Environmental Impact Statement

1479 Centreview Road, Combermere

Prepared for

Chris LeBlanc

370 Main Street South
Guelph/Eramosa, ON N0B 2K0

June 14, 2024
Project No. P2024-827

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1. Introduction

GeoProcess Research Associates Inc. (GeoProcess) has been retained by Chris LeBlanc to complete a scoped Environmental Impact Study for the property located at 1479 Centreview Road in Combermere, Ontario. This is herein referred to as the "subject property". It is our understanding that the subject property is the proposed site of a tourist establishment/hunt camp with five cabins with associated septic and well infrastructure. The County of Hastings has identified that the subject property contains significant wildlife habitat (SWH) Deer Yard Stratum 2, triggering the requirement for a scoped Environmental Impact Study (EIS). The scope of this EIS is focused on identifying deer wintering habitat around the proposed cabin locations and any potential negative impacts from the proposed development.

1.1. Site Description

The subject property is approximately 60 ha in size, located south of Centreview Road and east of Papineau Lake near Combermere, ON. The subject property contains a residence near Centreview Road along with several outbuildings. An existing gravel driveway connects the residence and several outbuildings to the southern end of the property, the location of the proposed cabins. The southern end of the property contains an open field and a looping trail among the surrounding woodlands. The trail provides access to McCormick Lake just south of the property limit.

2. Policy Context

Applicable municipal, provincial, and federal natural heritage policies have been reviewed and used as guidance in the preparation of this EIS.

2.1. Provincial Policy Statement

The Provincial Policy Statement (PPS), 2020 is administered under Section 3 of the *Planning Act*. It became effective May 1, 2020 and replaces the 2014 PPS. The PPS applies to planning decisions made on or after that date. It provides policy direction for land use and development within the Province of Ontario and provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment. The policies of the PPS may be complemented by provincial and municipal plans and policies.

The PPS defines eight natural heritage features and provides planning polices for each, listed below. The function of Natural Heritage Features and Areas is further clarified by the definition of a Natural Heritage System, which is *"a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems."*

- Significant wetlands
- Coastal wetlands
- Fish habitat
- Significant woodlands
- Significant valleylands
- Habitat of endangered species and threatened species
- Significant Wildlife Habitat
- Significant Areas of Natural and Scientific Interest (ANSIs)

Section 2.0 and 3.0 of the PPS deal with development and site alteration, and where these activities shall not be permitted. Section 2.0 policies surround the conservation of biodiversity, and protection of the health of the Great Lakes, natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits. Section 3.0 directs development away from areas of natural or human-made hazards to mitigate risks to public health or safety, and property damage from natural hazards, including the risks that may be associated with the impacts of a changing climate.

Policies in Section 2.1 are particularly relevant as they surround development and site alteration in and adjacent to *natural heritage features*. These policies and select others are outlined below, in Table 1.

Table 1. Applicable Policies of the Provincial Policy Statement

Policy Number	Policy
(2.1 - Natural Heritage) 2.1.2	The diversity and connectivity of natural features in an area and the long-term *ecological functi*on and biodiversity of *natural heritage systems*, should be maintained, restored or where possible, improved, recognizing linkages between and among *natural heritage features and areas*, *surface water features* and *ground water features*.
2.1.3	*Natural heritage systems* shall be identified in Ecoregions 6E & 7E, recognizing that *natural heritage systems* will vary in size and form in *settlement areas, rural areas*, and *prime agricultural areas*.
2.1.4	*Development* and site alteration shall not be permitted in: a) *significant wetlands* in Ecoregions 5E, 6E and 7E; and, b) *significant coastal wetlands.*
2.1.5	Development and site alteration shall not be permitted in: a) *significant wetlands* in the Canadian Shield north of Ecoregions 5E, 6E and 7E; b) *significant woodlan*ds in Ecoregions 6E and 7E (excluding islands in Lake Huron and St. Marys River); c) *significant valleylands* in Ecoregions 6E and 7E (excluding islands in Lake Huron and St. Marys River); d) *significant wildlife habitat*; e) *significant areas of natural and scientific interest*; and f) *coastal wetlands* in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
2.1.6	*Development* and *site alteration* shall not be permitted in *fish habitat* except in accordance with *provincial and federal requirements.*
2.1.7	*Development and site alteration* shall not be permitted in *habitat of endangered species and threatened species*, except in accordance with *provincial and federal requirements*.
2.1.8	*Development* and *site alteration* shall not be permitted on *adjacent lands* to the *natural heritage features and areas* identified in policies 2.1.4, 2.1.5 and 2.1.6 unless the *ecological function* of the *adjacent lands* has been evaluated and it has been demonstrated that there will be no *negative impacts* on the natural features or on their *ecological functions*.
(2.2 - Water) 2.2.2	*Development* and *site alteration* shall be restricted in or near *sensitive surface water features* and *sensitive ground water features* such that these features and their related *hydrologic functions* will be protected, improved or restored. Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore *sensitive surface water features*, *sensitive ground water features*, and their *hydrologic functions*.
(3.1 - Natural Hazards) 3.1.1	Development shall generally be directed, in accordance with guidance developed by the Province (as amended from time to time), to areas outside of: a) *hazardous lands* adjacent to the shorelines of the *Great Lakes - St. Lawrence River System* and *large inland lakes* which are impacted by *flooding hazards, erosion hazards* and/or *dynamic beach hazards*; b) *hazardous lands* adjacent to *river, stream* and *small inland lake systems* which are impacted by *flooding hazards* and/or *erosion hazards*; and c) *hazardous sites.*
3.1.3	Planning authorities shall prepare for the impacts of a changing climate that may increase the risk associated with natural hazards

2.2. Endangered Species Act (2007)

The Endangered Species Act (ESA) (2007) provides protection to species designated as Threatened or Endangered on the Species at Risk in Ontario list (MECP 2019). The habitat of some species at risk is also protected under the ESA. Protected habitat is habitat identified as essential for life processes including breeding, rearing, feeding, hibernation and migration.

The ESA (Subsection 9(1)) states that:

"No person shall,

(a) kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species;

(b) possess, transport, collect, buy, sell, lease, trade or offer to buy, sell, lease or trade,

(i) a living or dead member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species,
(ii) any part of a living or dead member of a species referred to in subclause (i),
(iii) anything derived from a living or dead member of a species referred to in subclause (i); or
(c) sell, lease, trade or offer to sell, lease or trade anything that the person represents to be a thing described in subclause (b) (i), (ii) or (iii)."

Clause 10 (1)(a) of the ESA also states that:

"No person shall damage or destroy the habitat of a species that is listed on the Species at Risk in Ontario list as an endangered or threatened species."

An authorization or permit between the proponent and the MECP is required to authorize activities that would otherwise be prohibited by subsection 9(1) and 10(1) of the ESA.

There are three applicable regulations under the ESA, 2007; O. Reg. 230/08 - the Species at Risk in Ontario (SARO) List, O. Reg. 242/08 (General), and O. Reg 830/21 (Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut). These regulations serve to identify which species and habitats receive protection and provide direction on the current implementation of the ESA.

2.3. County of Hastings Official Plan (2017)

The County of Hastings Official Plan (herein referred to as the OP) implements the Provincial Policy Statement. The OP guides the management of land uses, infrastructure, and natural resources within the County of Hastings. Section 4.3 of the OP deals with Natural Heritage Features and Areas, including significant wildlife habitat.

In pre-consultation with the County, the County's planner noted that Significant Wildlife Habitat, particularly winter deer habitat (Deer Yard Stratum 2) is present on the subject property. Section 4.3.3.10 of the OP states the following:

a) Site alteration shall not be permitted in Stratum 1 winter habitat; b) Development and site alteration in Stratum 2 habitat shall conserve valuable conifer stands, feeding areas and movement corridors; c) Habitat assessment, by a qualified person, will be required in and within 1.5 km of Stratum 1 and Stratum 2 winter deer habitats to clarify the fine-scale boundaries and to map areas of conifer thermal cover, deciduous browse and movement corridors; d) The habitat assessment required in c) above shall be used to appropriately locate new development and site alteration including the location of buildings and driveways to ensure that no negative impacts occur; e) New lot creation shall restricted construction/development to a single detached dwelling(s) and lots having a minimum lot size of 90 metres width by 90 metres depth – for shoreline lots this shall include a minimum 90 metre shoreline width; f) Notwithstanding e) above, where winter deer habitat is restricted to a narrow fringe along the lakeshore, a minimum of 120 metres of shoreline width shall be required for new shoreline lots; g) Conifer thermal cover and deciduous browse within 30 to 50 metres of the conifer cover shall be protected within the Member Municipality's comprehensive zoning by-law by a non-development zoning such as an Environmental Protection (EP) Zone and shall not be used for access roads and driveways; and, h) Site plan approval pursuant to Section 7.5 of this Plan may provide another means to implement some of the requirements of this Section as it pertains to protecting winter deer habitat and providing sensitive development in relation thereto.

3. Methodology

The scope of this EIS has been narrowed down to focus on the assessment of potential winter deer habitat on the subject property.

3.1. Background Studies

The following background documentation and related information sources were reviewed to identify natural heritage features and constraints in the study area:

- Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO) digital mapping of natural heritage features (MNRF 2022)
- Satellite imagery (Google Earth Pro 2024)

A list of species at risk (SAR) and species of conservation concern (SOCC) with potential to occur in the Study Area was prepared by reviewing the following sources:

- Natural Heritage Information Centre (NHIC) Database, 1 km x 1 km square 18TR8225;
- Atlas of the Breeding Birds of Ontario (2022)
- Ontario Reptile and Amphibian Atlas (2022)
- Ontario Butterfly and Moth Atlas (2022)
- i-Naturalist- NHIC Rare Species of Ontario
- eBird hotspots
- Ontario Regulation 230/08 Species at Risk in Ontario List
- Provincial and federal assessments, recovery strategies, and management plans

3.2. Fieldwork

GeoProcess Research Associates conducted field studies to characterize and inventory the natural heritage features and wildlife activity of the subject property. The study area consisted of lands within a 1.5 km radius of the proposed development area on the subject property (Map 1). A summary of the fieldwork details is provided below in Table 2.

Table 2. Completed Fieldwork

Activity	Timing	Date	Staff
Vegetation Surveys	Winter	February 6, 2024	D. Hock, B. Plumb
Deer Track Survey - Drone Imagery Survey	Winter	February 6, 2024	D. Hock, B. Plumb

3.2.1. Floristic Studies

A winter inventory of vegetation was conducted on February 6, 2024. Species inventoried were limited due to deep snow. The focus of the vegetation survey was to identify deer wintering habitat which primarily focused on key tree assemblages, specifically conifer and deciduous tree communities representing thermal and browse habitats, respectively.

Species nomenclature and ranking were determined provincially by the Ministry of Natural Resources Natural Heritage Information Database (S_Ranks). Ground-based field surveys of the vegetation communities within 120 m of the proposed development were conducted with a focus on potential winter deer habitat. These surveys were conducted in tandem with aerial drone surveys for the broader 1.5 km radius around the proposed development.

Vegetation communities were mapped and described according to the Ecological Land Classification (ELC) system for Southern Ontario (Lee et al., 2008). Vegetation community boundaries were determined using desktop analysis and further refined in the field. The results of this assessment are found in Section 4.2 and Map 2.

3.2.2. Incidental Wildlife Surveys

Informal observations of wildlife were conducted and recorded during the completion of the deer wintering habitat surveys.

3.2.3. Species at Risk Screening and Assessment

An assessment and screening of potential Species at Risk was conducted for the Property based on Federal and Provincial status. Following the MECP (2019) Client's Guide to Preliminary SAR Screening, this screening was based on a review of the Natural Heritage Information Centre, the regional species list, atlases (breeding bird, butterfly and moth) citizen science databases (i.e. iNaturalist), and any additional lists provided by the MECP. The preliminary screening was submitted as a memo to sar@ontario.ca for assignment to a management biologist for review. The Species at Risk assessment results are found in Section 5.

For the purpose of the screening, SAR are defined as:

- Endangered and Threatened species that are on the Species at Risk in Ontario (SARO) list and protected by the provincial Endangered Species Act, 2007 (ESA)
- Endangered and Threatened aquatic species that are listed on Schedule 1 of the federal Species at Risk Act, 2002 (SARA) and protected by the SARA

Species of Conservation Concern (SOCC) are defined as:

- Special Concern species on the SARO list
- Endangered, Threatened and Special Concern terrestrial species listed on Schedule 1 of SARA, but not protected by the ESA.
- Species with provincial ranks of S1 to S3. Provincial ranks (S ranks) are used by the NHIC to set protection priorities for rare species and vegetation communities. They are based on the number of occurrences in Ontario and are not legal designations. Provincial S ranks are defined as follows:

  S1: Critically imperiled; usually fewer than 5 occurrences
  S2: Imperiled; usually fewer than 20 occurrences
  S3: Vulnerable; usually fewer than 100 occurrences
  S4: Apparently secure; uncommon but not rare, usually more than 100 occurrences
  S5: Secure, common, widespread and abundant
  ? S-rank followed by a "?" indicates the rank is uncertain

3.2.4. Significant Wildlife Habitat Screening and Assessment

A screening for Significant Wildlife Habitat following the Ministry of Natural Resources and Forestry Significant Wildlife Habitat Technical Guide (2000) and Significant Wildlife Habitat Criteria Schedule for Ecoregion 5E (January 2015) was conducted for the Subject Property. Potential SWH identified was assessed during the complementary field studies. The results of this assessment are found in Section 6. This was completed with the understanding that this EIS is scoped to address deer overwintering habitat.

4. Existing Conditions

4.1. General Landscape Position & Description

The subject property is located east of Papineau Lake near Combermere, ON. The majority of the site is forested with the occasional break in cover comprised of open fields that appears to have been previously used for agriculture. A field and access road connects the residence near Combermere Road to a field at the south end of the property. This field/road area is used to access the southern portions of the subject property. The proposed development area is located at the south end of the access road. McCormick Lake is located south of the subject property limit. Topography is rolling with wetland pockets located in the lowland portions, particularly on the western half of the property. A cell tower is also located at the western edge of the property limits.

4.2. Vegetation Communities

The study area is dominated by Dry-Fresh Hardwood-Hemlock Mixed Forest (FOMM3-1) with abundant red oak (*Quercus rubra*) and eastern hemlock (*Tsuga canadensis*) in the canopy and sub-canopy. Young American beech (*Fagus grandifolia*), eastern hemlock, white spruce (*Picea glauca*), and red spruce (*Picea rubens*) were common in the understory. Bedrock was noted to be relatively close to the surface based on visual observations. Soil analyses were not possible due to the presence of deep snow and frozen ground. Stands of paper birch (*Betulya papyrifera*) were abundant along the periphery of the forest clearings.

Table 3. Ecological land classification communities

ELC Code and Classification	Vegetation		Comments
FOMM3-1 Dry-Fresh Hardwood-Hemlock Mixed Forest	Ground	American beech, eastern hemlock, white spruce, red spruce	This community was dominant in the study area. Edges were dominated by paper birch and spruce species.
	Sub-canopy	Red oak, eastern hemlock, red spruce, white spruce	
	Canopy	Red oak, eastern hemlock, white spruce, red spruce	
FOCM3-2 Fresh-Moist Hemlock – White Pine Coniferous Forest	Ground	Eastern hemlock, American beech	The community was heavily dominated by eastern hemlock at all layers from ground to canopy. Large white pines were also present in the canopy.
	Sub-canopy	Eastern hemlock, white spruce, white pine	
	Canopy	Eastern hemlock, white pine.	

Vegetation communities are outlined in Map 2. The majority of the study area could be characterized as FOMM3-1 with varying concentrations of conifer and deciduous components spread throughout including conifer-dominated stands close to the lake shore (FOCM3-2).

4.3. Incidental Wildlife

Wildlife observations were limited to a group of 3-4 black-capped chickadees (*Poecile atricapillus*) which were observed during drone flights. No deer were observed while on site.

5. Species at Risk Screening

The Endangered Species Act, 2007, S.O. 2007 was passed to protect the biodiversity of Ontario by using the best available scientific, community and aboriginal traditional knowledge and the precautionary principle as its doctrine. The purpose of the Act is to identify species at risk, protect species at risk and their habitats, and to promote the recovery of species at risk and stewardship activities which assist in these goals. The Committee on the Status of Species at Risk in Ontario (COSSARO) functions to maintain an up-to-date database of information pertaining to species in Ontario and their classification. COSSARO advises the Minister of Natural Resources and Forestry, who makes and files a regulation that lists all plant and animal species classified by COSSARO as extirpated, endangered, threatened, or of special concern. This regulation is the Species at risk in Ontario List, O. Reg 230/08. Ontario Regulation 242/08 provides general policies concerning exemptions and habitat specifications for those listed species, Species at Risk (SAR).

5.1. Screening

A list of SAR and SOCC with the potential to occur in the study area (Table 4) was prepared by reviewing the following sources:

- MNRF Land Information Ontario (LIO) digital mapping of natural heritage features
- Natural Heritage Information Centre (NHIC) database (Atlas ID: 18TR8225)
- Species at Risk in Ontario (SARO) List Schedule 2 & 3
- Species at Risk Act (SARA), Schedule 1
- Ontario Breeding Bird, Butterfly, Moth, Reptile and Amphibian Atlases (Atlas Square: 18TR82)
- iNaturalist and eBird (citizen science databases)

The desktop background review identified 11 SAR that have been previously documented as occurring in the atlas square or citizen science database associated with the study area (Table 4). Observations of SAR within these squares do not necessarily represent observations within the boundaries of the Study Area.

Table 4. Screening Results

Species		Status		
Common Name	**Scientific Name**	**S_Rank**	**SARO**	**SARA**
		Birds		
Chimney Swift[2]	Chaetura pelagica	S3B	THR	THR
Evening Grosbeak[2]	Coccothraustes vespertinus	S4	SC	SC
Eastern Wood-Pewee[2]	Contopus virens	S4B	SC	SC
Barn Swallow[2]	Hirundo rustica	S4B	SC	SC
Wood Thrush[1,2]	Hylocichla mustelina	S4B	SC	THR
Bobolink[1,2]	Dolichonyx oryzivorus	S4B	THR	THR
Eastern Meadowlark[1]	Sturnella magna	S4B	THR	THR
Canada Warbler[1,2]	Cardellina canadensis	S5B	SC	THR
		Amphibians and Reptiles		
Blanding's Turtle[1]	Emydoidea blandingii	S3	THR	END
Midland Painted Turtle[1]	Chrysemys picta marginata	S4	-	SC
		Plants		
Ogden's Pondweed[1]	Potamogeton hillii X Potamogeton zosteriformis	SNA	END	END

[1] NHIC Database
[2] OBBA
[3] Ontario Reptile and Amphibian Atlas
[4] eBird Database
[5] Ontario Buttefly Atlas
[6] DFO Aquatic SAR Map
[7] iNaturalist

5.2. SAR Assessment

Based on the screening, in combination with vegetation communities and other environmental features observed during fieldwork, the following species were identified for further assessment:

Blanding's Turtle

The Blanding's Turtle was already assessed as threatened when the Endangered Species Act took effect in 2008 and a reassessment in May 2017 confirmed this status. This species usually lives in large wetlands and shallow lakes with lots of water and plants. They prefer shallow water, but it is not unusual to find them hundreds of metres from the nearest water body, especially while they are searching for a mate or travelling to a nesting site. They use culverts and roadside ditches as corridors when moving during breeding season, and from late October to the end of April they hibernate in the mud at the bottom of permanent water bodies.

The nearby McCormick Lake and wetlands in the area may provide suitable habitat for Blanding's turtles.

Canada Warbler

The Canada warbler was added to the SARO list on September 10, 2009 as a species of Special Concern. It is a small, brightly-coloured songbird with bluish-grey upperparts and tail, and yellow underparts. It has a

black forehead and sideburns which join to form a necklace of black stripes across its chest. Its breeds in deciduous and coniferous, mostly wet forest types, with a well-developed dense shrub layer. In Ontario, it primarily breeds in the Boreal Shield, extending north to the Hudson Plains, and south into the Mixedwood Plains. It is most abundant along the Southern Shield. The main threat to the Canada warbler is a reduction in forests with a well-developed shrub layer.

Potential Canada warbler habitat may be present near the wetlands west of the subject property where woodlands may be classified as wet. The woodlands in the subject property are primarily upland forests that are less likely to provide suitable habitat.

Chimney Swift

The chimney swift was listed as Threatened on the Species at Risk in Ontario list on September 10, 2009. It is an eastern species found across all of Southern Ontario. Historically the species nested on cave walls and in tree cavities of snags in old growth forest. Upon European settlement the species adapted to use chimneys and other manmade structures for nesting; this resulted in a dramatic, albeit artificial, population increase. These small birds (12-14 cm) have brown colouring with a lighter colour along the throat, long slender wings and a cigar-shaped body. It has a distinguishing acrobatic and erratic flight pattern due to its reliance on aerial insects as a primary food source. It is a flocking aerial insectivore which uses bodies of water as indicators of feeding grounds. Threats to this species are not fully understood but likely related to declines in their food source, flying insects.

The structures on site did not appear to provide appropriate habitat for Chimney Swift.

Evening Grosbeak

The evening grosbeak was listed as Special Concern on the SARO list in 2018. It is found across Canada and breeds in coniferous forests in northern Ontario as far south as Georgian Bay. During the breeding season they are usually found in open, mature mixed-wood forests dominated by fir species, white spruce, or trembling aspen. The abundance of their primary prey, spruce budworm, is a strong link to their abundance in any area. Outside of the breeding season these birds sustain themselves on seeds from firs and spruces as well as fruits from ornamental trees. Evening grosbeak are threatened by habitat loss and degradation from forestry and chemical measures to control spruce budworm.

It is possible that evening grosbeak habitat is present on the subject property. The study area is located within their breeding range and contains suitable habitat in the form of mixed forests with extensive fir and spruce stands.

Eastern Wood-pewee

The Eastern Wood-pewee was designated as Special Concern on the Species at Risk in Ontario List on June 27, 2014. An aerial insectivore forest bird, it is identified by its distinct “pee-ah-wee” song and is difficult to distinguish from related species by morphology. Individuals reach only 15 cm in length and colouring is adapted to provide camouflage within the forest setting. It is one of many forest flycatchers which partition the forest canopy into different niches of foraging habitat. The most common habitat is intermediate age to mature forest with limited understory vegetation, though it is also found along forest edges and within clearings of forests. The species is found throughout the eastern half of the continent with its northern limit located north of the Great Lakes system. Threats to the species survival are relatively unclear but may include overall land use conversion and loss of forest, a decrease in available prey, an increase in predators (urbanized squirrels and jays), and impacts related to the over-browseing of forests by White-Tailed Deer. Threats specific to migration and overwinter habitat in the south must also be considered.

The woodlands on the subject property contain intermediate-aged stands with varying densities of understory growth and may provide suitable habitat for this eastern wood-pewee.

Barn Swallow

The Barn Swallow was designated as Special Concern under the Ontario *Endangered Species Act* on January 13, 2012. It is found throughout southern Ontario and to the north as far as Hudson Bay. This species uses almost exclusively human-made structures to mount their cup-shaped nests on. Males show a glossy colouring of steel-blue on their back and breast band, while females have a pale underbelly and short tail feathers. The tail feathers form a distinctive deep fork with a line of white spots across the end. Since the

mid-1980's the population has been in decline due to causes not well understood. Modernization of buildings, especially barns, and the use of agricultural pesticides are probable threats.

Several outbuildings that may provide suitable barn swallow habitat are present on the subject property, however these structures are not proposed to be impacted.

Wood Thrush

The Wood Thrush was added to the SARO list on June 27, 2014 as a species of Special Concern. It is a medium-sized songbird, about 20 cm long – slightly smaller than the American robin and similar in shape. These birds are rusty brown on the upper parts, have white under parts and large blackish spots on the breast and sides. The Wood Thrush lives in mature deciduous and mixed (conifer-deciduous) forests. They seek moist stands of trees with well-developed undergrowth and tall trees for singing perches. These migrants fly south to Mexico and Central America for the winter. Major threats include the loss and fragmentation of forest habitat from urban, suburban and cottage development, over-browseing by white-tailed deer which decreases the number and type of plants and trees in the forest where the Wood Thrush nests, and parasitic behaviour from brown-headed cowbirds, which lay their eggs in the nests of the Wood Thrush (and other birds).

Potential wood thrush habitat may be present in the study area due to the presence of mature deciduous and coniferous trees on the subject property.

6. Significant Wildlife Habitat

Significant Wildlife Habitat (SWH) is protected as per Section 2.1 of the Provincial Policy Statement, 2014. The Significant Wildlife Habitat Technical Guide (OMNRF, 2000) aids in land use planning by providing the identification, description, and prioritisation of significant wildlife habitat in Ontario. The associated Ecoregion Criteria Schedules are used to further provide detailed criteria for assessing and confirming SWH within Ontario. This section will provide a screening in the form of a summary table followed and an assessment of the potentially or confirmed occurring SWH.

Significant (and/or sensitive) Wildlife Habitat features and functions as described within the OMNRF Significant Wildlife Habitat Ecoregion Criteria Schedule for Region 5E (OMNRF, 2015) were reviewed and evaluated for the study area. The documented groups wildlife habitat into five main categories:

- Seasonal concentration areas of animals.
- Rare vegetation communities or specialized habitats for wildlife.
- Specialized Habitat for Wildlife.
- Habitat for species of conservation concern.
- Animal movement corridors.

This EIS has been scoped to identify and evaluate deer yarding habitat (stratum 2) as per comments by the County of Hastings for the proposed development.

6.1. Screening

The results of the assessment indicated the presence of Deer Yarding Areas (Stratum 2). This was confirmed with MNRF mapping for the study area Map 2.

6.2. Significant Wildlife Habitat Survey

Approximately 4.8 ha of the southernmost portion of the subject property is designated as white-tailed deer wintering area (stratum 2) by the MNRF.

Figure 1. Example of deer tracks observed from aerial imagery analysis. The orange dotted lines highlight deer tracks.

A field study was completed to assess Deer Yarding Stratum 2 areas on the subject property as well as the surrounding area within 1.5 km of the proposed development. Winter track density surveys are one of the methods which can be used to determine which areas on the landscape deer are most often frequenting during the winter. Essentially, the greater the density of tracks (and animals) recorded in each area, the more important it is as a deer yarding area. For the purpose of this study, a track density survey was completed. This study consisted of a winter drone survey in February 2024 to identify potential deer yarding areas and movement corridors within a radius of approximately 1.5 km of the proposed development area. A site walk was also conducted within 120 metres of the proposed development to identify vegetation communities and potential deer habitat usage. This was completed during the winter months during a window between large snowfalls when deer tracks were most evident. The last major snowfall occurred 33 days prior to the date that surveys were completed, which allowed for sufficient time for deer tracks to be observed. Drones were used to capture aerial imagery of the study area. This imagery was then analyzed for potential deer tracks as well as deer habitat. Google satellite imagery was used in combination with the drone imagery in cases where imagery was distorted during processing to assist with the detection of potential deer habitat. Map 3 shows the deer tracks that were observed as a result of the survey. Track density ratings were prescribed as per the methods described by Ranta (1997). The rating system is described in Table 5.

Table 5. Track Density Rating System

Rating	Description
0	No deer tracks visible.
1	A few track aggregates or a single trail.
2	More than a few track aggregates and/or a few trails, but much of the area of forest had little or no deer activity.
3	Numerous track aggregates which may or may not be associated with major trails and much of the area had deer activity.
4	Heavily tracked area, many track aggregates, deer often visible.

Figure 2 below shows the result of the compiled drone imagery. The image is the result of hundreds of drone images compiled to produce a single image representing the study area. Note that some distortion was present in the northeast and northwest areas. Google Earth imagery was used in conjunction with the drone imagery in distorted areas to determine the presence of potential deer wintering habitat. Maps 1-4 made use of Google Earth imagery only to reduce visual confusion for the purposes of this report.

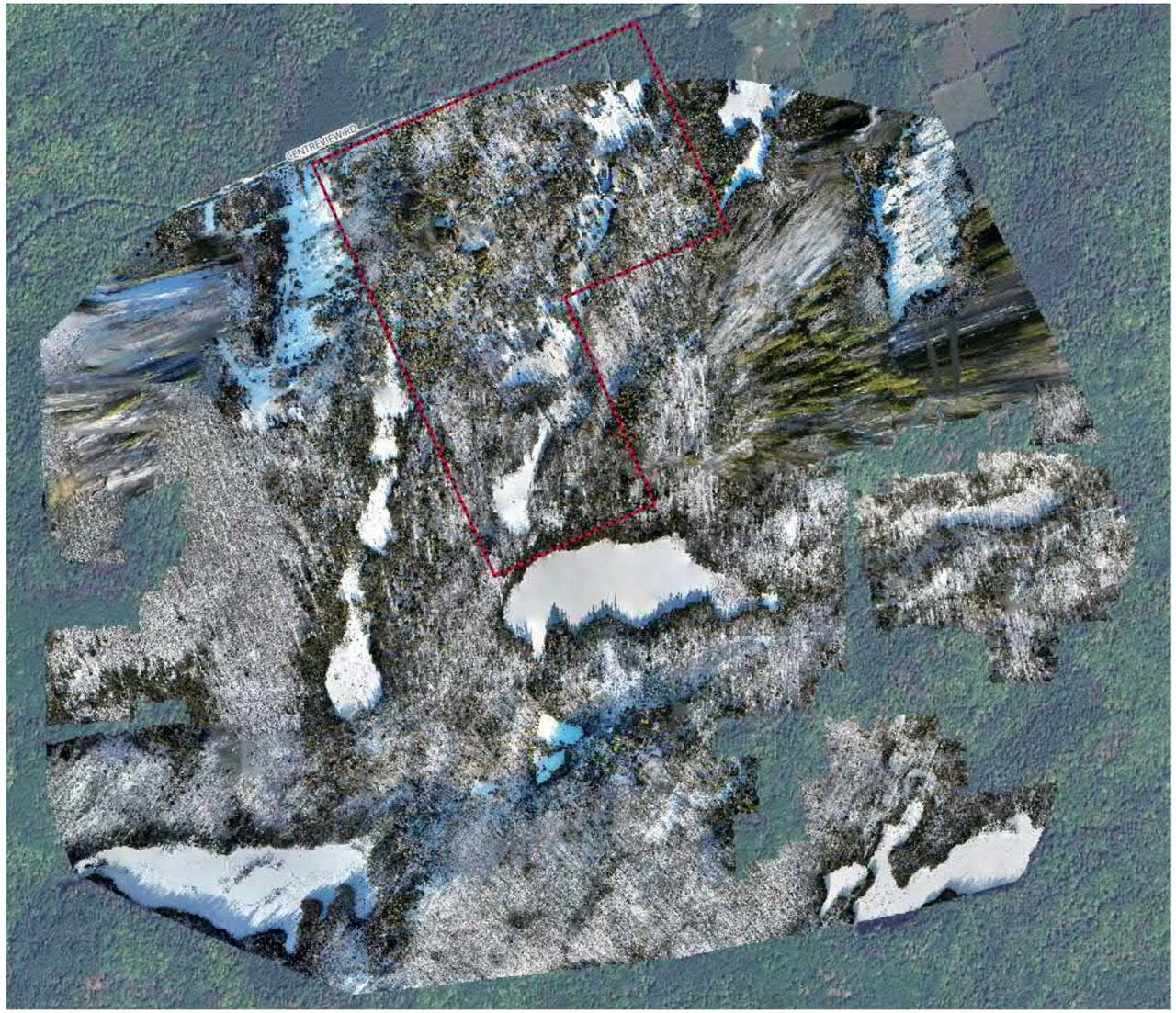

Figure 2. Compiled Drone Imagery with the Subject Property Limits Shown

6.3. Deer Track Density and Habitat Analysis

Potential deer habitat was categorized into three types as per section 4.3.3.10 of the County's official plan, including thermal cover, deciduous browse, and movement corridors. These habitat types were interpreted via ground surveys for the area within 120 m of the proposed development. Drone imagery was used to interpret deer habitat for the remaining area within 1.5 km of the proposed development.

Thermal Cover

Thermal cover consists of treed areas dominated by coniferous species such as cedar, hemlock, and spruce. These areas are used by deer to shelter from winds and cold temperatures in the winter months. Track density near stands of conifers was used to help identify potential thermal cover used by deer.

Deciduous Browse

Deciduous browse areas are made up of deciduous trees and shrubs that provide food for deer in the winter months. Desirable browse species provide low-hanging buds and may include species such as oaks, maples, and birch. Stands of deciduous trees within 30-50m of thermal cover areas were identified as potential deciduous browse areas in keeping with the County's OP Section 4.3.3.10g and the guideline material by Ranta (1997) and Voigt et. al (1997).

Movement Corridor

Movement corridors are areas that deer regularly use to move between areas of thermal cover and deciduous browse. These areas are evident by deer tracks visible in the snow. Areas containing concentrations of deer tracks with similar alignments were identified as potential movement corridors.

6.4. Deer Habitat Results

Map 3 shows the results of the aerial imagery and track density analysis. Deer track density combined with drone aerial imagery and Google satellite imagery was used to determine where deer habitat may be present in the form of thermal cover, deciduous browse, and movement corridors. Map 4 shows observed deer tracks and areas interpreted to contain potential thermal cover, browse areas, and movement corridors.

Several pockets of Rank 3 deer track density are located within 1.5 km of the proposed development, with the closest being approximately 340 m to the west of the proposed cabin site. The areas of Rank 3 track density zones were estimated to range between 9 and 46 ha in size. The largest of these Rank 3 pockets is located approximately 500 m south of the subject property. A large portion of Rank 1 habitat appears to connect several of the Rank 3 areas and acts as a movement corridor. Multiple tracks were evident near a stand of hemlock approximately 150 m north of the proposed development area adjacent to the access road. This hemlock stand may provide thermal cover due to the presence of multiple deer tracks on the southern edge of the stand (Map 4).

It should be noted that the analysis of the data gathered through visual interpretation of aerial/drone imagery is partially limited by tree cover. Deer tracks are not easily discernible via aerial imagery in dense conifer stands, which are common in the study area. Therefore, potential shelter, browse, and movement

corridor areas are interpreted based on the visibility of tracks and their convergence on areas such as conifer stands and deciduous wooded areas.

Map 4 highlights the areas that may function as thermal cover, deciduous browse, and movement corridor areas within 1.5 km of the proposed development. These areas were estimated based on two determining factors.

1. The first factor was the apparent density and alignment of tracks.
2. The second factor was the vegetation community type as interpreted using ground truthing and/or aerial imagery. Communities consisting predominantly of thermal protection species (conifers) with high track densities nearby were identified as potential thermal cover areas. Potential deciduous browse areas were delineated in deciduous treed areas within 30-50m of identified thermal cover areas. Areas dominated by deciduous vegetation with a high track density were identified as potential movement corridors.

6.4.1. Deer Wintering Habitat on the Subject Property

One potential thermal cover area is present on the subject property on the west side of the existing access road. This area is more than 120 m from the proposed development footprint. While no browse activity was observed near this thermal cover area at the time of the site visit, it is assumed that the deciduous community located within 30-50 m of the thermal cover may be used by deer as a deciduous browse area. Potential deciduous browse areas within 30-50 m of all thermal cover areas are highlighted in Map 4. The 30-50 m browse area limit reflects the County's OP policy 4.3.3.10g, which requires that potential deciduous browse areas with 30-50 m of thermal cover be protected. This thermal cover feature and its associated potential deciduous browse area were the only deer wintering habitat features observed within the subject property boundaries.

6.4.2. Deer Wintering Habitat Outside of the Subject Property

Outside of the subject property boundaries, several relatively large thermal cover areas with associated movement corridors and deciduous browse areas were identified based on track density and aerial interpretation of vegetation communities. The largest potential thermal cover, browse, and movement corridor areas are located to the south and west of the subject property, more than 500 m from the proposed development area. Two more potential thermal cover areas are also present to the east of the subject property. The closest of these potential habitats is 320 m from the proposed development area. Track density, correlating to deer activity, in these larger areas, is much higher relative to the activity observed within the subject property. This indicates that the critical deer wintering habitat is located outside of the subject property.

7. Proposed Development

The proposed site plan (Appendix A) consists of 5 cabins, including a main cabin (~135 m^2) and 4 smaller sleeping cabins (~15 m^2 each). A well and a septic system are also proposed. The existing driveway and trail loop will act as the access to all 5 structures.

Three of the proposed cabins and the proposed septic system and well are located within the wooded areas near McCormick Lake. This will require the limited removal of trees within the building footprints. It is our understanding that the woodlands surrounding the cabin footprints will be retained. An existing, looping trail is present in the wooded area with a connection to McCormick Lake. This trail will be used as the access route to the proposed cabins within the woodland. The remaining two cabins will be located within open fields to the west of the cabins that are proposed within the woodland.

Seasonal use of the cabins will primarily occur between November 4th and December 15th. The cabins will not be active following December 15th. The landowner will infrequently access the area during the winter.

8. Environmental Impact Assessment

Potential impacts of the proposed development are discussed below with a focus on deer wintering habitat stratum 2. While Species at Risk were not the focus of this report, impacts on flagged SAR and the surrounding vegetation communities in the study area were also considered.

8.1. Direct Impact Assessment

Construction activity that includes grading, servicing, and development can cause short-term direct impacts on surrounding habitats and possible local and migrating wildlife. The following potential negative impacts were considered, and appropriate mitigation measures were identified.

Table 8 presents the natural heritage components which were considered in this assessment, the proposed activity associated with that component, potential short-term and long-term impacts, recommended mitigation measures, and if any residual effects are anticipated. Potential impacts were assessed using field-collected data and secondary source information, including an overlay of the proposed site plan.

Table 6. Impact Assessment Table

Category	Feature and Function	Proposed Activity	Potential Impacts	Recommended Mitigation	Residual Effects
Short-term Impacts					
Construction Activity	Surrounding habitats	Grading, Servicing & Development	Release of dust as a result of construction activities.	Implement dust suppression measures during site grading when conditions are dry or strong winds are anticipated.	Impacts from dust to the surrounding landscape should be minimal. No residual effects expected.
Construction Activity	Surrounding habitats	Grading, Servicing & Development	Release of petroleum products or other contaminants into surrounding habitats.	To prevent contaminant runoff into the surrounding watershed, equipment maintenance and refuelling need to be controlled to prevent any discharge of petroleum products. Vehicular maintenance and refuelling should be conducted at least 30 m from the nearby lake and wetlands. Construction material, excess material, construction debris, and empty containers should be stored in one location with proper containment and spill control measures in place.	No residual effects are expected if recommended mitigation measures are followed.
Construction Activity	Local and migrating wildlife	Grading, Servicing & Development	Construction activities and movement of heavy machinery may impact the movement of amphibian or reptile species to and from McCormick Lake and the nearby wetlands, including flagged SAR species such as reptiles/amphibians.	Screen the construction area for migrating reptiles and amphibians prior to the beginning of work each day.	No residual effects are expected if recommended mitigation measures are implemented.
Construction Activity	Local and migrating wildlife	Grading, Servicing & Development	Noise from construction works on local and migrating wildlife.	Limited measures can be employed as a certain level of construction noise will occur. Limit construction	Noise impacts on wildlife present may occur. If construction activities are limited to daytime hours, minimal residual impacts on wildlife are expected.

Category	Feature and Function	Proposed Activity	Potential Impacts	Recommended Mitigation	Residual Effects
				activities at sunrise and sunset during the active spring breeding bird season.	
Natural Heritage System	Breeding Birds	Development	Nest destruction during tree removal.	The active breeding bird season is between April and September. Tree removal is to occur outside of the breeding bird window. If cutting is to occur between April and September, all trees to be cut are required to be screened for active nests by a qualified biologist. Active nests are not to be disturbed until the young have fledged the nest.	If tree cutting is limited to the months of October to March, no residual effects are expected.
Natural Heritage System (NHS): Environmental Protection	Deer Wintering Habitat (Stratum 2), movement corridors, shelter areas	Grading, Servicing and Development	Removal of trees, damage to woodland edge trees. Erosion and sedimentation release to the significant woodland.	Avoid damaging trees along the outer boundary of the development area by keeping heavy machinery outside of tree driplines where possible. Avoid construction during high-volume rain events or significant snow melts/thaws. Construction should resume once soils have stabilized to avoid risk of erosion, soil compaction, or the potential for sediment release into nearby natural features/watercourses.	The proposed development includes 5 structures and a septic facility. 2 of these structures are planned to be located in a cleared area while the remaining 3 structures and the septic facility will be located in wooded areas. Access to the structures within the wooded areas will make use of existing trails. Some tree removals will be required to accommodate the structures located within the wooded area. Minimal long-term residual impacts are anticipated due to the small area being cleared relative to the size of the larger woodland community.
Long-term Impacts					
Artificial Light	Local and migrating wildlife	Development	Light pollution.	Lights directed downward will reduce the amount of ambient light issuing from the cabins.	Minimal residual effects are expected.
Vegetation	Deer Wintering Habitat (Stratum 2), movement corridors, shelter areas	Grading, Servicing and Development	The proposed development will require the removal of trees to accommodate the property development.	Keep tree removals to a minimum. Tree removal is to occur outside of the breeding bird window. If cutting is to occur between April and September, all trees to be cut are required to be screened for active nests by a qualified biologist. Active nests are not to be disturbed until the young have fledged the nest.	The proposed development includes 5 structures and a septic facility. 2 of these structures are planned to be located in a cleared area while the remaining 3 structures and the septic facility will be located in wooded areas. Access to the structures within the wooded areas will make use of existing trails. Some tree removals will be required to accommodate the structures located within the wooded area

Category	Feature and Function	Proposed Activity	Potential Impacts	Recommended Mitigation	Residual Effects
					Minimal long-term residual impacts are anticipated if tree removals are kept to a minimum.
Natural Heritage System	Deer Wintering Habitat (Stratum 2)	Wildlife/Human Interactions	Encroachment, dumping and spread of invasive species.	Provide sufficient educational materials and/or instructions for tourists using the development to reduce dumping of waste in the surrounding habitat including the woodlands and McCormick Lake. Provide proper waste disposal containers and implement a removal plan. Limit any ornamental or other plantings to include native species only.	Minimal long-term residual impacts are anticipated if proper waste removal and educational materials are provided by the operator of the tourist establishment.

8.2. Indirect Impact Assessment

Indirect impacts are those which occur as a secondary result of the proposed activity, and not necessarily as a direct result of the activity. These are usually associated with population growth or density changes, or alterations/additions to road networks.

Table 7. Indirect Impact Summary

Impacts	Summary
Wildlife interactions with traffic	The development will result in increased vehicle traffic in the local area between November and mid-December. Signage indicating the presence of local wildlife should be displayed on the access routes to the proposed development. This signage should alert drivers to be aware of nearby wildlife such as deer, turtles, and amphibians, while driving on site.
Informal trails	It is common for informal trails to develop within natural heritage features with new development. Appropriate information should be provided to users of the development alerting them to stay on existing trails.

9. Mitigation Measures and Recommendations

Mitigation measures and recommendations have been put forward with a focus on deer wintering habitat. Species at risk habitat as well as the surrounding vegetation communities have also been considered. The implementation of these mitigation measures will help minimize impacts on the natural heritage system, including deer wintering habitat.

9.1. Specific Deer Wintering Habitat Recommendations

The *Significant Wildlife Habitat Mitigation Support Tool* (2014) published by the MNRF was consulted to help determine appropriate mitigation measures to avoid negative impacts on the deer wintering areas identified in the study area. The MNRF's first recommendation is to avoid development within the deer yarding habitat if possible. Since the proposed site plan incudes structures within deer habitat (woodlands) on site, the following recommendations are supported by the MNRF's support tool:

- Minimize the amount of habitat affected by making the development footprint as small as possible where it affects the habitat.
- Choose a site location that is at the edge of the habitat where deer activity is lowest.
- Direct activity away from core (stratum 1) cover and core feeding areas, and areas of adjacent lands offering deer the opportunity to access abundant food supplies.
- Development should not isolate core areas of a yard or large woodlots from each other or block access by deer from outside the wintering habitat. The two potential shelter areas identified on the subject property should remain connected to the woodlands to their west and north.

9.2. Species at Risk & Breeding Birds

Potential species at risk bird and reptile habitat has been identified within the study area. The nearby lake and wetlands may provide habitat for SAR. The surrounding woodlands may also provide habitat for a number of SAR birds. The following mitigation measures should be implemented to minimize impacts on SAR reptiles and breeding birds:

- Complete any tree removals outside of the breeding bird window, during the months between October and March (inclusive).
- Conduct routine sweeps of the work areas prior to beginning work to ensure that wildlife is clear of the work site.
- Prevent the introduction of waste or chemicals into the nearby lake and woodlands.

10. Summary and Recommendations

Deer track surveys were conducted to assess the significance of potential deer habitat for the subject property. Track density analysis indicates that deer make relatively light use of the subject property compared to nearby areas where track densities were much higher.

The construction of seasonal recreational-use cabins is expected to have minimal impacts on overall deer wintering habitat in the area so long as appropriate mitigation measures are implemented. In keeping with Section 4.3.3.7 of the County's OP it is recommended that tree removals be kept to a minimum. It is also recommended that construction access and subsequent recreational access should be limited to existing non-vegetated areas and trails, and that new trails are not constructed as part of the development. The proposed development area's limited size means that it is not expected to interfere with any movement corridors or isolate any deer browse or thermal cover areas, and will allow for continued access by deer to the surrounding habitat during the winter. While the proposed development includes the limited removal of trees, the removal areas were not found to support deer wintering habitat in the form of thermal cover, deciduous browse, or movement corridors.

It is our understanding that the existing access road is not currently used in the winter months and that tourist operations at the proposed development occur during the fall season between November 4th and December 15th with minimal to no activity during the winter. As per the *Forest Management Guidelines for the Provision of White-tailed Deer Habitat* by Voigt et. al (1997), deer do not typically enter deer yards in Ontario until the 3rd or 4th week in December. This timing should mitigate or eliminate the potential for disturbance to the potential thermal cover and deciduous browse area located near the access road on the subject property.

10.1. MNRF Guidelines

The MNRF's *Significant Wildlife Habitat Mitigation Support Tool* outlines mitigation measures, such as those outlined in section 9.1, that should be implemented to minimize potential impacts on winter deer habitat Stratum 2. The MNRF recommends that development within a deer yarding habitat greater than 10 km^2 should not disrupt more than 15% of the habitat area. The proposed development area for this project is divided between 5 structures spread out over an area of approximately 1.6 ha, while the area of SWH deer

wintering habitat Stratum 2 that is associated with the subject property is more than 2,600 ha in size. The infrequent use of the cabins is expected to minimize any potential for habitat abandonment by deer that may currently make use of the area. The conifer stand that was identified as providing potential thermal cover on the subject property is not proposed to be impacted. Following construction of the proposed development, it is anticipated that deer will still be able to make use of the small pocket of thermal cover identified north of the proposed development with no change to the current use and function.

10.2. County of Hastings OP Section 4.3.3.10

Section 4.3.3.10 of the County of Hastings Official Plan provides detailed requirements that apply to proposed development or site alterations within or adjacent to winter deer habitat and are addressed below in Table 8.

Table 8. Section 4.3.3.10 Policy Conformity

Official Plan Requirement	Rationale
a) Site alteration shall not be permitted in Stratum 1 winter habitat.	No site alteration or development is proposed within Stratum 1 habitat.
b) Development and site alteration in Stratum 2 habitat shall conserve valuable conifer stands, feeding areas and movement corridors.	Conifer stands providing thermal cover, feeding areas (deciduous browse), and movement corridors have been identified to be outside of the proposed development. The proposed cabins and limited tree removals are not located within these areas.
c) Habitat assessment, by a qualified person, will be required in and within 1.5 km of Stratum 1 and Stratum 2 winter deer habitats to clarify the fine-scale boundaries and to map areas of conifer thermal cover, deciduous browse and movement corridors.	This was completed as part of this scoped EIS by an ecologist.
d) The habitat assessment required in c) above shall be used to appropriately locate new development and site alteration including the location of buildings and driveways to ensure that no negative impacts occur.	The habitat assessment followed best practices for deer habitat evaluation as recommended in deer habitat assessment procedures by Ranta (1997) and Voigt (1997). Based on these evaluation standards, the proposed development was found to have minimal impacts on deer wintering habitat that could not otherwise be mitigated.
e) New lot creation shall restricted construction/development to a single detached dwelling(s) and lots having a minimum lot size of 90 metres width by 90 metres depth – for shoreline lots this shall include a minimum 90 metre shoreline width	No new lot creation is proposed.

f)	Notwithstanding e) above, where winter deer habitat is restricted to a narrow fringe along the lakeshore, a minimum of 120 metres of shoreline width shall be required for new shoreline lots	Winter deer habitat was not identified along the shore of Lake McCormick within 120 m of the proposed development.
g)	Conifer thermal cover and deciduous browse within 30 to 50 metres of the conifer cover shall be protected within the Member Municipality's comprehensive zoning by-law by a non-development zoning such as an Environmental Protection (EP) Zone and shall not be used for access roads and driveways; and,	This policy may apply to the potential thermal cover area that was identified on the subject property on the west side of the access road. The proposed site plan does not include structures within 50 metres of this feature. The access road that exists adjacent to this feature is not proposed to be widened. It is also our understanding that the access road will not be used during deer over-wintering periods. No new access roads are proposed.

10.3. Policy Adherence Summary

The proposed site plan is expected to have no negative impacts on deer habitat due to the following conditions that will ensure that County and MNRF policies are satisfied:

1. The potential thermal cover located on the subject property, along with its associated potential deciduous browse area, will be protected.
2. No new access roads or structures are proposed within the 30-50 m potential deciduous browse areas around the thermal cover areas on the subject property.
3. The existing access road near the potential thermal cover area on the property will not be used for vehicular access during the deer overwintering period, from December 15th to the end of winter. Consequently, any deer utilizing this thermal cover will not be disturbed. Although the landowner may occasionally visit the area during winter, motorized vehicles will not make use of the road near the identified deer thermal cover during the overwintering period. This occasional access is not expected to impact the deer habitat.
4. The proposed cabins will be constructed in areas that were not identified as potential thermal cover, deciduous browse, or movement corridors.

Overall, the proposed development and seasonal use of the property as proposed in this application is not expected to negatively impact deer wintering habitat if the proposed mitigation recommendations are followed.

11. Closing

This EIS has reviewed the proposed development as it relates to the surrounding SWH winter deer habitat. Based on the proposed use, the existing deer activity in the area, and the surrounding landscape, the EIS found that the proposed development is unlikely to have measurable negative effects on the surrounding significant wildlife habitat (deer wintering habitat stratum 2) and its ecological function if suitable mitigation measures are put in place.

A summary of key Mitigation measures include the following:

- Vehicular use of the access road should be limited during the winter months beginning on December 15th.
- Conduct tree removals outside of the active breeding bird window.
- Provide signage and educational materials for visitors post-construction to minimize the impacts of human disturbance on nearby deer habitat (i.e. proper waste disposal).
- Protect the existing thermal cover and deciduous browse areas identified for the subject property.

12. References

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Environmental Impact Statement
1479 Centreview Rd, Combermere ON

Prepared for Chris LeBlanc

June 14, 2024

Prepared by:

Devin Hock
Ecologist & Water Resources Specialist

Reviewed by:

Ken Glasbergen
Senior Ecologist, Principal

Disclaimer

We certify that the services performed by GeoProcess Research Associates were conducted in a manner consistent with the level of care, skill and diligence to be reasonably exercised by members of the engineering and science professions.

Information obtained during the site investigations or received from third parties does not exhaustively cover all possible environmental conditions or circumstances that may exist in the study area. If a service is not expressly indicated, it should not be assumed that it was provided. Any discussion of the environmental conditions is based upon information provided and available at the time the conclusions were formulated.

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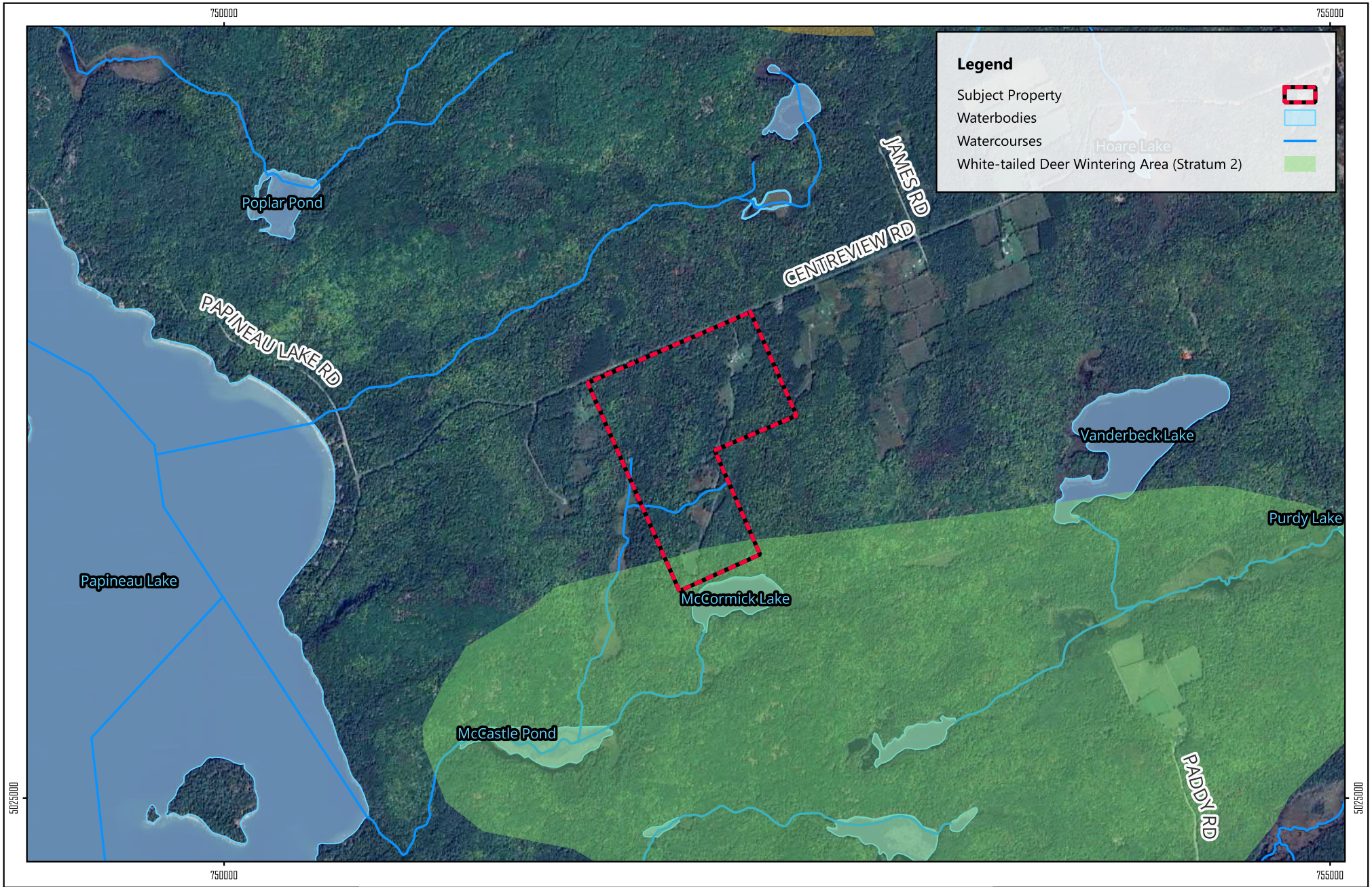
Project Number P2024-827

Maps



GeoProcess RESEARCH ASSOCIATES

CREATED BY:	DH	PROJECT NO.:	P2024-827
CHECKED BY:	KG	DATE:	Apr 16, 2024

N

0 0.5 1 1.5 2 km

NAD83 / UTM zone 17N (EPSG:26917)

Notes:
[1] Imagery from Google Earth.
[2] Limits are approximate.
[3] Watercourses and waterbodies sourced from Land Information Ontario.
[4] Deer Wintering Area from MNRF mapping.

Map 1.

Key Map

Environmental Impact Statement
1479 Centreview Road, Combermere

Chris LeBlanc

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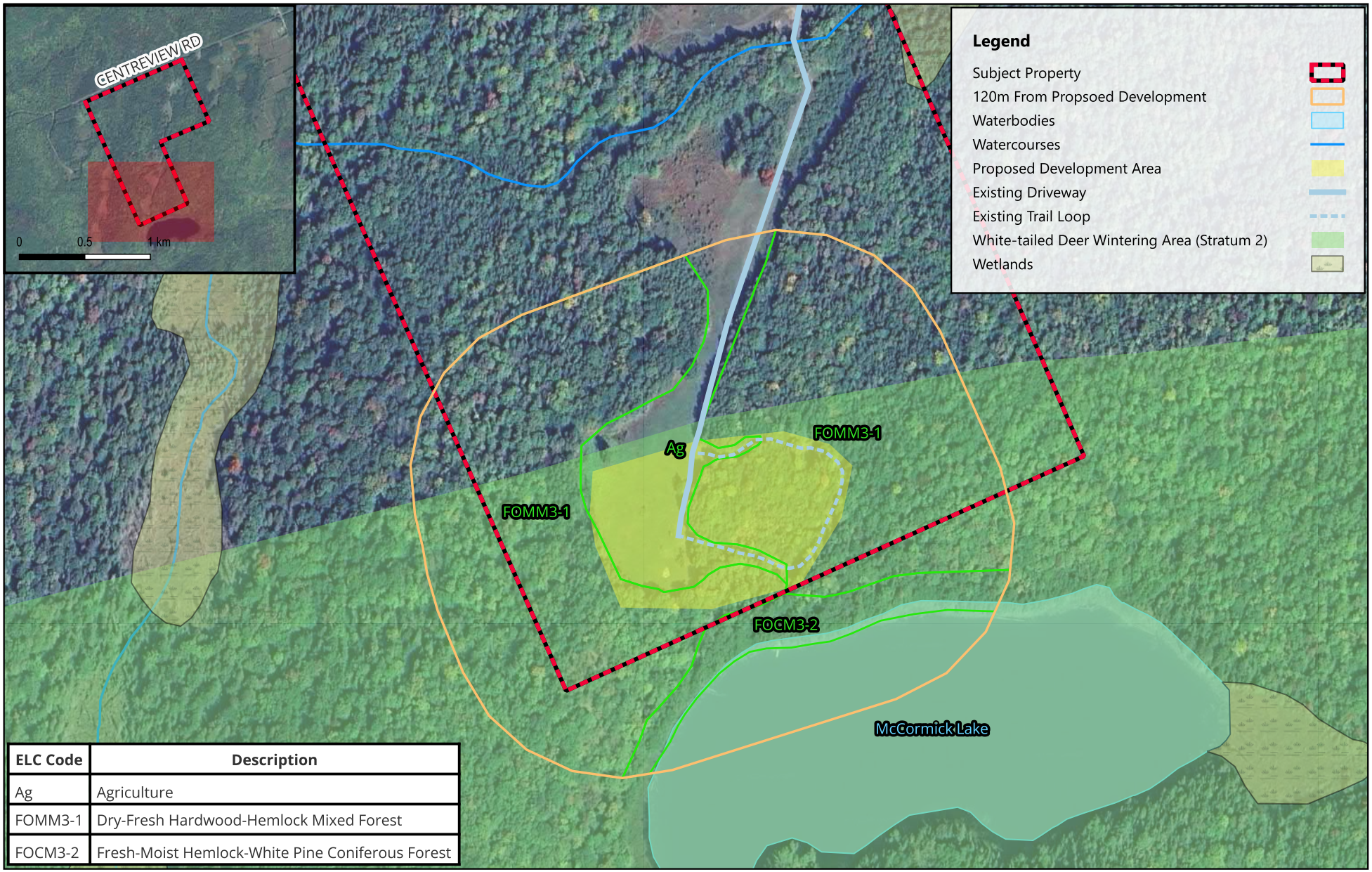

ELC Code	Description
Ag	Agriculture
FOMM3-1	Dry-Fresh Hardwood-Hemlock Mixed Forest
FOCM3-2	Fresh-Moist Hemlock-White Pine Coniferous Forest

GeoProcess RESEARCH ASSOCIATES

CREATED BY:	DH	PROJECT NO.:	P2024-827
CHECKED BY:	KG	DATE:	May 03, 2024

N

0 100 200 300 m

NAD83 / UTM zone 17N (EPSG:26917)

Notes:
[1] Imagery from Google Earth.
[2] Limits are approximate.
[3] Watercourses, wetlands, and waterbodies sourced from Land Information Ontario.

Map 2.

Existing Conditions

Environmental Impact Statement
1479 Centreview Road, Combermere
Chris LeBlanc

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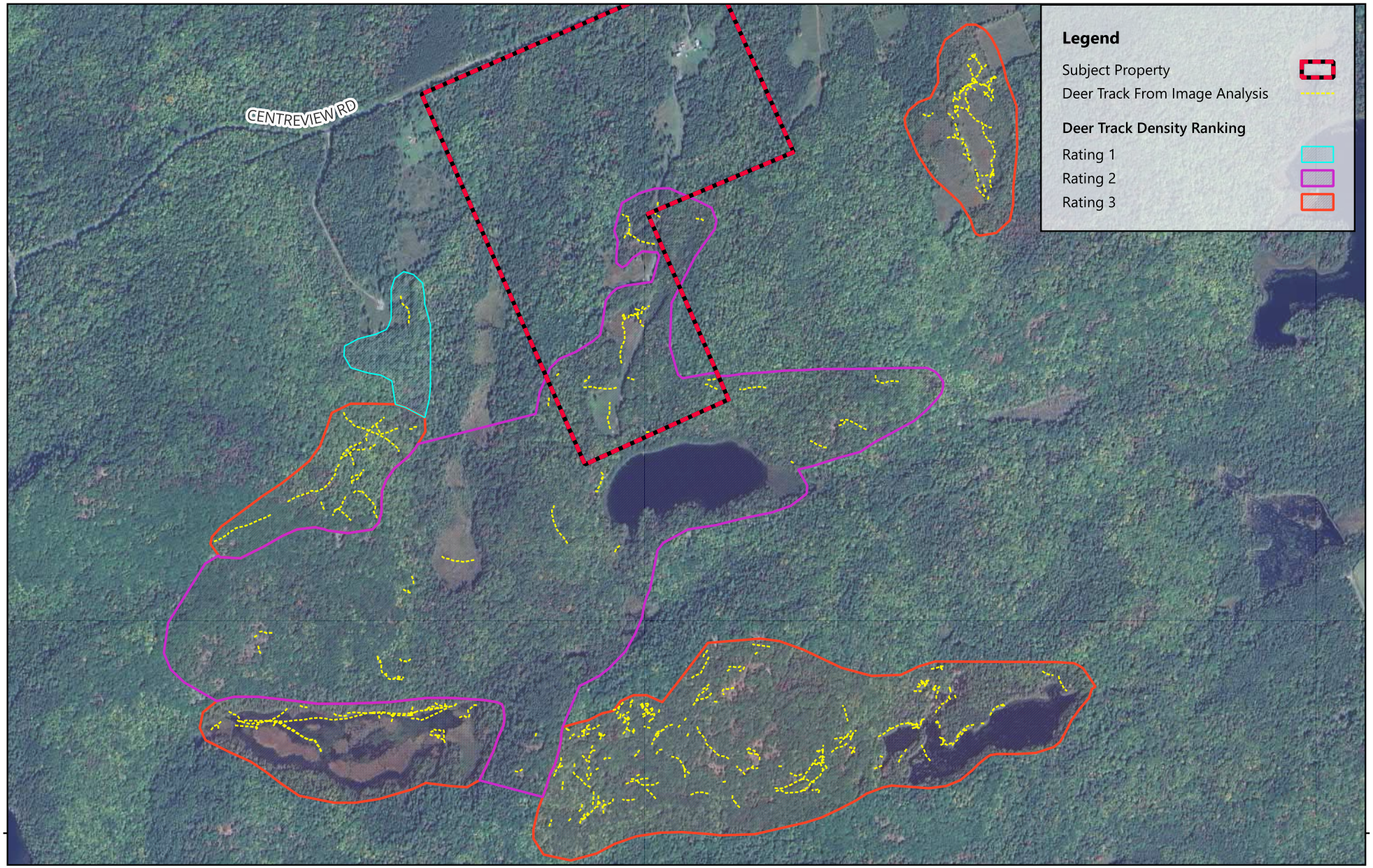

GeoProcess RESEARCH ASSOCIATES

CREATED BY:	DH	PROJECT NO.:	P2024-827
CHECKED BY:	KG	DATE:	May 03, 2024

N

0 0.25 0.5 0.75 1 km

NAD83 / UTM zone 17N (EPSG:26917)

Notes:
[1] Imagery from Google Earth.
[2] All deer tracks observed from the gathered aerial imagery are dsiplayed.

Map 3.

Deer Track Density

Environmental Impact Statement
1479 Centreview Road, Combermere

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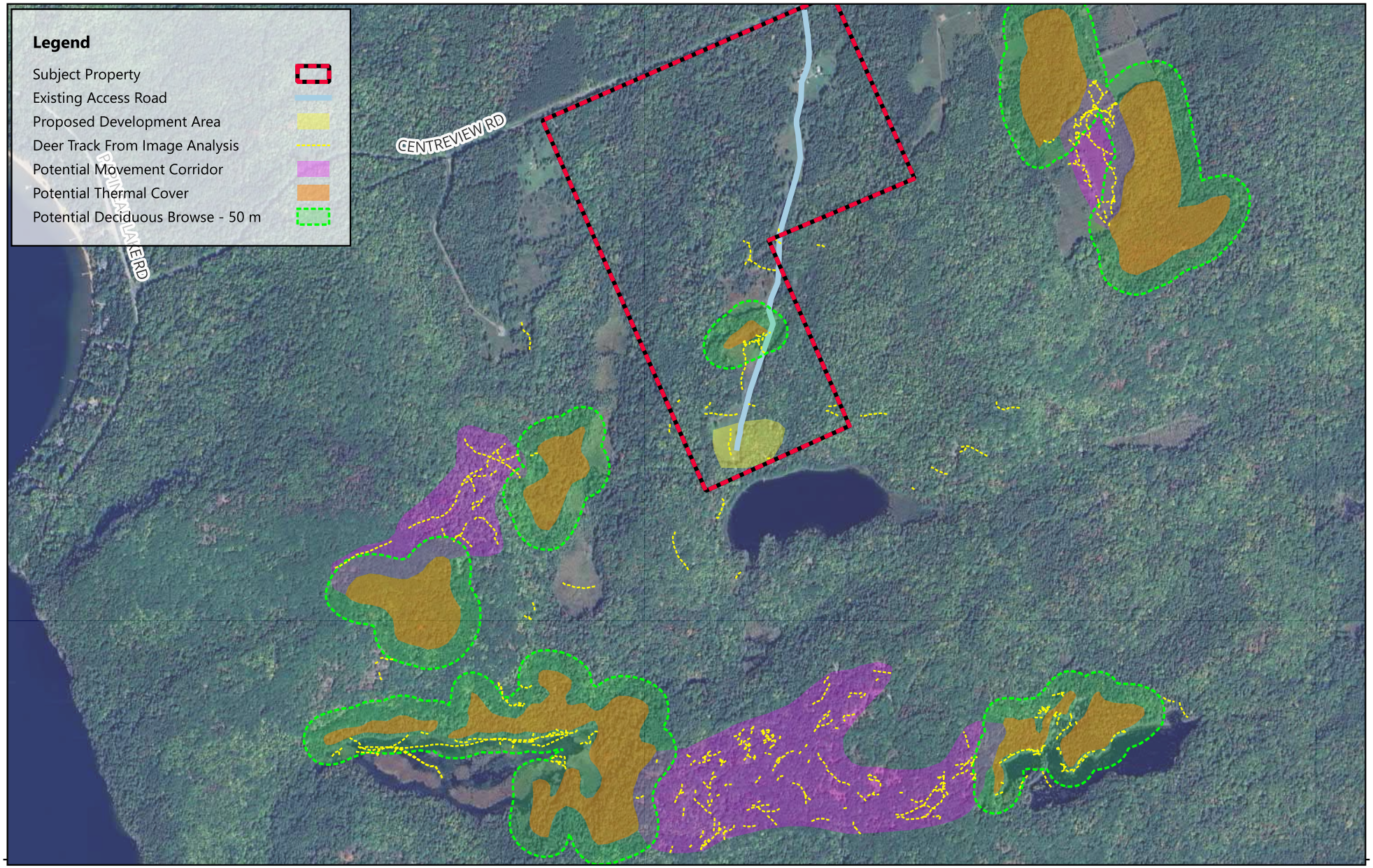

GeoProcess RESEARCH ASSOCIATES

CREATED BY:	DH	PROJECT NO.:	P2024-827
CHECKED BY:	KG	DATE:	May 03, 2024

N

0 0.25 0.5 0.75 1 km

NAD83 / UTM zone 17N (EPSG:26917)

Notes:
[1] Imagery from Google Earth.
[2] All deer tracks observed from the gathered aerial imagery are dsiplayed.
[3] The propsoed development area includes the 5 cabins proposed for consturction. Cabin consturction and tree removal will no cover this entire area.

Map 4.

Potential Deer Habitat

Environmental Impact Statement
1479 Centreview Road, Combermere

Chris LeBlanc

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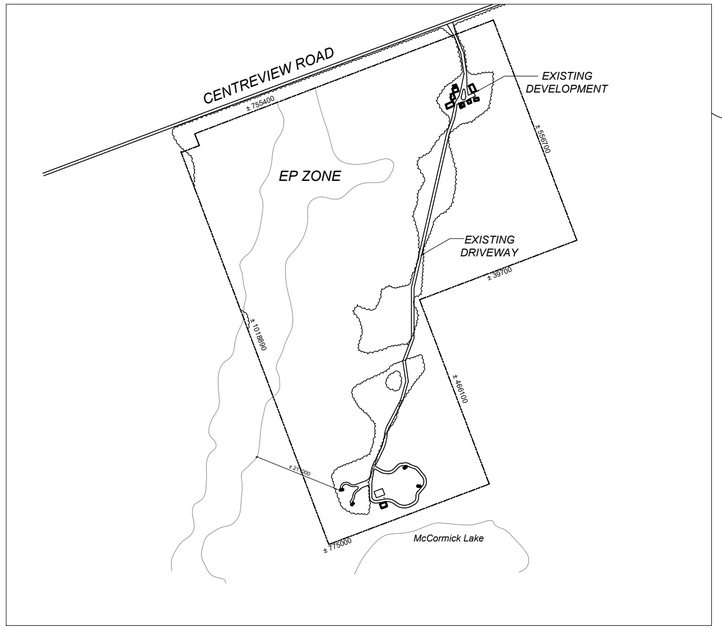
Appendix A

Proposed Site Plan



2 SP1.01

Key Plan
Scale 1:10,000

LOT STATISTICS

1479 Centreview Road, Combermere, Ontario

Zoning Designation - MA & EP
Lot Area: ± 633,5m^2 (63.34ha)

NOTE:
ALL DIMENSIONS SHOWN IN MILLIMETERS UNLESS NOTED OTHERWISE

N

EXISTING GRAVEL DRIVEWAY

PROPOSED DRIVEWAY ACCESS

PROPOSED SLEEPING CABIN 15.12 m^2

PROPOSED SEPTIC (by others)

PROPOSED WELL

PROPOSED MAIN CABIN 135.41 m^2

PROPOSED SLEEPING CABIN 15.12 m^2

PROPOSED SLEEPING CABIN 15.12 m^2

PROPOSED SLEEPING CABIN 15.12 m^2

± 167700

± 70806

± 66800

± 66600

± 37100

± 65200

McCormick Lake

1 SP1.01

Proposed Site Plan
Scale 1:800

DO NOT SCALE DRAWINGS

Note:
1) Contractor to check all dimensions, specifications, ect.on site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

2) These plans are to remain and the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3) All works to be in accordance with the Ontario Building Code.

smpl DESIGN STUDIO

Drawing Submissions:	
Date:	Type:
April 04, 2023	Re-Zoning

Hunt Camp
1479 Centreview Road
Combermere, Ontario

Reviewed By	JT
Drawn By	HD^2

Page
SP1.01

Site Plan

In accordance with subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 19618 Firm BCIN: 31829

David Shouldice CBCO MAATO

Appendix B

Species at Risk Screening Resources

Table B 1. SAR screening resources

Screening Resource	Description
Natural Heritage Information Center (NHIC)	The Natural Heritage Information Center (NHIC), operated by the Ontario Ministry of Natural Resources and Forestry, collects, reviews, manages and distributes information on Ontario's biodiversity. Data distributed by the NHIC is used in conservation and natural resource management decision making and was a primary resource for this report. Through the NHIC Make-a-Map tool, data on species, plant communities, wildlife concentration areas and natural areas is made accessible to the public and professionals using generalized 1-kilometer grid units to protect sensitive information. The mapping interface provides current and historical occurrences of SAR within the specified grid unit. The database also identifies environmental designations which provide insight into habitat potential including wetland, areas of natural and scientific interests and woodlands.
Breeding Bird Atlas	The atlas divides the province into 10×10 km squares and then birders find as many breeding species as possible in each square. Atlassers who know birds well by song complete 5-minute "Point Counts", 25 of which are required to provide an index of the abundance of each species in a square. Data from every square are mapped to show the distribution of each species. Point count data from each square show how the relative abundance of each species varies across the province.
eBird	eBird data document bird distribution, abundance, habitat use, and trends through checklist data collected within a simple, scientific framework. Birders enter when, where, and how they went birding, and then fill out a checklist of all the birds seen and heard during the outing. eBird's free mobile app allows offline data collection anywhere in the world, and the website provides many ways to explore and summarize your data and other observations from the global eBird community. eBird hotspots that are within 1 km of the Study Area are selected for species review.
Ontario Moth Atlas	The Ontario Moth Atlas is a project of the Toronto Entomologists' Association. The atlas currently covers about 250 species from 7 of the best-known families. The atlas presently includes 62,000 records. The last update of the atlas was in April 2020. The atlas is updated at least every 3 months. Most atlas data come from iNaturalist records. However, there is some data from Chris Schmidt of Agriculture Canada, the BOLD (Barcode of Life Datasystems) project of the University of Guelph, and from other records submitted directly to the TEA. The atlas uses the same 10×10 km squares at the Breeding Bird Atlas.
Ontario Butterfly Atlas	The Ontario Butterfly Atlas is a project of the Toronto Entomologists' Association (TEA). The TEA has been accumulating records and publishing annual seasonal summaries (Ontario Lepidoptera) for 50 years, with the first edition appearing in 1969. Atlas data comes from eButterfly records, iNaturalist records, BAMONA records, and records submitted directly to the TEA. The atlas uses the same 10×10 km squares at the Breeding Bird Atlas.
i-Naturalist	i-Naturalist is a nature app that helps public identify plants and animals. Using algorithms as well as scientists and taxonomic experts' multiple observations can be identified at a research scale. This data generated by the iNat community can be used in science and conservation. The program actively distributes the data in venues where scientists and land managers can find it. I-Naturalist has a project group for (NHIC) Rare species of Ontario. GeoProcess only records observations with-in 1 km of the Study Area.
Fisheries and Ocean Aquatic Species at Risk Maps	The DFO has compiled critical habitat and distribution data for aquatic species listed under the Species at Risk Act (SARA). The interactive map is intended to provide an overview of the distribution of aquatic species at risk and the presence of their critical habitat within Canadian waters. The official source of information is the Species at Risk Public Registry. Using this map, a 1 km radius circle is outlined around aquatic features located within the Study Area.