i>)	NHIC	END	Associated with deciduous forests, establishing under canopy openings or along forest edges. Prefers moist, well-drained soil and frequently occurs within the floodplains of streams or small rivers.	Absent – one Butternut was found that does not reach size/age requirements for protection under the SCA.
Little Brown Myotis (<i>Myotis lucifugus</i>)	Habitat Assessment/ Distribution	END	Maternity roosts sites most often include buildings and large diameter trees with cracks, crevices, and/or exfoliating bark. Overwinters in caves and mines that maintain temperatures above 0°C.	Potential - limited number of suitable trees (2/ha). Habitat present would be considered low-quality. As habitat is below the threshold of 10 snags/ha to be considered high- quality habitat, further acoustic monitoring was not warranted and mitigation measures recommended in this report will mitigate impacts to the species.
Northern Myotis (<i>Myotis septentrionalis</i>)	Habitat Assessment/ Distribution	END	Maternity roosts most often include large diameter trees with cracks, crevices, and/or exfoliating bark.	Potential - limited number of suitable trees (2/ha). Habitat present would be considered low-quality. As habitat is below

Protected Species Assessment (THR and END)
430 Raglan Street - Collingwood

			Overwinters in caves and mines that maintain temperatures above 0°C.	the threshold of 10 snags/ha to be considered high- quality habitat, further acoustic monitoring was not warranted and mitigation measures recommended in this report will mitigate impacts to the species.
Tri-colored Bat (<i>Perimyotis subflavus</i>)	Habitat Assessment/ Distribution	END	Maternity roosts include Maple and Oak with dead/dying leaf clusters. Overwinters in caves and mines that maintain temperatures above 0°C.	Potential - limited number of suitable trees (2/ha). Habitat present would be considered low-quality. As habitat is below the threshold of 10 snags/ha to be considered high- quality habitat, further acoustic monitoring was not warranted and mitigation measures recommended in this report will mitigate impacts to the species.
Eastern Small-footed Myotis (<i>Myotis leibii</i>)	Habitat Assessment/ Distribution	END	Roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. Hibernates, most often in caves and abandoned mines that maintain temperatures above 0°C.	Absent – no anthropogenic habitats, mine, caves or talus slopes that would provide habitat.
Hoary Bat (<i>Lasiurus cinereus</i>)	Habitat Assessment/ Distribution	END	Deciduous and coniferous forests, with a preference for deciduous stands that have larger diameter canopy trees.	Potential - limited number of suitable trees. Habitat present would be considered low-quality. As habitat is below the threshold of 10 snags/ha to be considered high- quality habitat, further acoustic monitoring was not warranted and mitigation

Protected Species Assessment (THR and END)
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				measures recommended in this report will mitigate impacts to the species.
Eastern Red Bat (<i>Lasiurus borealis</i>)	Habitat Assessment/ Distribution	END	Deciduous and coniferous forests, with a preference for deciduous stands that have larger diameter canopy trees.	Potential - limited number of suitable trees. Habitat present would be considered low-quality. As habitat is below the threshold of 10 snags/ha to be considered high- quality habitat, further acoustic monitoring was not warranted and mitigation measures recommended in this report will mitigate impacts to the species.
Silver-haired Bat (<i>Lasionycteris noctivagans</i>)	Habitat Assessment/ Distribution	END	Deciduous and coniferous forests, with a preference on larger diameter decaying trees with cavities and/or peeling bark.	Potential - limited number of suitable trees (2/ha). Habitat present would be considered low-quality. As habitat is below the threshold of 10 snags/ha to be considered high- quality habitat, further acoustic monitoring was not warranted and mitigation measures recommended in this report will mitigate impacts to the species.

Species Status:

THR: Threatened

END: Endangered

Source References:

NHIC: Natural Heritage Information Centre (NHIC) <https://www.ontario.ca/page/make-natural-heritage-area-map>

ONRAA: Ontario Nature Reptile and Amphibian Atlas <https://www.ontarioinsects.org/herp/>

APPENDIX F

CV – Kyle Fleming (Roots Environmental Inc.)



Kyle Fleming, BSc. (Wildlife)

Senior Ecologist/President

Qualifications

Kyle has over 20 years experience as an ecologist where he has been responsible completing over 350 Environmental Impact Studies, Species at Risk Assessments, environmental monitoring, and related projects throughout Central, Southern and Eastern Ontario. He is a Qualified Wetland Evaluator & Certified Butternut Assessor by the MNRF, is trained and experienced in the use of Ecological Land Classification (ELC) and has been qualified as an expert at the Ontario Municipal Board/LPAT. His work is readily accepted by municipalities, conservation authorities and government agencies, and he is very familiar with provincial and federal policies and legislation.

Professional Experience

MAY 2019 - PRESENT

Senior Ecologist/President / Roots Environmental Inc., Barrie, ON

As the Senior Ecologist with Roots Environmental, Kyle is responsible the managing and implementation of environmental impact assessments, species at risk assessments and related studies for private and public sector clients throughout Ontario.

MAY 2004- MAY 2019

Senior Terrestrial Ecologist / Skelton, Brumwell & Associates, Barrie, ON

Responsible for completing Natural Environmental Reports, Environmental Impact Studies, Species at Risk Assessments for private and public sector clients throughout Ontario.

APRIL – AUGUST 2003

Project Supervisor/Field Biologist / Hamer Environmental L.P., Mt. Vernon, WA, USA

Responsible for supervising and managing a threatened seabird monitoring project on state lands.

NOVEMBER 2002 – JANUARY 2003

Environmental Technician / Aqua-Terre Solutions Inc., Toronto, ON

Responsible for data management of water and soil sampling for sites across the GTA.

APRIL – AUGUST 2002

Field Biologist / Hamer Environmental L.P., Mt. Vernon, WA, USA

Conducted threatened seabird surveys on state lands to determine presence/absence relative to forestry activities.

MAY – AUGUST 2001

Field Technician/ University of Washington, Forks, WA, USA

June-August 2001, Field Technician

Research project on nest predation of threatened seabirds and impacts of forestry practices on nesting sites.

Education

2002

Bachelor of Science in Wildlife Biology / University of Northern British Columbia, Prince George, BC

1998

Diploma in Fish and Wildlife Technology / Sir Sandford Fleming College, Lindsay, ON

Certifications/Courses

- Ontario Wetland Evaluation Training Course, 2004.
- Ecological Land Classification for Southern Ontario Training Course, 2005.
- Certificate of Participation: Wildlife Acoustics Bat Detector & Analysis Course, 2015.
- Ministry of Natural Resources (MNR) Butternut Assessment Course, 2009, 2014 & 2019.
- OPPI- The Planner at the Ontario Municipal Board Seminar, 2006.