Environmental Impact Study

Part Lot 6, Concession 3, Municipality of Dysart et al., Ontario

D.M. Wills Project Number 7543



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Peterborough

November 2023

Prepared for: Todd Emmerson





Submissions Summary

| Submission No. | Submission Title | Date of Release | Submissions Summary |
|-------------------|-------------------------------------|----------------------|-------------------------------|
| 1 | Draft Environmental Impact Study | November 16, 2023 | Draft Submission to Client |
| 2 | Final Environmental Impact Study | November 20, 2023 | Final Submission to Client |
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This report has been formatted considering the requirements of the Accessibility for Ontarians with Disabilities Act.



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Executive Summary

D.M. Wills Associates Limited (Wills) was retained by Todd Emmerson to undertake an Environmental Impact Study (EIS) to address potential impacts associated with severing two parcels of land and retaining one lot on his property (Project) at Part Lot 6, Concession 3, Municipality of Dysart et al. (Municipality), Ontario (Subject Property).

Due to the presence of various natural heritage features within 120 m of the Subject Property, which include a watercourse, unevaluated wetlands, a Provincially Significant Wetland (PSW), unevaluated woodlands, and a Deer Wintering Area, an EIS is required in order to move forward with the Project under the Municipality's Official Plan.

Potential impacts of the Project on existing natural heritage features and associated wildlife, including Species at Risk (SAR), were evaluated based on a review of publicly available resources, agency consultation, as well as on-site field investigations.

Field investigations identified the following features:

- Four unevaluated wetlands
- Two drainage features
- One confirmed SAR and various potential SAR habitats
- Two confirmed Significant Wildlife Habitats (SWH) and various candidate SWHs

In order to move forward with the Project, a number of mitigation measures are necessary, including:

- Future development must occur within the suggested building envelopes that have been created to avoid wetlands and a drainage feature, as well as their associated 30 m buffers.
- The creation of a Tree Preservation Plan (TPP) to preserve suitable trees contributing to Deer Yarding Habitat.
- Surveys conducted by a qualified biologist to confirm the Candidate SWH (Bat Maternity Colonies, Reptile Hibernaculum, and Woodland Raptor Nesting Habitat) should be conducted in the proposed area of impact. Surveys should be completed prior to the development of a site plan to confirm the presence/absence of Confirmed SWH. If the surveys suggest the presence of Confirmed SWH in the area of impact, additional mitigation may be required.
- The implementation of erosion and sediment control measures including sediment fencing around the exterior of any future work site.
- A nest sweep for all species listed on Schedule 1 of the Migratory Bird Regulations (MBR) must be conducted in the area of impact prior to any vegetation removal.
- Black Ash surveys to be conducted prior to the development of a site plan to confirm the presence/absence of this SAR species in the area of impact.



- Eastern Whip-poor-will surveys to be conducted prior to the development of a site plan to confirm the presence/absence of this SAR in the area of impact.
- Wildlife exclusion fencing (60 cm tall, hardware cloth, ¼ inch mesh or smaller) to be installed around work sites and to be maintained throughout construction.
- A breeding bird and bat timing window where vegetation must be removed outside of **April 1st to August 31st**.

In summary, Wills does not anticipate any significant negative environmental impacts associated with the Project provided the environmental mitigation measures described in this report are implemented effectively throughout the construction period.



1.0 Introduction

D.M. Wills Associates Limited (Wills) was retained by Todd Emmerson (Client) to undertake an Environmental Impact Study (EIS) to address potential impacts associated with severing two parcels of land and retaining one lot on his property (Project) at Part Lot 6, Concession 3, Municipality of Dysart et al. (Municipality), Ontario (Subject Property). See **Appendix A** for Statement of Limitation details.

Under the Municipality of Dysart et al Official Plan (2018), an ElS is required to help guide recommendations for applications for development within, or adjacent to, natural heritage features or areas. The presence of various natural heritage features within 120 m of the proposed severances, which include a watercourse, unevaluated wetlands, a Provincially Significant Wetland (PSW), unevaluated woodlands, and a Deer Wintering Area, prompted the need for the ElS.

The EIS must demonstrate that there will be no negative ecological or hydrological impacts to the natural heritage system, connectivity, and linkages associated with the site and surrounding area. The EIS should identify environmental constraints, develop appropriate setbacks, consult with regulatory agencies and identify the activities required to address project compliance with Provincial and Federal statutes and policies including, but not limited to: the *Planning Act* (R.S.O. 1995), the *Municipality* of Dysart et al Official Plan (2018), the County of Haliburton Official Plan (2017), the Migratory Birds Convention Act (S.C. 1994), the Endangered Species Act (R.O. 2007), and the Provincial Policy Statement (2020).

To meet the requirements of the EIS, Wills' biologists undertook a site visit to collect information on existing conditions. This document provides an existing conditions background review, a summary of the observations made during the site visit, describes the potential impacts of the proposed severances, and recommends measures to mitigate impacts of the Project.

1.1 Subject Property/Project Details

The Subject Property encompasses approximately 34.5 ha of land with access from Old Donald Road. The two parcels of land being severed are proposed in the north end of the Subject Property. The southern portion of the Subject Property is being retained.

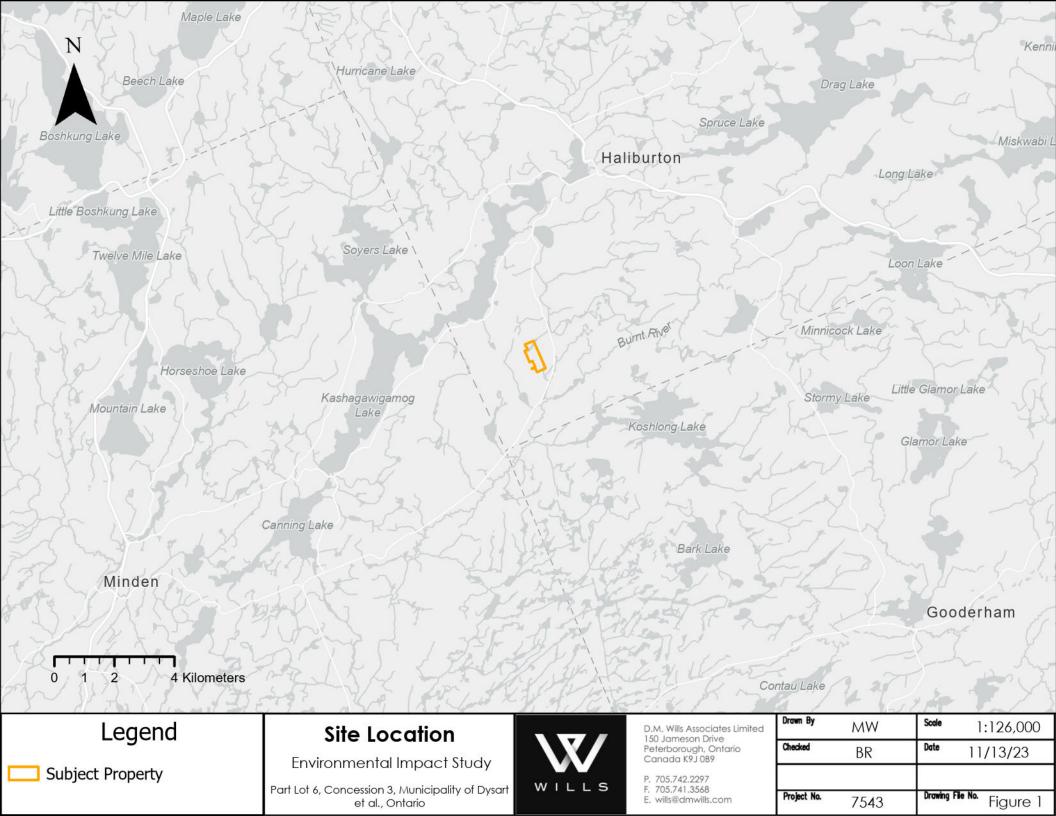
Forested areas, wetlands and a watercourse are present on the Subject Property. Old Donald Road borders the Subject Property to the west, with residential properties located to the northeast and southeast. The land adjacent to the Subject Property to the north and west is forested. In the southwestern end of the Subject Property, the Lochlin Wetland Complex PSW exists approximately 440 m from the southerly proposed severance. A watercourse is present running northeast through the northern portion of the Subject property, within the proposed severance area.

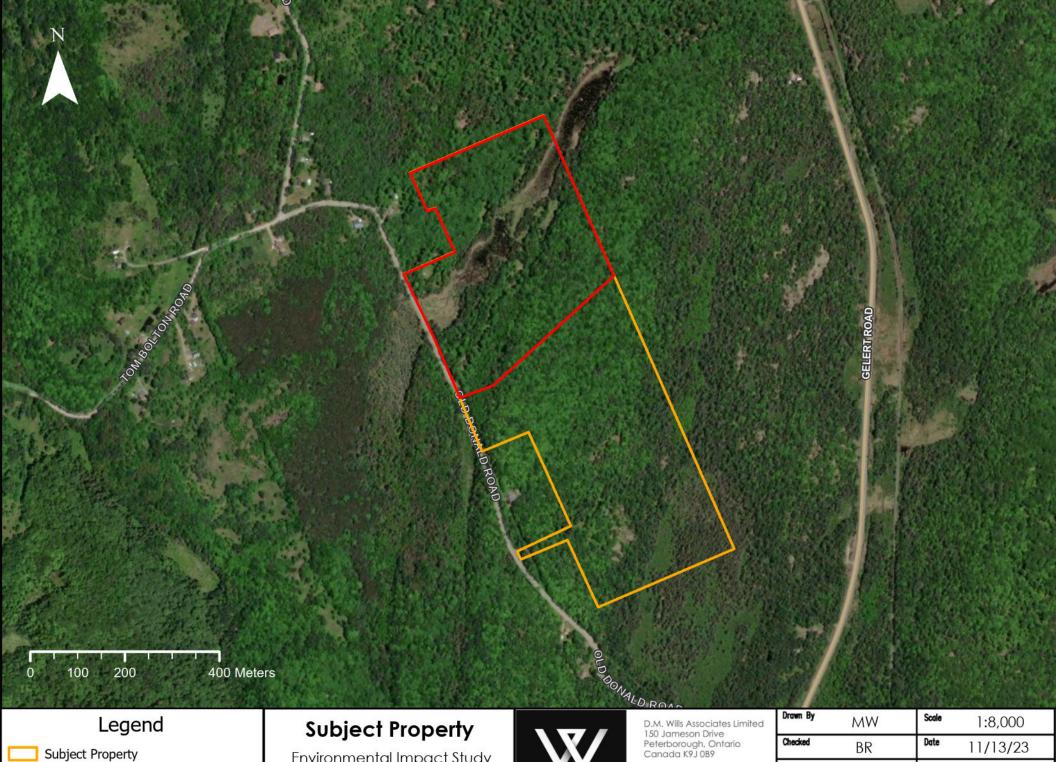


Wills understands that the Client wishes to sever two lots (approximately 8.76 ha for the northern severance and 6.65 ha for the southern severance) while retaining the remaining 19.1 ha on the south end of the Subject Property. See **Figure 1** for the Site Location and **Figure 2** for the Subject Property and proposed severance parcels.

1.2 Project Details

The Client is proposing to sever two lots and retain one lot on his property. See **Appendix B** for Site Plan.





Subject Property

Overall Severance Boundary

Environmental Impact Study

Part Lot 6, Concession 3, Municipality of Dysart et al., Ontario



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| Drawn By | MW | Scale | 1:8,000 |
| Checked | BR | Date | 11/13/23 |
| Project No. | 7543 | Drawing F | File No. Figure 2 |



2.0 Existing Conditions

2.1 Background Review

Surrounding Land Use

Properties adjacent to the Subject Property are currently being utilized for residential purposes and undeveloped private land. The woodland on the Subject Property continues to the north, west, and south. The watercourse in the northern end of the Subject Property continues to the northwest and into an unevaluated wetland to the southeast (across Old Donald Road). The PSW in the southwestern end of the Subject Property continues to the south.

Designated Areas

A review of the Ministry of Natural Resources and Forestry (MNRF) natural heritage/resources data obtained through the Natural Heritage Information Centre (NHIC) database was completed to identify the presence or absence of any natural heritage features identified under the Provincial Policy Statement (2020) as well as other features of local or federal interest including Federal Parks, Environmental Sensitive Landscapes or Areas, such as significant woodlands, locally significant wetlands or otherwise natural heritage features identified for conservation. A copy of the NHIC data map is located in **Appendix C**.

A summary of the results of the database searches is outlined below.

Areas of Natural and Scientific Interest

No Areas of Natural and Scientific Interest (ANSI) were identified on the Subject Property. One ANSI, (Earth Science, Complex Drumlins) was identified on neighbouring lots to the west and to the south of the Subject Property. The ANSI is approximately 160 m to the west of the proposed severance and approximately 40 m to the south of the retained lands.

Conservation Reserves

No Conservation Reserves are located on, or within 120 m of the Subject Property.

Provincial Parks

No Provincial Parks are located on, or within 120 m of the Subject Property.

Significant Wildlife Habitat

Municipality of Dysart et al. mapping indicates that a Stratum 2 Deer Wintering Area exists throughout the western portion of the Subject Property. Results of Deer Yard Assessment can be found in **Section 2.2**.



Provincially Significant Wetlands

A PSW was identified on the Subject Property. The PSW is the Lochlin Wetland Complex located in the southeastern corner of the Subject Property. This PSW consists of a 9.96 ha swamp with approximately 2.29 ha occurring on the proposed retained portion of the Subject Property. This PSW is located approximately 440 m away from the proposed severance parcels.

Woodlands

NHIC mapping indicates woodlands as being present throughout the Subject Property.

Other Wetlands

An unevaluated wetland makes up approximately 0.56 ha of the Subject Property. The wetland is located along the approximate centre of the overall severance boundary of the Subject Property. This wetland originates across Old Donald Road to the southwest and becomes a small waterbody that extends outside the Subject Property to the northeast eventually draining into a watercourse.

Soils

The Subject Property falls within Ecoregion 5E (Georgian Bay), a region located on the southern edge of the Precambrian Shield. The topography is bedrock controlled mostly consisting of migmatitic gneisses and felsic igneous rocks. Areas with variable depths of morainal till are common and glaciofluvial deposits are also associated with large river valleys and outwash deposits. (Wester et al., 2018).

Hydrology/Topography

It is anticipated that surface water on the proposed severance parcels flows from the elevated ridges in the north and south towards the low laying wetland located in the approximate center of the overall severance boundary. The topography peaks at 375 metres above sea level (masl) in the northwest corner of the north severance parcel and peaks at 376 masl along the south border of the south severance parcel. The landscape slopes from these peaks and their associated ridges to the central wetland where the elevation is approximately 350 masl. The area of the proposed severance has an elevation change of approximately 25 m.

Fish Habitat

Using the Aquatic Resource Area Polygon Segment tool, the MNRF watercourse database, one tributary was identified within the Subject Property. The tributary was identified as an unknown thermal regime which is located in the northern section of the Subject Property and crosses northeast into the adjacent property. It continues flowing generally northeast until it enters Barnum Creek. Fish ON-Line, the MNRF fisheries database, did not provide any fisheries information for the one tributary and consultation with the MNRF did not identify any species-specific information. This



tributary is directly connected to the large wetland that is present on the Subject Property which is also anticipated to provide fish habitat.

Significant Wildlife Habitat (SWH)

In accordance with the Provincial Policy Statement (2020) and the MNRF's Significant Wildlife Habitat Technical Guide (2000), SWH is generally defined as areas where wild mammals, birds, reptiles, amphibians, fishes, invertebrates, plants, fungi, algae, bacteria and/or other wild organisms live, and find adequate amounts of food, water, shelter, and space needed to sustain their populations, and where areas are considered ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or Natural Heritage System. Specific wildlife habitats of concern may include:

- 1. Seasonal Concentration Areas of Animals;
- 2. Rare Vegetation Communities or Specialized Habitats;
- 3. Habitat of Species of Conservation Concern; and,
- 4. Animal Movement Corridors.

Stratum 2 Deer Wintering Area was identified through background review. A Deer Yard Assessment was completed by Wills' biologists on January 31, 2023. On-site Deer Yard Assessment results can be found in **Section 2.2**.

Based on the NHRM guidelines, a SWH assessment is recommend due to the presence of Stratum 2 Deer Wintering Area found through background review.

2.2 Field Investigations

The scope of work for the field investigations was outlined by the County of Haliburton (see **Appendix D** for correspondence records). Field investigations took place on January 31, 2023, April 13, 2023, May 23, 2023, May 31, 2023, June 13, 2023, and June 19, 2023 to evaluate existing ecological conditions within the Subject Property. The field investigations included the following surveys:

- A deer yard assessment was completed on January 31, 2023.
- Ecological Land Classification (ELC) was assessed on May 31, and June 13, 2023.
- A breeding bird survey, in general accordance with OBBA standard procedures and protocols. Field investigations took place on May 31, and June 13, 2023.
- Amphibian call surveys completed in general accordance with the Marsh Monitoring Program (MMP) standard procedures and protocols. Field investigations took place on April 13, May 23, and June 19, 2023.
- Confirm presence/absence of hydrological features (wetlands, watercourses, seeps, springs) and delineate their boundaries on June 13, 2023;
- Incidental wildlife and wildlife habitat observations were completed (auditory, visual, tracks, scat, burrows, nests, etc.) throughout the Subject Property after



breeding bird surveys, with particular attention to any species of conservation concern noted to be present within the area.

SAR Assessment.

A photographic record to support field investigations is located in **Appendix E**.

2.2.1 Deer Yard Assessment

Correspondence received from the County of Haliburton confirmed that the Subject Property is located within Stratum 2 Deer Wintering Habitat.

Stratum II areas include agricultural lands or deciduous/mixed forests where White-tailed Deer (Odocoileus virginianus) congregate before moving into the core area, when winter conditions are more severe. Congregation areas are typically greater than 100 hectares, though conifer plantations less than 50 hectares may also be used. In areas where deer populations are high and there are large yards distributed across the landscape, a small wintering area may not be significant (Voigt et al., 1992).

Methodology

An assessment of available Stratum II Deer habitat was completed by Wills staff within the Subject Property following general methodology identified in the Deer Habitat Assessment 101 document (MNRF). One site visit was completed on January 31, 2023, to document existing conditions. Wills staff assessed twelve 10 m diameter plots within the Subject Property in order to complete a 2% inventory cruise of the Subject Property.

Sample plots were chosen at random within each of the ELC communities identified via aerial imagery. Figure 4 shows the location of each of the 12 plots within the Subject Property. Information collected at each plot included a tally of all trees by species and classification of trees into class sizes (pole [10 to 24 cm diameter], small saw [26 to 36 cm diameter] and medium saw [38 to 48 cm diameter]). Additional information recorded at each plot included GPS coordinates, representative photographs, and evidence of habitat use by deer. This information was reviewed in combination with information collected during the ELC assessment which captured canopy, subcanopy, understorey and ground level vegetation covers. Results of the survey plots identified canopy cover and composition to range from 20% to 90% and included typical Maple Hardwood Forest ELC community types for this region of Ontario. It should be noted that some portions of the Maple Hardwood communities had portions where a higher density of coniferous trees were present. A tally of stem densities showed that areas without a high proportion of coniferous tree species in the canopy layer had a greater density of browse as shown by the density of stems with a diameter at breast height (dbh) of less than 10 cm. The areas dominated by conifer stands had little to no browse but would provide areas of low snow depth for deer movement throughout the winter. The Subject Property is consistent with typical Stratum II habitat; however, there are adequate areas for development along the northern and central portions of the Subject Property where existing cleared/maintained driveways with little available browse species are available.



See **Appendix E** for a photograph of a typical sample plot on the Subject Property.

2.2.2 Ecological Land Classification

Ecological Land Classification (ELC) mapping of the Subject Property was completed using the *Ecosites of Ontario - Draft* (Ecological Working Group, 2009). From this, **Figure 3** and **Table 1** were created.

Six ELC units were identified within the Subject Property:

1. Intolerant Hardwood Swamp (G130Tt)

The canopy is comprised primarily of Black Ash (Fraxinus nigra) with Eastern White Cedar (Thuja occidentalis), Balsam Fir (Abies balsamea), Red Maple (Acer rubrum), White Elm (Ulmus americana), and White Birch (Betula papyrifera) interspersed. The subcanopy contains Mountain Maple (Acer spicatum), Balsam Fir (Abies balsamea), White Elm (Ulmus americana), Black Ash (Fraxinus nigra) and Red Maple (Acer rubrum) while the understorey is comprised of Sedge species (Carex spp.), Aster species (Symphyotrichum spp.), Lady Fern (Athyrium filix-femina), and Sensitive Fern (Onoclea sensibilis). The ground layer contained Spotted Jewelweed (Impatiens capensis), Feather Mosses, Sensitive Fern (Onoclea sensibilis), Dwarf Raspberry (Rubus pubescens), Wood Nettle (Laportea canadensis), and Sedge Species (Carex spp.).

2. Dry to Fresh, Coarse: Maple Hardwood (G058Tt)

The canopy is dominated by Sugar Maple (Acer Saccharum) with American Basswood (Tilia americana), Green Ash (Fraxinus pennsylvanica), and Balsam Fir (Abies balsamea) interspersed. The subcanopy contains mainly Sugar Maple (Acer Saccharum) with Balsam Fir (Abies balsamea) and scattered Striped Maple (Acer pensylvanicum). The sparse understorey is comprised of Ironwood (Ostrya virginiana), Leatherwood (Dirca palustris), Wild Sarsaparilla (Aralia nudicaulis), various Grass species (Poacea spp.), and Intermediate Wood Fern (Dryopteris intermedia). The equally sparse ground layer contains various Grass species (Poacea spp.), Canada Mayflower (Maianthemum canadense), Starflower (Lysimachia borealis), Intermediate Wood Fern (Dryopteris intermedia), Trillium species (Trillium spp.), and Marginal Wood Fern (Dryopteris marginalis).

This community contains a small wetland ecoelement which drains into the G141N ecosite to the south through a drainage feature. This small ecoelement consists of a Sugar Maple (Acer Saccharum) and Black Ash (Fraxinus nigra) canopy with a Sugar Maple and Balsam Fir (Abies Balsamea) subcanopy. The understory contains Black Ash (Fraxinus nigra), Sugar Maple (Acer Saccharum), and Striped Maple (Acer pensylvanicum) with a ground cover layer dominated by Feather Mosses, Black Ash seedlings (Fraxinus nigra), Lady Fern (Athyrium filix-femina), and Sphagnum Mosses.



3. Mineral Meadow Marsh (G141N)

The canopy is non-existent in this community. The subcanopy is very sparse and contains mainly Eastern White Cedar (*Thuja occidentalis*) and Tamarack (*Larix laricina*). The understorey is comprised of Willow species (Salix spp.), Red-osier Dogwood (*Cornus sericea*), Sweet Gale (*Myrica gale*), and Gooseberry species (*Ribes spp.*). The ground layer is the dominant layer in this community and contains various Grass species (*Poacea spp.*), various Sedges species (*Carex spp.*), various Rush species (*Juncus spp.*), Water Arum (*Calla palustris*), Northern Blueflag Iris (*Iris versicolor*), and Sensitive Fern (*Onoclea sensibilis*).

It should be noted that two drainage features contribute surface water flow directly to the G141N community. One drainage feature runs parallel to Old Donald Road and flows out of the G130Tt community. This feature is intended to flow through a culvert at the laneway entrance before flowing into the G141 community; however, this culvert was partially plugged at the time of the field investigations.

The second drainage feature was observed to flow out of the Wetland Ecoelement, located to the north of the G141N community. This feature is located on a slope that directly outlets into the G141N wetland.

4. Dry, Sandy: Maple Hardwood (G042Tt)

The canopy is dominated by Sugar Maple (Acer Saccharum) with White Birch (Betula papyrifera), Green Ash (Fraxinus pennsylvanica), Black Cherry (Prunus serotina), Eastern White Cedar (Thuja occidentalis) and Balsam Fir (Abies balsamea) interspersed. The subcanopy contains Balsam Fir (Abies balsamea) with Sugar Maple (Acer Saccharum), White Elm (Ulmus americana), Green Ash (Fraxinus pennsylvanica), and Ironwood (Ostrya virginiana). The understorey is comprised of Balsam Fir (Abies balsamea), Sugar Maple (Acer Saccharum), White Spruce (Picea glauca), Wild Raspberry (Rubus idaeus), and Green Ash (Fraxinus pennsylvanica). The ground cover layer contains various Grass species (Poacea spp.), Wild Sarsaparilla (Aralia nudicaulis), Feather Mosses, Starflower (Lysimachia borealis), Sugar Maple seedlings (Acer sccharum) and Lady Fern (Athyrium Filix-femina).

5. Organic Rich Conifer Swamp (G129Tt)

The canopy is comprised primarily of Balsam Fir (Abies balsamea) and Black Ash (Fraxinus nigra) with Eastern White Cedar (Thuja occidentalis), and White Elm (Ulmus americana) interspersed. The subcanopy which is significantly sparser than the canopy contains Balsam Fir (Abies balsamea), Black Ash (Fraxinus nigra), Eastern White Cedar (Thuja occidentalis), Green Ash (Fraxinus pennsylvanica) and White Elm (Ulmus americana). The dense understorey is comprised of Wood Nettle (Laportea canadensis), Sedge species (Carex spp.), Lady Fern (Athyrium filix-femina), Black Ash seedlings (Fraxinus nigra) and Sensitive Fern (Onoclea sensibilis). The ground layer is dominated by Golden Saxifrage and Feather Mosses, with scattered Spotted Jewelweed (Impatiens capensis), Dwarf Raspberry (Rubus pubescens), Wood Nettle (Laportea canadensis), and Bittersweet Nightshade (Solanum dulcamara).



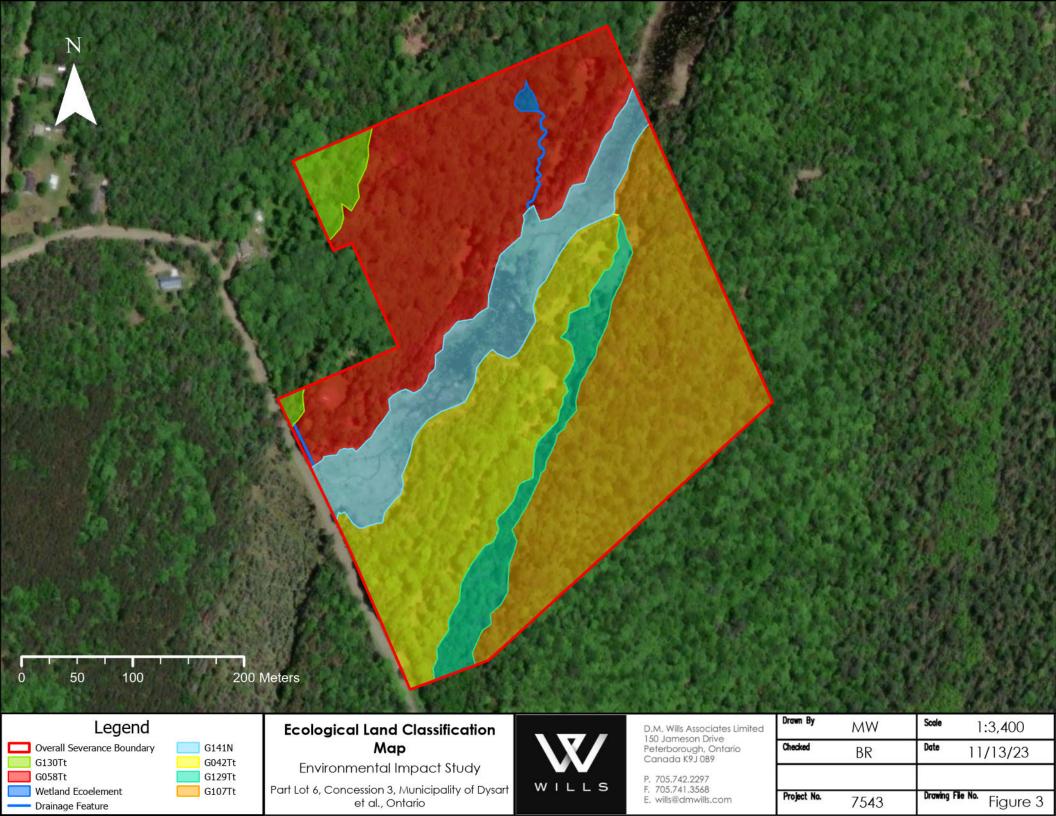
6. Fresh, Silty to Fine Loamy: Maple Hardwood (G107Tt)

The canopy is dominated by Sugar Maple (Acer Saccharum) with American Basswood (Tilia americana), Green Ash (Fraxinus pennsylvanica), Balsam Fir (Abies balsamea), and Balsam Poplar (Populus balsamifera) interspersed. The sparse subcanopy contains mainly Balsam Fir (Abies balsamea) with Sugar Maple (Acer Saccharum), Ironwood (Ostrya virginiana) and scattered White Elm (Ulmus americana). The understorey is comprised of Ironwood (Ostrya virginiana), Leatherwood (Dirca palustris), Green Ash (Fraxinus pennsylvanica), and Balsam Fir (Abies balsamea). The ground layer contains mainly Sugar Maple seedlings (Acer Saccharum), Green Ash seedlings (Fraxinus pennsylvanica), and Wild Sarsaparilla (Aralia nudicaulis), with Canada Mayflower (Maianthemum canadense), and Trillium species (Trillium spp.) interspersed.



Table 1 – Soil Auger Sample Summary

| ELC Community | Soil Auger ID | Total Auger Depth | Effective Texture | Depth of Organics | Moisture Regime | Depth (cm) to Gleys (G) or Mottles (g) | Depth to Water |
|-----------------------------------|------------------|----------------------|------------------------------|----------------------|-------------------------|--|-------------------|
| G130Tt | Auger #1 | 125 cm | fine Sandy Loam | 10 cm | Very Moist (6) | G: 30 cm g: 43 cm | 20 cm |
| G130Tt | Auger #2 | 120 cm | Silty very fine Sand | 20 cm | Very Moist (6) | G: 40 cm | 0 cm |
| G058Tt | Auger #3 | 40cm | Loam | 8 cm | Moderately Fresh (1) | n/a | n/a |
| G058Tt | Auger #4 | 60 cm | Silty Loam | 5 cm | Moderately Fresh (1) | n/a | n/a |
| G058Tt (Wetland Ecoelement) | Auger #5 | >120 cm | fine Sandy Clay | 20 cm | Moist (5) | g: 40 cm | 0 cm |
| G042Tt | Auger #6 | >120 cm | medium Sand | 4 cm | Moderately Dry (0) | n/a | n/a |
| G042Tt | Auger #7 | 82 cm | very fine Sandy Clay Loam | 7 cm | Fresh (2) | n/a | n/a |
| G129Tt | Auger #8 | >120 cm | Organic | >120 cm | Wet (8) | n/a | n/a |
| G129Tt | Auger #9 | >120 cm | Organic | >120 cm | Wet (8) | n/a | n/a |
| G107Tt | Auger #10 | 40 cm | fine Sandy Clay Loam | 5 cm | Moderately Fresh (1) | n/a | n/a |
| G107Tt | Auger #11 | 43 cm | fine Sandy Loam | 43 cm | Moderately Fresh (1) | n/a | n/a |
| G141N | Auger #12 | 45 cm | very fine Sand | 20 cm | Very Moist (6) | g: 20 cm | 20 cm |
| G141N | Auger #13 | 50 cm | Loamy medium Sand | 25 cm | Moist (5) | n/a | n/a |





2.2.3 Breeding Bird Surveys

Breeding bird surveys (Surveys) were completed on May 31 and June 13, 2023, in general accordance with OBBA standard procedures and protocols. Four listening stations were determined prior to arriving at site, as noted in **Figure 4**, following OBBA protocols. Surveys on May 31 commenced at 8:10 a.m. and at 8:00 a.m. on June 13, 2020. Audio recordings were taken at each listening station.

During the two Surveys, a total of 27 species were observed through auditory or visual cues. Eastern Wood-pewee (Contopus virens, Special Concern) and Wood Thrush (Hylocichla mustelina, Special Concern) were the only SAR observed during the Surveys. Five Eastern Wood-pewee were heard throughout the Subject Property, and one Wood Thrush was heard to the west of Old Donald Road across from the Subject Property.

Table 1 provides full details of species found during the Surveys.



Table 2 – 2023 Breeding Bird Survey Results

| | | ВВ | 801 | В | В02 | ВВ | 03 | ВВ | 04 |
|---------------------------------|---------------------------|-----------|------------|-----------|---------|--------|---------|-----------|------------|
| Common Name | Scientific Name | May 31 | June 13 | May 31 | June 13 | May 31 | June 13 | May 31 | June 13 |
| Great Crested Flycatcher | Myiarchus crinitus | | | x | | | 3 | | x |
| Swamp Sparrow | Melospiza georgiana | x | | х | 2 | | 2 | | |
| Common Yellowthroat | Geothlypis trichas | x | | | | | х | | |
| Blue Jay | Cyanocitta cristata | x | | | | Х | х | х | х |
| Scarlet Tanager | Piranga olivacea | | | | 2 | | х | | 2 |
| American Robin | Turdus migratorius | х | | х | х | х | | х | |
| Black-throated Green Warbler | Setophaga virens | x | | х | | | | х | |
| Gray Catbird | Dumetella carolinensis | | | | | | | х | |
| Black-and-white Warbler | Mniotilta varia | x | | | x | | | | х |
| Red-eyed Vireo | Vireo olivaceus | х | | х | х | х | 2 | х | |
| Yellow-bellied Sapsucker | Sphyrapicus varius | | | | | | x | | x |
| American Crow | Corvus brachyrhynchos | | | | | | | | х |
| Ovenbird | Seiurus aurocapilla | x | | х | | х | | | х |
| Eastern Wood-pewee | Contopus virens | | | х | х | х | х | х | х |
| Common Loon | Gavia immer | x | | | | | | | |



| | | ВВ | 801 | В | B02 | ВВ | 03 | ВВ | 04 |
|---------------------------|----------------------------|-----------|------------|-----------|---------|--------|---------|-----------|------------|
| Common Name | Scientific Name | May 31 | June 13 | May 31 | June 13 | May 31 | June 13 | May 31 | June 13 |
| Veery | Catharus fuscescens | | | | 2 | X | x | x | |
| Winter Wren | Troglodytes hiemalis | | | | | | x | | |
| Cedar Waxwing | Bombycilla cedrorum | x | | | | | х | | |
| Black-capped Chickadee | Poecile atricapillus | | | х | | | х | | |
| Yellow-rumped Warbler | Setophaga coronata | х | | | Х | | | | |
| Blackburnian Warbler | Setophaga fusca | | | | 2 | | х | | |
| Rose-breasted Grosbeak | Pheucticus Iudovicianus | | | x | | | | | |
| Eastern Kingbird | Tyrannus tyrannus | | | | Х | | | | |
| Hermit Thrush | Catharus guttatus | | | | | х | | х | |
| Common Raven | Corvus corax | | | | | х | | | |
| American Redstart | Setophaga ruticilla | Х | | | | | | х | |
| Wood Thrush | Hylocichla mustelina | | | | | | | _ | |



2.2.4 Amphibian Call Surveys

Amphibian Call Surveys were completed on April 13, May 23, and June 26, 2023, in general accordance with the Marsh Monitoring Program (MMP) standard procedures and protocols. The Amphibian Call Surveys took place at two Listening Stations on the Subject Property and commenced after sunset. Listening stations were strategically chosen to optimize coverage while preventing overlap of species calls; see **Figure 4**. Amphibian Call Surveys were conducted based on auditory cues for mating purposes, with incidental visual observations noted as well. Spring Peepers (*Pseudacris crucifer*), and Gray Tree Frogs (*Hyla versicolor*) were observed on the Subject Property during the Amphibian Call Surveys. One Green Frog (*Lithobates clamitans*) was observed to the west of the Subject Property across Old Donald Road from the ACS2 during the Amphibian Call Survey on June 26, 2023.

2.2.5 Hydrology/Topography

A drainage feature is present in the northeast corner of the northernmost proposed severance. It is anticipated that this feature carries surface water runoff in the spring from a small, vernal pool wetland on top of the ridge to the north into the larger wetland feature to the south. This feature was delineated by a Wills biologist. See **Figure 3** for the location of the drainage feature. A small culvert currently exists immediately upstream of the G141N community that conveys water in the drainage feature underneath a maintained trail/driveway.



Overall Severance

Boundary

Amphibian Call Survey Station

Breeding Bird Survey Station

Deer Yard Assessment Plot

Amphibian Call Survey Map

Environmental Impact Study

Part Lot 6, Concession 3, Municipality of Dysart et al., Ontario



D.M. Wills Associates Limited 150 Jameson Drive Peterborough, Ontario Canada K9J 0B9

P. 705.742.2297 F. 705.741.3568 E. wills@dmwills.com

| Drawn By | MW | Scale | 1:3,400 |
|-------------|------|-----------|-------------------|
| Checked | BR | Date | 11/13/23 |
| | | | |
| Project No. | 7543 | Drawing I | File No. Figure 4 |



2.2.6 Wetland Delineation

Wills' biologists conducted a desktop review of aerial imagery within the Subject Property for wetlands using the NHIC mapping prior to the field investigation. Mapping indicated that a wetland was present throughout the central portion of the overall severance boundary as shown in **Figure 3**.

On May 31, 2023, Wills' biologists conducted a ground confirmation exercise by foot, within the Subject Property, following the Ontario Wetland Evaluation System, 2014 (OWES) standard methods for identifying wetland communities. Wills' biologists traversed the Subject Property conducting an evaluation of wetland presence/absence in the wetland polygons indicated by NHIC mapping. When a wetland was found, the boundary was delineated using a handheld Garmin GPS, marking a waypoint approximately every 5 m.

The OWES methodology involves identifying vegetation species and determining the relative abundance or "cover" of wetland indicator species versus upland vegetation species. If the vegetation community consists of greater than 50% wetland indicator species, this area is identified as a wetland. This is commonly known as the "50% wetland vegetation rule". If the percent composition of wetland indicator species is equal to that of upland indicator species, that space represents the wetland boundary. Soil augers were taken at various locations to assist in confirming wetland communities/boundaries.

Two additional wetlands were found and delineated during field investigations. One was located in the northwest corner of the Subject Property and the other in the southernmost severance parcel running approximately parallel to the wetland and watercourse listed on NHIC mapping. The wetland boundary can be seen in **Figure 3**.

2.2.7 Incidental Wildlife Observations

The following wildlife species were observed during field investigations:

- Green Frog (Lithobates clamitans)
- American Toad (Anaxyrus americanus)
- Wood Frog (Lithobates sylvaticus)
- Bullfrog (Lithobates catesbeianus) observed within the G141N community
- Mallard (Anas platyrhynchos)
- Pileated Woodpecker (Dryocopus pileatus)
- Red Squirrel (Sciurus vulgaris)



2.2.8 Migratory Bird Assessment

A screening assessment for birds identified on Schedule 1 of the Migratory Birds Regulations, 2022 (MBR), a subsection of Migratory Birds Convention Act, 1994 (MBCA), is completed below. It reviews all Schedule 1 birds and compares their known geographic range to the location of the Subject Property. If the Subject Property falls within the specific breeding range of a Schedule 1 bird, that species is included in the screening table. That species' specific nesting habitat is then compared to the existing habitat conditions found within the Subject Property to determine the area's suitability.

See **Table 3** below for all birds identified on Schedule 1 of the MBR whose range aligns with the Subject Property. Column 2 describes the number of consecutive months that a nest of each species must be vacant before it can be removed.



Table 3 - MBR Schedule 1 Screening Assessment

| Species | Nest Monitoring Requirement (in months) | Nesting Habitat Requirements | Site Area Suitability / Observation |
|------------------|--|--|---|
| Great Blue Heron | 24 | Great Blue Herons nest mainly in trees but will also nest on the ground, on bushes, in mangroves, and on structures such as duck blinds, channel markers, or artificial nest platforms. Males arrive at the colony and settle on nest sites; from there, they court passing females. Colonies can consist of 500 or more individual nests, with multiple nests per tree built 100 or more feet off the ground. Great Blue Herons live in both freshwater and saltwater habitats and forage in grasslands and agricultural fields where they stalk frogs and mammals. Most breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests (The Cornell Lab of Ornithology, 2023). | Low – No Great Blue Heron or evidence of nesting colonies detected at the time of the field investigations or during breeding bird surveys. |
| Green Heron | 24 | The male selects a secluded site within his territory, usually in a large fork of a tree or bush, with overhanging branches to conceal the nest. Green Herons use many plant species as nest sites pines, oaks, willows, box elder, cedar, honey locust, hickory, sassafras, and mangroves. The nest is usually on or over the water but may be up to a half-mile away. It may be anywhere from ground level to 30 feet off the ground (occasionally higher) (The Cornell Lab of Ornithology, 2023). | Low - No Green Heron or evidence of nests were observed at the time of the field investigations or during breeding bird surveys. |



| Pileated Woodpecker | 36 | Nest trees are typically dead and within a mature or old stand of coniferous or deciduous trees but may also be in dead trees in younger forests or even in cities. Dead trees are a valuable resource as nest sites or shelter for birds and other animals, and Pileated Woodpeckers battle for ownership with Wood Ducks, European Starlings, Redbellied Woodpeckers, Red-headed Woodpeckers, Eastern Bluebirds, and Great Crested Flycatchers. Occasionally bats and swifts share roost cavities with Pileated Woodpeckers (The Cornell Lab of Ornithology, 2023). | Moderate - One Pileated Woodpecker was observed incidentally (outside of the breeding bird surveys) during field investigations. No evidence of nests were observed at the time of the field investigations or during breeding bird surveys. |
|------------------------|----|---|--|
|------------------------|----|---|--|



2.2.9 Species at Risk Assessment

Information from the following sources was reviewed for all species of conservation concern prior to completing the field investigation to assist in assessing the area of the proposed severance for SAR.

- 1. Land Information Ontario Natural Heritage Areas database
- 2. Other SAR species identified through other data sources (OBBA, iNaturalist)

A SAR Screening Assessment was completed comparing known occurrences within the area against specific local habitat features identified during the field investigation; see **Table 4** for details.



Table 4 – Species at Risk Screening Assessment

| Species | Provincial ESA Status | Federal SARA Status | Habitat Requirements | Likelihood of Occurrence | Site Area Suitability/Observations |
|---|-----------------------|---------------------|--|-----------------------------|---|
| Bald Eagle (Haliaeetus leucocephalus) | Special Concern | Not listed | Bald Eagles nest in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. While fish are their main source of food, Bald Eagles can easily catch prey up to the size of ducks, and frequently feed on dead animals, including White-tailed Deer. They usually nest in large trees such as pine and poplar. During the winter, Bald Eagles sometimes congregate near open water such as the St. Lawrence River, or in places with a high deer population where carcasses might be found (MECP, 2021). | Low | Habitat requirements not present. Although multiple ecosites may offer scattered supercanopy trees, none are adjacent to large productive waterbodies. No nests were encountered during field investigations nor were any Bald Eagles observed or heard during the breeding bird surveys. |
| Bank Swallow (Riparia riparia) | Threatened | Threatened | Bank Swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs (MECP, 2023). | Low | Habitat requirements not observed during field investigations. No vertical faces were observed within the Subject Property. No Bank Swallows or their nests were observed or recorded during Breeding Bird Surveys. |
| Barn Swallow (Hirundo rustica) | Special Concern | Threatened | Barn Swallows often live in close association with humans, building their cup-shaped mud nests almost exclusively on human-made structures such as open barns, under bridges and in culverts. The species is attracted to open structures that include ledges where they can build their nests, which are often re-used from year to year. They prefer unpainted, roughcut wood since the mud does not adhere as well to smooth surfaces (MECP, 2023). | Negligible | Habitat requirements not present. No artificial structures suitable for nesting were observed within the Subject Property. No Barn Swallows were observed or recorded during Breeding Bird Surveys. |
| Black Ash (Fraxinus nigra) | Endangered | Not Listed | Black Ash is predominantly a wetland species found in swamps, floodplains and fens (MECP, 2023). | Medium | The G130Tt/TI, G129Tt/TI ecosites, and the wetland ecoelement within G058Tt/TI contain Black Ash. The wetland protection associated with the proposed 30m buffer described in Section 5 will provide protection to the Black Ash. The likelihood of Black Ash occurring outside the wetlands is low. |
| Blanding's Turtle (Emydoidea blandingii) | Threatened | Threatened | Blanding's Turtles live in shallow water, usually in large wetlands and shallow lakes with lots of water plants. It is not unusual, though, to find them hundreds of metres from the nearest water body, especially while they are searching for a mate or traveling to a nesting site. Blanding's Turtles hibernate in the mud at the bottom of permanent water bodies from late October until the end of April (MECP, 2021). | Medium | The G141N ecosite provides suitable shallow water habitat characterised by abundant aquatic vegetation. This ecosite has the potential to support hibernacula for this species as well as present aqua-basking and terrestrial basking opportunities. There is also potential for this species to occur in the G129Tt/Tl ecosite which may act as a suitable migratory route during nesting periods. Existing gravel driveways may provide suitable nesting substrate; however, this habitat is limited by relatively dense shade cover from the surrounding forested communities. No Blanding's Turtles were observed during field investigations, but it must be noted that species-specific surveys were not completed within the scope of this study. Mitigation measures to offset impacts described in Section 5 . |



| Species | Provincial ESA Status | Federal SARA Status | Habitat Requirements | Likelihood of Occurrence | Site Area Suitability/Observations |
|--|-----------------------|---------------------|--|-----------------------------|---|
| Bobolink (Dolichonyx oryzivorus) | Threatened | Threatened | Historically, Bobolinks lived in North American tallgrass prairie and other open meadows. With the clearing of native prairies, Bobolinks moved to living in hayfields. Bobolinks often build their small nests on the ground in dense grasses. Both parents usually tend to their young, sometimes with a third Bobolink helping (MECP, 2021). | Negligible | Habitat requirements not present. No tall grass prairies or forage crop areas were observed within the Area of Assessment. No Bobolink were observed or recorded during Breeding Bird Surveys. |
| Canada Warbler (Cardellina canadensis) | Special Concern | Threatened | The Canada Warbler breeds in a range of deciduous and coniferous, usually wet forest types, all with a well-developed, dense shrub layer. Dense shrub and understory vegetation help conceal Canada Warbler nests that are usually located on or near the ground on mossy logs or roots, along stream banks or on hummocks. It winters in South America (MECP, 2023). | Low | Habitat requirements are low. Ecosites G130Tt/Tl and G129Tt/Tl consist of wet forest types but lack a dense shrub layer. No Canada Warblers were observed or heard during Breeding Bird Surveys. |
| Chimney Swift (Chaetura pelagica) | Threatened | Threatened | Before European settlement, Chimney Swifts mainly nested on cave walls and in hollow trees or tree cavities in old growth forests. Today, they are more likely to be found in and around urban settlements where they nest and roost (rest or sleep) in chimneys and other manmade structures. They also tend to stay close to water as this is where the flying insects they eat congregate (MECP, 2022). | Negligible | Habitat requirements not present. No old growth forest with hollow trees or suitable manmade structures were observed within the Subject Property. No Chimney Swifts were observed or recorded during Breeding Bird Surveys. |
| Common Nighthawk (Chordeiles minor) | Special Concern | Threatened | Traditional Common Nighthawk habitat consists of open areas with little to no ground vegetation, such as logged or burned-over areas, forest clearings, rock barrens, peat bogs, lakeshores, and mine tailings. Although the species also nests in cultivated fields, orchards, urban parks, mine tailings and along gravel roads and railways, they tend to occupy natural sites (MECP, 2022). | Medium | Habitat requirements low. Few open areas present other than wetland ecosites. No Common Nighthawks were observed or heard during Breeding Bird Surveys. |
| Eastern Hog-nosed Snake (Heterodon platirhinos) | Threatened | Threatened | The Eastern Hog-nosed Snake specializes in hunting and eating toads, and usually only occurs where toads can be found. Eastern Hog-nosed Snakes prefer sandy, well-drained habitats such as beaches and dry forests where they can lay their eggs and hibernate. They use their upturned snout to dig burrows below the frost line in the sand where eggs are deposited (MECP, 2023). | Medium | The Subject Property provides a mix of upland and wetted forest communities which could present suitable habitat for this species. Ecosites G058Tt/Tl and G043Tt/Tl consist of dry maple forests. While no individuals of this species were encountered, toads were observed during field investigations. It must be noted that the Eastern Hog-nosed Snake is a highly cryptic species, and no species-specific surveys were conducted within the scope of this study. Mitigation measures to offset impacts are described in Section 5. |
| Eastern Meadowlark (Sturnella magna) | Threatened | Threatened | Eastern Meadowlarks breed primarily in moderately tall grasslands, such as pastures and hayfields, but are also found in alfalfa fields, weedy borders of croplands, roadsides, orchards, airports, shrubby overgrown fields, or other open areas. Small trees, shrubs or fence posts are used as elevated song perches (MECP, 2021). | Negligible | Habitat requirements not present. No tall grass prairies or forage crop areas were observed within the Area of Assessment. No Eastern Meadowlark were observed or recorded during Breeding Bird Surveys. |
| Eastern Ribbonsnake (Thamnophis sauritus) | Special Concern | Special Concern | The Eastern Ribbonsnake is usually found close to water, especially in marshes, where it hunts frogs and small fish. A good swimmer, it will dive in shallow water, especially if it is fleeing from a potential predator. At the onset of cold weather, these snakes congregate in underground burrows or rock crevices to hibernate together (MECP, 2021). | Low | Ecosite G141N consists of a marsh with various species of frogs present and potentially fish. However, no suitable hibernacula features were observed in adjacent forest communities. No |



| Species | Provincial ESA Status | Federal SARA Status | Habitat Requirements | Likelihood of Occurrence | Site Area Suitability/Observations |
|---|-----------------------|---------------------|---|-----------------------------|---|
| | | | | | Eastern Ribbonsnake were observed or recorded during field investigations. |
| Eastern Small-footed Myotis (Myotis leibii) | Endangered | Not at Risk | In the spring and summer, eastern small-footed bats will 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. These bats often change their roosting locations every day. At night, they hunt for insects to eat, including beetles, mosquitos, moths, and flies. In the winter, these bats hibernate, most often in caves and abandoned mines. They seem to choose colder and drier sites than similar bats and will return to the same spot each year. (MECP, 2023). | Medium | The forested ecosites primarily consist of intermediate to mature deciduous forest that extend beyond the Subject Property in all directions. These communities may support suitable roosting habitat for this species; however, no snag surveys or acoustic sampling programs were undertaken under the scope of this study. Therefore, it could not be confirmed whether these ecosites support habitat for Eastern Small-footed Myotis. Mitigation recommendations are provided in Section 5 . |
| Eastern Whip-poor-will (Caprimulgus vociferus) | Threatened | Threatened | The Eastern Whip-poor-will is usually found in areas with a mix of open and forested areas, such as savannahs, open woodlands or openings in more mature, deciduous, coniferous and mixed forests. It forages in these open areas and uses forested areas for roosting (resting and sleeping) and nesting. It lays its eggs directly on the forest floor, where its colouring means it will easily remain undetected by visual predators (MECP, 2021). | Medium | Habitat requirements present. Forested areas contain some open areas that may be utilized for foraging. No Eastern Whip-poor-will were observed or recorded during Breeding Bird Surveys. It should be noted that the open areas within the forested communities are due to the existing driveways that provide an opening in the forest canopy. The location of the driveways can be seen in Figure 5 . Mitigation measures to offset impacts described in Section 5 . |
| Eastern Wolf (Canis sp.) | Threatened | Special Concern | The Eastern Wolf is not restricted to any specific habitat type but typically occurs in deciduous and mixed forest landscapes. It is found to be most prevalent in areas with abundant prey, such as Beaver, White-tailed Deer and Moose along with low levels of human-caused mortality. Den sites are typically found in conifer dominated forests close to a permanent water source. Suitable soil to construct a den, such as sand, is necessary for excavation (MECP, 2023). | Low | Ecosites G058Tt/Tl, G042Tt/Tl, and G107Tt/Tl are all forested areas with the potential to support abundant prey species and are located within proximity to a permanent water source. Ecosites G042Tt/Tl, and G107Tt/Tl also have sand substrates suitable for den excavation. All these ecosites are dominated by Sugar Maple rather than conifer species. However, Eastern Wolves are not anticipated to be found this close to other residential dwellings that are present along Old Donald Road. No evidence of Eastern Wolves was observed during field investigations. |
| Eastern Wood-pewee (Contopus virens) | Special Concern | Special Concern | In Canada, the Eastern Wood-pewee is mostly associated with the mid- canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in forest stands of intermediate age and in mature stands with little understory vegetation. During migration, a variety of habitats are used, including forest edges, early successional clearings, and primary and secondary lowland (and submontane) tropical forest, as well as cloud forest. In South America in the winter, the species primarily uses open forest, shrubby habitats, and edges of primary forest. It also occurs in interior forests where tree-fall gaps are present (COSEWIC, 2012). | High | Habitat requirements present. Forested ecosites consist of deciduous intermediate to mature stands with little understory vegetation. Some forest edge areas exist along roadways and wetlands. Eastern Wood-pewees were observed/recorded during Breeding Bird Surveys. Mitigation measures to offset impacts described in Section 5 . |



| Species | Provincial ESA Status | Federal SARA Status | Habitat Requirements | Likelihood of Occurrence | Site Area Suitability/Observations |
|---|-----------------------|---------------------|---|-----------------------------|---|
| Evening Grosbeak (Coccothraustes vespertinus) | Special Concern | Special Concern | During the breeding season, the Evening Grosbeak is generally found in open, mature mixed-wood forests dominated by fir species, White Spruce and/or Trembling Aspen. Its abundance is strongly linked to the cycle of its primary prey, the Spruce Budworm. Outside the breeding season, the species depends mostly on seed crops from tree species in the boreal forest such as firs and spruces. It is also attracted to ornamental trees that have seeds or fruit, and may visit bird feeders (MECP, 2021). | Negligible | Habitat requirements not present. No mature mixed-wood forests dominated by fir species, White Spruce and/or Trembling Aspen were observed within the Subject Property. No Evening Grosbeak were observed or recorded during Breeding Bird Surveys. |
| Golden-winged Warbler (Vermivora chrysoptera) | Special Concern | Threatened | Golden-winged Warblers prefer to nest in areas with young shrubs surrounded by mature forest – locations that have recently been disturbed, such as field edges, hydro or utility right-of-ways, or logged areas (MECP, 2021). | Low | Habitat requirements limited. Disturbed shrubby areas limited to edge of gravel driveways. No Golden-winged Warblers were observed or recorded during Breeding Bird Surveys. |
| Least Bittern (Ixobrychus exilis) | Threatened | Threatened | In Ontario, the Least Bittern is found in a variety of wetland habitats, but strongly prefers cattail marshes with a mix of open pools and channels. This bird builds its nest above the marsh water in stands of dense vegetation, hidden among the cattails. The nests are almost always built near open water, which is needed for foraging. This species eats mostly frogs, small fish, and aquatic insects (MECP, 2022). | Low | Habitat requirements low. Cattail stands restricted to areas of wetlands adjacent to Old Donald Road. No Least Bitterns were observed or heard during Breeding Bird Surveys. |
| Little Brown Myotis (Myotis lucifugus) | Endangered | Endangered | Bats are nocturnal. During the day they roost in trees and buildings. They often select attics, abandoned buildings and barns for summer colonies where they can raise their young. Bats can squeeze through very tiny spaces (as small as six millimeters across), and this is how they access many roosting areas. Little brown bats hibernate from October or November to March or April, most often in caves or abandoned mines that are humid and remain above freezing (MECP, 2021). | Medium | The forested ecosites primarily consist of intermediate to mature deciduous forest that extend beyond the Subject Property in all directions. These communities may support suitable roosting habitat for this species; however, no snag surveys or acoustic sampling programs were undertaken under the scope of this study. Therefore, it could not be confirmed whether the FOD5 and FOM2 communities support habitat for Little Brown Myotis. Mitigation recommendations are provided in Section 5 . |
| Northern Myotis (Myotis septentrionalis) | Endangered | Endangered | Northern long-eared bats are associated with boreal forests, choosing to roost under loose bark and in the cavities of trees. These bats hibernate from October or November to March or April, most often in caves or abandoned mines (MECP, 2021). | Medium | The forested ecosites primarily consist of intermediate to mature deciduous forest that extend beyond the Subject Property in all directions. These communities may support suitable roosting habitat for this species; however, no snag surveys or acoustic sampling programs were undertaken under the scope of this study. Therefore, it could not be confirmed whether the FOD5 and FOM2 communities support habitat for Northern Myotis. Mitigation recommendations are provided in Section 5 . |
| Olive-sided Flycatcher (Contopus cooperi) | Special Concern | Threatened | The Olive-sided Flycatcher is most often found along natural forest edges and openings. It will use forests that have been logged or burned, if there are ample tall snags and trees to use for foraging perches. Olive-sided Flycatchers' breeding habitat usually consists of coniferous or mixed forest adjacent to rivers or wetlands. In Ontario, Olive-sided Flycatchers | Low | Habitat requirements low. Natural forage edges restricted to ecosites G058Tt/Tl, G042Tt/Tl and G107Tt/Tl where they meet ecosite G141N. Forest ecosites are mostly deciduous with some scattered Balsam Fir. No Olive-sided Flycatchers |



| Species | Provincial ESA Status | Federal SARA Status | Habitat Requirements | Likelihood of Occurrence | Site Area Suitability/Observations |
|---|-----------------------|---------------------|---|-----------------------------|---|
| | | | commonly nest in conifers such as White and Black Spruce, Jack Pine and Balsam Fir (MECP, 2022). | | were observed or heard during Breeding Bird Surveys. |
| Peregrine Falcon (Falco peregrinus) | Special Concern | Not Listed | Peregrine Falcons usually nest on tall, steep cliff ledges close to large bodies of water. Although most people associate Peregrine Falcons with rugged wilderness, some of these birds have adapted well to city life. Urban peregrines raise their young on ledges of tall buildings, even in busy downtown areas. Cities offer peregrines a good year-round supply of pigeons and starlings to feed on (MECP, 2022). | Negligible | Habitat requirements not present. No suitable habitat features for nesting were observed. The majority of Subject Property consists of dense forest canopy. No Peregrine Falcons were observed or recorded during Breeding Bird Surveys. |
| Red-headed Woodpecker (Melanerpes erythrocephalus) | Endangered | Threatened | The Red-headed Woodpecker lives in open woodland and woodland edges and is often found in parks, golf courses and cemeteries. These areas typically have many dead trees, which the bird uses for nesting and perching. This woodpecker regularly winters in the United States, moving to locations where it can find sufficient acorns and beechnuts to eat. A few of these birds will stay the winter in woodlands in southern Ontario if there are adequate supplies of nuts (MECP, 2023). | Low | Habitat requirements low. Forest edges limited to the border of G141N and forested ecosites are dominated by Sugar Maple. No open areas with dead trees were observed on the Subject Property. No Red-headed Woodpeckers were observed or recorded during Breeding Bird Surveys. |
| Rusty Blackbird (Euphagus carolinus) | Special Concern | Special Concern | The Rusty Blackbird breeds in habitats that are dominated by coniferous forest with wetlands nearby including bogs, marshes, and beaver ponds. During the winter, it is found in wet woodlands, swamps, and pond edges and often forages in agricultural lands (MECP, 2021). | Low | Habitat requirements low. Forested ecosites are dominated by Sugar Maple rather than conifer species. No Rusty Blackbirds were observed or recorded during Breeding Bird Surveys. |
| Snapping Turtle (Chelydra serpentina) | Special Concern | Special Concern | Snapping Turtles spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter, with only their noses exposed to the surface to breathe. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits (MECP, 2021). | Medium | The G141N ecosite provides suitable shallow water habitat characterised by dense aquatic vegetation and soft substrates. This ecosite also has the potential to support hibernacula for this species. There is also potential for this species to occur in the G129Tt/Tl ecosite which may provide a suitable migratory route during nesting periods. Existing gravel driveways may provide suitable nesting substrate; however, this is limited due to substantial shade being present from the surrounding forested communities. No Snapping Turtles were observed during field investigations, but it must be noted that species-specific surveys were not completed within the scope of this study. Mitigation measures to offset impacts described in Section 5 . |
| Tri-coloured Bat (Perimyotis subflavus) | Endangered | Endangered | During the summer, the Tri-colored Bat is found in a variety of forested habitats. It forms day roosts and maternity colonies in older forest and occasionally in barns or other structures. They forage over water and along streams in the forest. Tri-colored Bats eat flying insects and spiders gleaned from webs. At the end of the summer, they travel to a location where they swarm; it is generally near the cave or underground location where they will overwinter. They overwinter in caves where they typically roost by themselves rather than part of a group (MECP, 2021). | Medium | The forested ecosites primarily consist of intermediate to mature deciduous forest that extend beyond the Subject Property in all directions. These communities may support suitable roosting habitat for this species; however, no snag surveys or acoustic sampling programs were undertaken under the scope of this study. These communities may support suitable roosting habitat for this species; however, no snag surveys or acoustic sampling programs were undertaken under the scope of |



| Species | Provincial ESA Status | Federal SARA Status | Habitat Requirements | Likelihood of Occurrence | Site Area Suitability/Observations |
|---------------------------------------|-----------------------|---------------------|--|-----------------------------|--|
| | | | | | this study. Therefore, it could not be confirmed whether the FOD5 and FOM2 communities support habitat for Tri-colored Bats. Mitigation recommendations are provided in Section 5 . |
| Wood Thrush (Hylocichla mustelina) | Special Concern | Threatened | 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 birds prefer large forests but will also use smaller stands of trees. They build their nests in living saplings, trees, or shrubs, usually in sugar maple or American beech (MECP, 2023). | Medium | Habitat requirements are present within the area of the proposed severance. The G130Tt/Tl and G129Tt/Tl are moist to wet forested areas dominated by deciduous species. A Wood Thrush was recorded across Old Donald Road to the west of the Proposed Severances. No Wood Thrush was observed on the Subject Property. |



3.0 Regulatory Context

3.1 Provincial Policy Context

The Provincial Policy Statement 2020 (PPS) is a consolidated statement of the government's policies on land use planning. The PPS was issued under section 3 of the Planning Act and came into effect May 1, 2020. It replaces the PPS issued April 30, 2014.

The PPS states:

Section 2.1.4: Development and site alteration shall not be permitted in:

a) significant wetlands in Ecoregions 5E, 6E and 7E

The Subject Property is located in Ecoregion 5E. A PSW is present at the south end of the Subject Property. No development is being proposed within 30 m of this feature.

Section 2.1.5: Development and site alteration shall not be permitted in:

- b) significant woodlands in Ecoregions 6E and 7E;
- d) significant wildlife habitat;

unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

The Subject Property is located within Ecoregion 5E where an abundance of woodlands is present. Stratum 2 Deer Wintering Habitat (identified by the Municipality of Dysart et al Official Plan mapping) and various other SWHs are located on the Subject Property. Further assessment is included in Section 4. Section 5 discusses mitigation measures to offset potential impacts to the SWH found on the Subject Property.

The also PPS states:

Section 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, 2.1.6 and 2.1.7, 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 the ecological functions.

The Ontario Natural Heritage Reference Manual for the Provincial Policy Statement defines adjacent lands as:

- 120 m from PSW.
- 50 m from significant woodlands; significant valley lands; significant wildlife habitat; significant portions of habitat for threatened or endangered species, significant ANSIs.
- 30 m from fish habitat.

The assessment to meet regulatory requirements is provided in Sections 5.



3.2 County of Haliburton Official Plan (2017)

According to the County of Haliburton Official Plan (2017) Schedule A mapping, the Subject Property is designated as Rural Land Use.

The following policies apply to the Subject Property:

5.3.2 Natural Heritage

- 5.3.2.1 Local official plans may identify areas of locally significant natural heritage features and areas including wetlands, wildlife habitat, fish habitat and areas of natural and scientific interest. Locally significant areas will be protected from incompatible development and local official plans will set appropriate development standards. The policies of 5.3.2 are not intended to limit the ability of agricultural uses to continue.
- 5.3.2.2 Development and site alteration shall not be permitted on lands adjacent to natural heritage features identified in section 5.3.2.3 unless in accordance with policies of the Provincial Policy Statement 2014 and local official plans, provided that there will be no negative impacts on the natural heritage features or on their ecological functions. Through an EIS the ecological function of the adjacent land must be evaluated and it must be demonstrated that there will be no negative impacts. Existing known provincially significant natural features are shown on the schedules to this Official Plan. Locally significant features may be identified in local official plans.
- 5.3.2.3 Lands that are contiguous to a specific natural heritage feature or area are adjacent lands for the purposes of this plan. Adjacent lands include lands where it is likely that development or site alteration would have a negative impact on the feature or area. The extent of adjacent lands within the County are as follow:

Natural Heritage Feature and Area Adjacent Lands Width

(distance from the feature for considering potential negative impacts)

- a) significant wetlands 120 m;
- b) significant wildlife habitat 120 m;
- c) significant areas of natural and scientific interest life science 120 m;
- d) significant areas of natural and scientific interest earth science 50 m;
- e) fish habitat inland lake trout lake (at capacity) on the Canadian Shield 300 m; and
- f) all other fish habitat 120 m.

The above adjacent land distances shall be included in local official plans unless the municipality creates and implements an approach which achieves the same objectives.

5.3.2.4 Not all potentially significant natural heritage features have been identified within the County. A site-specific evaluation (Site Evaluation Report) should be undertaken prior to planning approvals to determine the location of natural heritage areas and features and their ecological functions under any of the following circumstances:



- a) creation of more than three lots through consent or subdivision;
- b) construction of recreational uses that require large-scale modification of terrain, vegetation or both;
- c) adjacent to watercourses, rivers, and lakes unless recent information exists at the County or local municipality;
- d) adjacent to or in wetlands;
- e) within adjacent lands as identified in the local official plans; and
- f) as identified by the County or local municipality during preconsultation; and
- g) change in land use, not including the creation of a lot, that requires approval under the Planning Act [MAH Mod 6a].

The Site Evaluation Report may lead to the requirement for an Environmental Impact Statement or other assessments or studies (Wetland Evaluation).

5.3.2.5 Where a natural heritage feature or area exists a more detailed assessment will be required to determine the location and nature of the feature and to determine if it is significant.

Due to the extent of the natural heritage features within the Subject Property, it was determined that an Environmental Impact Study would be required; therefore, a Site Evaluation Report was not necessary.

A portion of the Subject Property is proposed to be rezoned to accommodate the development of a dwelling in the future. This EIS will address all natural heritage features that were identified through background review and field investigations that are described in Section 2.0. An assessment of impacts to the various natural heritage features within the Subject Property is provided in Section 5.

3.3 Municipality of Dysart et al Official Plan (2018)

The following policies apply to the Subject Property:

5.3.4 SIGNIFICANT NATURAL HERITAGE FEATURES

5.3.4.1 Definition

Significant natural heritage features consist of the following.

- significant habitat of endangered and threatened species, identified by the Ministry of Natural Resources and Forestry (NHIC). These areas are listed in the municipal resource register described in Section 5.5. Where significant habitat of endangered and threatened species has not been comprehensively mapped or where no data is available, an EIS should be completed that also identifies appropriate measures to be undertaken to ensure that there will be no negative impacts on the natural features or the ecological functions of the habitat they support.



- critical fish habitat, which are fish spawning and nursery areas identified by the Ministry of Natural Resources and Forestry (NRVIS) or critical fish habitat identified in site evaluation reports on file with the Municipality. These areas are designated on Schedule "B". Where fish habitat has not been comprehensively mapped, all water features, including permanent and intermittent streams, head waters, seasonally flooded areas, municipal or agricultural drains, lakes and ponds will be screened by the approval authority for the presence of fish habitat. Where such fish habitat is identified or where no data is available, an EIS should be completed that also identifies appropriate measures to be undertaken to ensure that there will be no negative impacts on the natural features or the ecological functions of the habitat they support.
- provincially significant wetlands, identified by the Ministry of Natural Resources and Forestry (NRVIS). These areas are designated on Schedule "A".
- wetlands as identified on the County of Haliburton wetland mapping.
- significant wildlife habitat deer wintering areas including Stratum 1 (core area) and Stratum 2 (broader area) identified by the Ministry of Natural Resources and Forestry (NRVIS). These areas are designated on Schedule "B".
- significant wildlife habitat species of conservation concern, which are nesting sites of redshouldered hawk, great blue heron, and osprey identified by the Ministry of Natural Resources and Forestry (NRVIS). These areas are designated on Schedule "B".
- significant Areas of Natural and Scientific Interest (ANSI's), identified by the Ministry of Natural Resources and Forestry (NRVIS). When this Plan was adopted, there were no such areas in the Municipality. Any such areas identified in future will be designated on Schedule "B".

The Subject Property contains potential fish habitat, a PSW (located away from proposed severances), a drainage feature, unevaluated wetlands, Stratum 2 Deer Wintering Habitat, and other SWH. An assessment of impacts to these natural heritage features is provided in Section 5.

5.3.4.2 Where Development Not Permitted

Development and site alteration is not permitted in significant habitat of endangered and threatened species, and provincially significant wetlands.

All major development proposals in the Waterfront Area or Rural Area must accompanied by an Environmental Impact Assessment (EIS) to determine the potential habitat of endangered and threatened species. If in the course of the development application and approval process, the applicant becomes aware that the subject lands include actual or potential habitat of endangered or threatened species, the applicant will advise the Municipality and the Ministry of Natural Resources and Forestry at the earliest opportunity.

No future development will take place within 30 m of the PSW located at the southeast end of the Subject Property. Both severed parcels are towards the northwest end of the Subject Property.



5.3.4.3 Where Development May Be Permitted

Council will only consider an application for development or site alteration within the following areas where it has been demonstrated through an Environmental Impact Study (EIS) that there will be no negative impacts on the natural features or their ecological functions:

- significant wildlife habitat deer wintering areas;
- significant wildlife habitat species of conservation concern; and
- significant Areas of Natural and Scientific Interest (ANSI's)

Council will only consider an application for development or site alteration within critical fish habitat in accordance with Provincial and Federal legislation.

Council will only consider an application for development or site alteration on adjacent lands to significant natural heritage features (as defined in Section 5.3.4.4), where it has been demonstrated through an Environmental Impact Study (EIS) that there will be no negative impacts on the natural features or their ecological functions.

Except with respect to the wetlands shown on the County of Haliburton Wetland mapping, no Environmental Impact Study (EIS) is required if the applicant provides confirmation that the Ministry of Natural Resources and Forestry does not consider the subject lands to be within a significant natural heritage feature or its adjacent lands.

- Within the Significant Wildlife Habitat Deer Wintering Areas or the adjacent lands, where the proposed development is the creation of lots by consent, or is further development on no more than four abutting lots, in a Waterfront Area or Rural Area, Council may exempt the applicant from having to submit an Environmental Impact Study only if the development approval includes a zoning by-law and consent agreement that requires:
 - In a Waterfront Area, minimum lot frontage of 90 metres (295 feet), and that at least 80% of the shoreline frontage to a depth of 30 metres (98 feet) will be maintained in a natural state;
 - In a Rural Area, minimum lot area of 1 hectare (2.5 acres), and that at least 80% of the lot area will be maintained in a natural state.

The Subject Property is located in a rural area. The Subject Property also contains a Stratum 2 Deer Wintering Area and other SWH, as well as multiple unevaluated wetlands and a drainage feature. An analysis of potential impacts to these features from development is assessed in Section 5.



The Municipality will use the County of Haliburton Wetland Mapping as a screening tool when reviewing development applications. Screening will be undertaken as follows:

- Where a development proposal will extend into an area identified on the County of Haliburton wetland mapping, the applicant will undertake a site assessment to accurately delineate the wetland boundaries. The proponent will complete an evaluation of the wetland, using the MNRF Ontario Wetland Evaluation System protocol, or treat the wetland as a provincially significant wetland.
- Where a development proposal is located within the adjacent lands to a
 wetland identified on the County of Haliburton wetland mapping, the applicant
 will undertake a site assessment to accurately delineate the wetland boundaries
 and complete an Environmental Impact Study (EIS), satisfactory to the approval
 authority, demonstrating that there will be no negative impacts to the wetland
 feature or its ecological function.
- These assessments will be completed prior to the approval of the development proposal and will be completed by a qualified professional.

Development on the Subject Property will occur greater than 30 m from the boundary of the PSW. The building envelopes are proposed to be at minimum, 30 m away from the boundary of the delineated wetlands. Improvements to the existing laneways are proposed to ensure no impacts to the unevaluated wetlands occur from future development.

3.4 Endangered Species Act, 2007

The Endangered Species Act, 2007 (ESA) was implemented to protect SAR in Ontario. An independent body, the Committee on the Status of Species at Risk in Ontario (COSSARO), was developed to classify native plants or animals into one of four categories of at-risk status:

- 1. Extirpated: lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario.
- 2. Endangered: lives in the wild in Ontario but is facing imminent extinction or extirpation.
- 3. Threatened: lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
- 4. Special Concern: lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.

Species at Risk in Ontario (SARO) are provided by MECP, who administer the ESA regulations for SAR in Ontario. The ESA applies to native species that have been proven to be in danger of becoming extinct or extirpated from Ontario. The ESA provides protection of both the species and their habitat, as well as provides a recovery strategy and stewardship program for those SAR.



Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing, or taking a member of a species listed as endangered, threatened or extirpated on the SARO list. In addition, Section 10(1) of the ESA prohibits the damage or destruction of habitat of a species listed as threatened, endangered or extirpated on the SARO list.

A permit from MECP is required under Section 17(2)(c) of the ESA for any proposed work to be completed within the habitat of one, or more, species listed as threatened or endangered.

Blanding's Turtle (Threatened), Eastern Hog-nosed Snake (Threatened), Eastern Whip-poor-will (Threatened), Eastern Wood-pewee (Special Concern), and Snapping Turtle (Special Concern) were confirmed and/or anticipated to utilize portions of the Subject Property during the field investigations. In addition, the potential for SAR bat (Endangered) roosting habitat exists in the forested communities on the Subject Property. An analysis to avoid impacts to these species is discussed in Section 5.

3.5 Migratory Birds Convention Act, 1944

The Migratory Birds Convention Act, 1944 (MBCA) was developed to protect migratory birds, their nests and eggs anywhere they are found in Canada. The Migratory Birds Regulations were amended in 2022 to include Schedule 1 birds nests, prohibiting their removal under certain circumstances. Relative to the Subject Property, the following is applicable:

Prohibitions

- 5(1) A person must not engage in any of the following activities unless they have a permit that authorizes them to do so or they are authorized by these Regulations to do so:
 - (a) capture, kill, take, injure or harass a migratory bird or attempt to do so;
 - (b) destroy, take or disturb and egg; and
 - (c) damage, destroy, remove or disturb a nest, nest shelter, eider duck shelter or duck box

Exceptions

- (2) However, the following may be damaged, destroyed, removed or disturbed without a permit:
 - (a) a nest shelter, eider duck shelter or duck box that does not contain a live bird or a viable egg;
 - (b) a nest that was built by a species that is not listed in a Table to Schedule 1 if that nest does not contain live bird or a viable egg; and
 - (c) a nest that was built by a species that is listed in a Table to Schedule 1 if the following conditions are met:
 - (i) the person who damages, destroys, removes or disturbs that nest provided a written notice Minister a number of months beforehand



- that corresponds to the number of months set out in column 3 of the relevant Table to that Schedule for the species, and
- (ii) the nest has not been used by migratory birds since the notice was received by the Minister.

As nesting birds were confirmed/are probable on the Subject Property, the requirements to ensure that the Project complies with the MBCA are outlined in Section 5.

4.0 Determination of Significance

Natural heritage features and areas, as defined in the Provincial Policy Statement, are features and areas, including significant wetlands, significant coastal wetlands, other coastal wetlands in Ecoregions 5E, 6E and 7E, fish habitat, significant woodlands and significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River), habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest, which are important for their environmental and social values as a legacy of the natural landscapes of an area.

Based on the background review and field investigations and relative to policy applicable to the Project, further assessment of significance is necessary to identify protected natural heritage and hydrologic features on and/or adjacent to the proposed development.

4.1 Significant Wildlife Habitat

To further investigate the potential occurrence of SWH, mapped ELC communities were cross-referenced with a database of significant wildlife habitats to determine potential for any seasonal concentration areas (SCA), rare vegetation communities and specialized habitats for wildlife (SHW), habitat for species of conservation concern (HSCC), and animal movement corridors to be present within the Area of Assessment. The Significant Wildlife Habitat Criteria Schedules for Ecoregion 5E were used to identify potential significant wildlife habitat. See **Table 5** below for details on Candidate SWH that may be applicable to the Subject Property.



Table 5 – Significant Wildlife Habitat Screening

| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|---------------------------|---|---|---|---------------|---------------|--|
| Seasonal Conce | ntration Areas of Animals | | | | | |
| Raptor Wintering Area | Rough-legged Hawk Long-eared Owl Boreal Owl Northern Saw-whet Owl Short-eared Owl | Combination of meadow/field and forest/woodland ecosites. Need to have a forest ELC Ecosite: G011-G019 G023-G028 G033-G043 G048-G059 G064-G076 G081-G092 G097-G108 G113-G125 And A meadow/field ELC Ecosite: G020-022 G029-032 G044-047 G060-063 G077-080 G093-096 G109-112 | The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Raptor wintering sites 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. | No | N/A | The Subject Property does not contain any meadow/field ecosites. |
| Bat Maternity Colonies | Big Brown Bat Silver-haired Bat | Maternity colonies considered SWH are found in forested Ecosites. ELC Ecosites: G016-G019 G028 G040-G043 G055-G059 G070-G076 G088-G092 G103- G108 G118-G125 Or Central Ontario Forest Ecosites: ES14 ES17 | Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH). Maternity roosts are not found in caves and mines in Ontario. Maternity colonies located in Mature (dominant trees > 80yrs old) deciduous or mixed forest stands with >10/ha large diameter (>25cm dbh) wildlife trees. Female Bats prefer wildlife trees (snags) in early stages of decay, class 1-3 or class 1 or 2. 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. | Yes | N/A | The Subject Property includes the presence of G042, G058, and G107 ecosites. To avoid impacts to potential Bat Maternity Colonies, mitigation measures are provided in Section 5.2. |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|---------------------------|---|---|--|---------------|---------------|--|
| | | ES18 ES23 ES24 ES25 ES26 ES27 ES28 ES29 ES30 | | | | |
| Turtle Wintering Areas | Midland Painted Turtle Special Concern: Northern Map Turtle Snapping Turtle | For Snapping and Midland Painted turtles; ELC Ecosites: G128-G135 G140-G152 For 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. | Yes | N/A | The Subject Property includes the presence of G129, G130, and G141 ecosites. Suitable habitat is expected to exist within the G141 ecosite where water is deep enough to avoid freezing and substrates consist of soft mud. The proposed 30 m buffer on the wetland communities will ensure that no impacts to overwintering turtles occurs. |
| Reptile Hibernaculum | Snakes: Eastern Gartersnake N. Watersnake N. Red-bellied Snake N. Brownsnake Smooth Green Snake N. Ring-necked Snake Special Concern: Milksnake Eastern Ribbonsnake Lizard: Special Concern: Five-lined Skink | For all snakes, habitat may be found in any forested ecosite in central Ontario other than very wet ones. Talus, Rock Barren, Crevice and Cave, and Alvar sites may be directly related to these habitats. The existence of rock piles or slopes, stone fences, and crumbling foundations assist in identifying candidate SWH. For Five-lined Skink; Central Ontario Forest Ecosites: ES14.2 ES17 – ES20 ES23 – ES30 | 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. Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line. Wetlands can also be important overwintering 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. | Yes | N/A | The Subject Property includes the presence of G042, G058, and G107 ecosites. It also includes the G129 ecosite. No features that provide access below the frost line were observed during field investigation. The G129Tt/Tl ecosite may provide suitable wintering habitat as a conifer swamp. To avoid impacts to potential Snake Hibernaculum, mitigation measures are provided in Section 5.2. |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|--|---|--|---|---------------|---------------|---|
| | | Or ELC Ecosites: G056-G059 G070-G076 G087-G092 G103-G108 G118-G125 | Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures. | | | No rock outcrop openings were observed on the Subject Property; therefore, skink overwintering habitat is not likely present. |
| Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs) | Great Blue Heron Black-crowned Night Heron | ELC Ecosites: G064-G076 G081-G092 G097-G108 G113-G125 G128-G136 | 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. | Yes | No | The Subject Property includes the presence of G107, G129, and G130 ecosites. Colony sites are typically the only known colony in the area and are used annually. No Great Blue Herons or Black-crowned Night Herons were detected during the field investigations or Breeding Bird Surveys. No nests or colonies were observed during field investigations. In addition, there is no proposed development within the G107, G129, and G130 ecosites. Therefore, no further mitigation is required. |
| Deer Yarding Areas | White-tailed Deer | May be found in all Tall Treed forest and swamp ELC Ecosites: G12-G15 G23-G27 G33-G38 G48-G54 G64-G69 G81-G87 G97-G103 G113-G118 G128-G129 | The Core of a deer yard (Stratum I) is located within the Stratum II area and is critical for deer survival in areas where winters become severe. It is primarily composed of coniferous trees (pine, hemlock, cedar, spruce) with a canopy cover of more than 60%. | Yes | Yes | The County of Haliburton identified Stratum II Deer Wintering Habitat is located within the Subject Property. Field investigations confirmed the Subject Property contains Stratum II Deer Wintering Habitat. Mitigation measures to ensure impacts from the proposed development are avoided are provided in Section 5.2 . |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes | | |
|---|---|--|--|---------------|---------------|--|--|--|
| Rare Vegetation Communities or Specialized Habitat for Wildlife | | | | | | | | |
| Specialized Habitat for Wildlife | | | | | | | | |
| Old Growth Forest | | Long-lived forest spp. within these ELC Ecosites: G011-G15 G017-G018 G023 G027 G033 G036 G039-G042 G048 G051 G054-G058 G064 G066 G069 G071-G075 G081 G084 G087 G089-G091 G103 G105-G107 G113 G115 G118 G120-G124 | Old Growth forests are characterized by exhibiting the greatest number of old-growth characteristics, such as mature forest with large trees that has been undisturbed. Heavy mortality or turnover of overstorey trees resulting in a mosaic of gaps that encourage development of a multilayered canopy and an abundance of snags and downed woody debris. Stands 30 ha or greater in size or with at least 10 ha interior habitat assuming 100 m buffer at edge of forest. | No | N/A | While the woodland associated with the Subject Property meets the size requirements, the woodland within the Subject Property did not contain old growth characteristics. No further mitigation is required. | | |
| Specialized Hab | itat for Wildlife | | | | | | | |
| Waterfowl Nesting Area | American Black Duck Northern Pintail Northern Shoveler Gadwall Blue-winged Teal Green- winged Teal Wood Duck Hooded Merganser Common Merganser Red-breasted Merganser Mallard Canada Goose American Widgeon Bufflehead Common Goldeneye | All upland habitats located adjacent to these wetland ELC Ecosites are Candidate SWH: G129-G135 G142-G152 | A waterfowl nesting area extends 120 m from a wetland (> 0.5 ha) 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, Bufflehead, Common Goldeneye and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites. | Yes | No | The upland habitat directly adjacent to G129 and G141 wetland ecosites contain several large diameter trees and the area is greater than 120 m wide. However, no waterfowl were observed during breeding bird surveys or other field investigations. Therefore, no further mitigation is required. | | |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|--|---|--|--|---------------|---------------|---|
| Bald Eagle and Osprey Nesting, Foraging and Perching Habitat | Osprey Special Concern: Bald Eagle | Forest communities 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. Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree's canopy. Nests located on man-made objects are not to be included as SWH (e.g. telephone poles and constructed nesting platforms). | Yes | No | The Subject Property contains large wetland communities and adjacent forested communities. No Bald Eagles or Ospreys were observed during breeding bird surveys or other field investigations. Therefore, no further mitigation is required. |
| Woodland Raptor Nesting Habitat | Red-tailed Hawk Great Horned Owl Broad-winged Hawk Sharp-shinned Hawk Merlin Barred Owl Red-shouldered Hawk Coopers Hawk Northern Goshawk | May be found in all forested ELC Ecosites in Community Class: T May also be found in the forested swamp ELC Ecosites: G128-G133 | All natural or conifer plantation woodland/forest stands Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Merlin or Coopers hawk nest along forest edges sometimes on peninsulas or small offshore islands. Includes nest sites within tree cavities for Barred Owl and sometime Great Horned Owls and Merlin. In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest. | Yes | N/A | Several woodlands are present within the Subject Property including the G042, G058, G107, G129, and G130 ecosites. No stick nests were observed during field investigations and no hawks or falcons were observed during Breeding Bird Surveys. Since Owls are nocturnal and often nest in cavities, their presence/absence was not captured in the field surveys completed. Mitigation measures to avoid impacts to Owl Nesting Habitat are provided in Section 5 . |
| Turtle and Lizard Nesting Areas | Midland Painted Turtle Special Concern Species: Northern Map Turtle Snapping Turtle Five-lined Skink | Turtle Nesting areas may be adjacent to these ELC Ecosites: G138 G140-149 For Five-lined Skink; ELC Ecosites: G056-G059 G070-G076 G087-G092 G103-G108 G118-G125 | Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and river are most frequently used. Skinks will nest under logs, in stumps or under loose rock in partially wooded areas | Yes | N/A | Suitable turtle nesting substrates and/or conditions are limited to open areas adjacent to the G141 ecosite. Ecosite G107 provides suitable nesting habitat for Skinks. However, background review of existing information did not identify the presence of Five-lined Skinks within 1 km of the Area of |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|---|------------------------------------|--|---|---------------|---------------|--|
| | | | | | | Assessment. Furthermore, ecosite G058 is characteristic of a mature hardwood forest and possesses a dense canopy, which limits the penetration of sunlight to the ground layer. Based on the findings of background review and field investigations, it is unlikely that ecosite G058 present candidate SWH for Lizard Nesting Areas. Mitigation measures to avoid impacts to Turtle and Skink nesting areas are provided in Section 5. |
| Aquatic Feeding Habitat | Moose White-tailed Deer | Habitat may be found in all forested ecosites adjacent to water. | Wetlands and isolated embayment's in rivers or lakes which provide an abundance of submerged aquatic vegetation such as pondweeds, water milfoil and yellow water lily are preferred sites. Adjacent stands of lowland conifer or mixed woods will provide cover and shade. | No | N/A | The Subject Property contains preferred submerged aquatic vegetation within the G141 ecosite; however, adjacent woodlands are characterized by upland deciduous ecosites rather than mixed or coniferous lowland ecosites. Therefore, no mitigation is required. |
| Mineral Licks | Moose White-tailed Deer | Habitat may be found in all forested ecosites. | This habitat component is found in upwelling groundwater and the soil around these seepage areas. It typically occurs in areas of sedimentary and volcanic bedrock. In areas of granitic bedrock, the site is usually overlain with calcareous glacial till. | No | N/A | The habitat requirements were not observed on the Subject Property. |
| Denning Sites for Mink, Otter, Marten Fisher and Eastern Wolf | Mink Otter Marten Fisher Grey Wolf | Habitat may be found in all forested ecosites. | Mink prefer shorelines dominated by coniferous or mixed forests with dens usually underground. Mink will sometimes use old muskrat lodges. Otters prefer undisturbed shorelines along water bodies that support productive fish | Yes | N/A | The forested ecosites adjacent to the wetland community are deciduous forests; however, a small border of conifers exists on the shorelines of the G141 |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|-----------------------|---|---|---|---------------|---------------|--|
| | Special Concern: Eastern Wolf | | populations with abundant shrubby vegetation and downed woody debris for denning. They often use old beaver lodges or log jams and crevices in rock piles. • Marten and fisher share the same general habitat, requiring large tracts of coniferous or mixed forests of mature or older age classes. Denning sites are often in cavities in large trees or under large, downed woody debris. | | | wetland. This provides potentially suitable denning habitat for Minks and Otters. This area is protected within the 30m buffer applied to the G141N wetland which extends into the G058Tt and G042Tt ecosites. The Subject Property lacks the large tracts of coniferous or mixed forests used by Martens and Fishers as denning sites. No mitigation is required. The G058, G042, and G107 ecosites offer potentially suitable denning habitat for Grey Wolves and Eastern Wolves; however, no evidence of Wolf presence (scat, tracks, or kill sites) was observed on the Subject Property during winter, spring, or summer field investigations. In addition, according to the Significant Wildlife Habitat Mitigation Support Tool (MNRF, 2014), Wolves are easily disturbed by human activity. Residential dwellings are present to the north, west and south of the Subject Property, thereby limiting the potential presence of wolves on or near the Subject Property. Therefore, no mitigation is required. |
| Amphibian Breeding | Eastern Newt Blue-spotted Salamander | All forested, ELC Ecosites; The wetland breeding ponds (including vernal pools) may | Presence of a wetland or pond >500 m² (about 25 m diameter) within or adjacent (within 120 m) to a woodland (no minimum) | Yes | No | Multiple wetlands are present within 120 m of the woodland ecosites. |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|--|--|--|---|---------------|---------------|---|
| Habitat (Woodland) | Spotted Salamander Four-toed Salamander Northern Two-lined Salamander Spring Peeper Wood Frog American Toad | be permanent, seasonal, ephemeral, large or small in size and could be located within or adjacent to the woodland. | size). The wetland, lake or pond and surrounding forest, would be the Candidate SWH. Some small wetlands may not be mapped and may be important breeding pools for amphibians. Breeding ponds within the woodland or the shortest distance from forest habitat are more significant because of reduced risk to migrating amphibians and more likely to be used. Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat. | | | Additionally, a wetland ecoelement was identified within the G058 ecosite during field investigations. No Salamanders or their egg masses were observed during field investigations. Only 1 species, Spring Peeper, was recorded with Call Level Codes of 3 during Amphibian Call Surveys. Less than 20 Wood Frogs and American Toads were observed during field investigations. In addition, no work is proposed within wetlands or the associated 30 m buffer. Therefore, no further mitigation is required. |
| Amphibian Breeding Habitat (Wetlands) | Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog | ELC Ecosites: G129-G135 G142-G152 Typically these wetland ecosites will be isolated (>120m) from woodland ecosites, however larger wetlands containing predominantly aquatic species (e.g. Bull Frog) may be adjacent to woodlands | Wetlands and pools (including vernal pools) >500 m² (about 25 m diameter) supporting high species diversity are significant. Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators. Bullfrogs require permanent water bodies with abundant emergent vegetation. | Yes | Yes | The G130, G141, and G129 ecosites provide suitable Amphibian Wetland Breeding Habitat. A Bullfrog was detected during field investigations within the G141 ecosite. As no development is proposed within 30 m of the delineated wetland features on the Subject Property, no additional mitigation is required. |
| Mast Producing Areas | Black Bear White-tailed deer Wild Turkey Ruffed Grouse | ELC Ecosites: G015 G017 G019 G027-G028 G041-G043 G057 G059 | Most important areas are mature forests >0.5 ha containing numerous large beech and red oak trees that supply the energy- rich mast that wildlife prefer. Other significant tree species include hickory, basswood, black cherry, ironwood, mountain ash, pin cherry, and butternut. Significant shrub species include | Yes | No | The Subject Property contains several significant tree and shrub species. This includes basswood, black cherry, ironwood, and wild raspberry, however not to the extent that would deem this habitat significant. Mast |



| SWH Type | Associated Species | Associated ELC Ecosites | Habitat Criteria | Candidate SWH | Confirmed SWH | Additional Notes |
|--|---|--|---|---------------|---------------|--|
| | | G072 G090 G106 G108 G121 | blueberries, wild black berry, serviceberry, raspberry, beaked hazel, choke cherry and hawthorn. Sites providing long-term, relatively stable food supplies, forest openings or barrens >1 ha provide excellent sites for mast producing shrubs. Sites such as clear-cuts or burns are temporary source of food and are less significant. | | | producing trees that are >40-65 cm DBH and make up greater than 50% of the forested community are not present on the Subject Property. In cleared/open areas within the forest, raspberry exists; however, raspberries do not make up >50% of the ground cover in those areas. |
| Habitat for Spec | ies of Conservation Concern (Not | including Endangered or Threate | ned Species) | | | |
| Marsh Bird Breeding Habitat | American Bittern Sora Red-necked Grebe Pie-billed Grebe Redhead Ring-necked Duck Lesser Scaup Ruddy Duck Common Moorhen American Coot Wilson's Phalarope Common Loon Sandhill Crane Green Heron Sedge Wren Marsh Wren Trumpeter Swan Special Concern: Yellow Rail Black Tern | ELC Ecosites: G138-G152 For Green Heron: Above Ecosites plus: G129-G136. | Nesting occurs in wetlands. 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. Less frequently, it may be found in upland shrubs or forest a considerable distance from water. | Yes | No | Suitable habitat is present within the Subject Property. Associated species were not detected during breeding bird surveys. In addition, no development is proposed within 30 m of the wetland features. No further mitigation is required. |
| Special Concern and Rare Wildlife Species | All Special Concern and Provincially Rare (\$1-\$3, \$H) plant and animal species. Lists of these species are tracked by the Natural Heritage Information Centre. | All plant and animal element occurrences (EO) within a 1 or 10km grid. Older element occurrences were recorded prior to GPS being available, therefore location information may lack accuracy. | Suitable habitat for Special Concern Species is addressed in Table 4 . | Yes | N/A | Likelihood of occurrence for Special Concern Species is addressed in Table 4 . |



5.0 Impact Assessment and Mitigation

Any future site development works including building erection, grading, and pavement development have the potential to incur adverse impacts on the surrounding environment including natural heritage features, sensitive species (e.g., SAR), and/or Significant Wildlife Habitat (often described under the umbrella of VECs), particularly concerning works in undeveloped natural landscapes. Locally specific mitigation measures are implemented to prevent or mitigate impacts to the VECs identified.

To address any potential impacts to the existing natural features or any potential wildlife species of conservation concern which may reside in the area, as shown in **Table 4**, the following mitigation measures should be implemented.

5.1 General Recommendations

The following general recommendations should be applied to any future development:

- All necessary precautions must be taken to prevent the accumulation of litter and construction debris within any natural areas outside of the construction limits. Daily inspections and clean-up must take place.
- Upon project completion, all construction materials must be removed off-site.

5.2 Natural Heritage Features

5.2.1 Wetland

Multiple unevaluated wetland communities were identified and delineated on the Subject Property. The building envelopes for the proposed severances have been created to avoid these features. A 30 m buffer has been applied to the boundary of the delineated wetlands where no development can occur (see **Figure 5**).

The small wetland ecoelement at the northern extent of the Subject Property drains into the larger wetland to the south via a small drainage feature. A 30 m buffer has been applied to this feature to avoid impacts from future development as it is important that surface water connection is maintained between the two wetland communities. The proposed building envelopes are depicted in **Appendix B**. It should be noted that the 30 m buffer that is proposed on the drainage feature in the northern part of the Subject Property is not depicted in **Appendix B**. However, the 30 m buffer will not change the building envelopes that are depicted, as shown in **Figure 5**.

A small drainage feature runs parallel to Old Donald Road, towards the northern extent of the Subject Property. This feature conveys water from a wetland community, located at the northwestern corner of the Subject Property, to the larger wetland complex in the middle of the Subject Property. The water flows through a culvert that is located at the entrance of the existing laneway at the northern portion of the Subject Property. The culvert has been noted to be partially blocked, preventing the free flow of water through the culvert and into the downstream wetland. To ensure safe access to the proposed lot, and to ensure no impacts to the downstream wetland and drainage



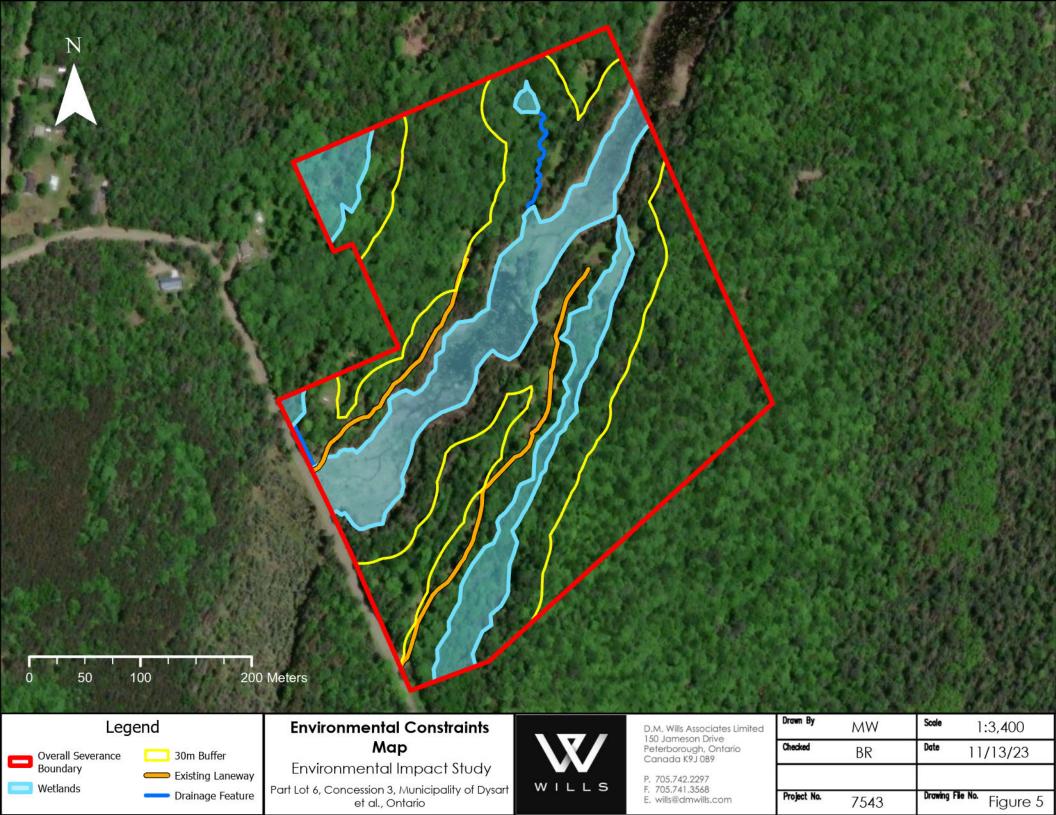
feature occurs, the culvert should be cleaned out. By cleaning out the culvert, backwatering at the culvert inlet will be avoided which can lead to increased erosion potential and flooding of the existing laneway. Due to the existing laneway and the presence of Old Donald Road immediately adjacent to the drainage feature, no buffer has been recommended. However, improvements to the culvert will ensure that no impacts to the downstream G141N wetland community will occur from the proposed development.

While the laneway at the northern portion of the Subject Property is within the 30 m buffer, additional work to maintain the laneway will be minimal and will not encroach inside the wetland's delineated boundary. A small berm is proposed to border the laneway between the wetland, with additional tree plantings located between the berm and the wetland. The berm will help protect the wetland from any fluid leaks from vehicles, and the plantings will help provide a naturalized buffer, further protecting the wetland from erosion and sedimentation impacts.

Similar to the northern existing laneway, a portion of the existing laneway identified on **Figure 5** located towards the southern portion of the Subject Property also exists within the proposed 30 m wetland buffer. While additional plantings are not proposed at this location due to the dense vegetation cover that is already present, a small berm should be constructed on the south side of the laneway to help protect the wetland from any vehicle fluid leaks or spills that could occur.

The following recommendations should be addressed:

- A lot grading and drainage plan should be prepared to ensure runoff is conveyed into the wetland/watercourse.
- Where drainage into the wetland cannot be maintained, Low Impact
 Development (LID) features are encouraged (i.e. grassed swales, rain gardens,
 infiltration trench).
- It is recommended that eavestrough downspouts be directed towards vegetated areas or LID features to increase infiltration to groundwater.
- Plantings along the southern edge of the northern laneway, adjacent to the wetland boundary.
- A berm to be constructed along the southern edge of both existing laneways.
- The wetland/drainage feature buffer should be staked in the field prior to any site development within the building envelopes.
- Site development, including erection of a house and associated septic system, should be constrained within the outlined building envelope in **Appendix B.** This will ensure that future development does not encroach within the proposed 30 m buffer on the wetland and drainage features that are found on the Subject Property.





5.2.2 Significant Wildlife Habitat

The SWH within the Subject Property has the potential to be impacted by the proposed development. The following mitigation measures should be implemented to minimize risk of impact associated with the proposed development.

5.2.2.1 Deer Yarding Areas

The County of Haliburton identified Stratum II Deer Wintering Habitat located on the Subject Property. Field investigations confirmed the forested communities on the Subject Property contains Stratum II Deer Wintering Habitat.

To ensure that no permanent impacts occur from future development, the following mitigation measures should be implemented:

- At least 80% of the developable area will remain in a natural state (Municipality of Dysart et al., 2018).
- Large coniferous trees (>40 cm DBH) should be preserved where possible in order to provide adequate canopy cover for deer through the winter months.

5.2.2.2 Turtle and Lizard Nesting Areas

The potential for Turtle Nesting Areas SWH exists adjacent to the G141N ecosite, and the potential for Lizard Nesting Areas SWH exists within the G058Tt and G107Tt ecosites.

- Suitable Turtle nesting habitat is restricted to the area directly adjacent to the G141N ecosite which receives adequate sun exposure. This area is protected within the 30m buffer applied to the G141N wetland.
- The G107Tt ecosite may provide potential nesting habitat for Five-lined Skinks; however, no development is proposed within the G107Tt ecosite. The G058Tt ecosite lacks rock outcrops or suitable openings which provide adequate sun exposure.

5.2.2.3 Special Concern Species

Special Concern and Rare Wildlife Species – Eastern Wood-pewee

The Eastern Wood-pewee lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation, as is found throughout the wooded communities on the Subject Property.

The Eastern Wood-pewee feeds on aerial insects and is thought to be impacted due to an overall decline in aerial insect abundance. Loss of habitat does not seem to be an issue that is causing population decline in Ontario for the Eastern Wood-pewee (COSSARO, 2013).



Based on COSSARO's assessment on the status of Eastern Wood-pewee in 2013, future development within the forested area with frontage onto Old Donald Road will not cause adverse effects to local populations of Eastern Wood-pewee. An abundance of aerial insects was observed within the Old Donald Road corridor, the historically cleared areas, and the wetlands, further suggesting that local Eastern Wood-pewee populations will not be impacted by future development within the Subject Property. Furthermore, development is likely to create more forest edge habitat which is favourable to the Eastern Wood-pewee.

5.2.2.4 Candidate SWH

The following Candidate SWH did not have specific studies carried out at the time of the field investigation as the exact area of impact from future development is unknown at this time and therefore could not be confirmed as part of this EIS.

In addition, these Candidate SWHs have the potential to be present and therefore potentially impacted by future development in the building envelopes identified in **Appendix B**. To confirm the presence/absence, further surveys need to be completed once a specific location has been selected for future development within each proposed building envelope. These surveys should be conducted prior to finalizing a site plan in case the area of proposed development must be moved to avoid any SWH. The following Candidate SWHs require additional surveys to confirm their presence:

- Bat Maternity Colonies
- Reptile Hibernaculum
- Woodland Raptor Nesting Habitat

The surveys should be scoped based on the "Defining Criteria" column in the Significant Wildlife Habitat Criteria Schedules for Ecoregion 5E (MNRF, 2015). MNRF should be consulted to confirm the methodology of the proposed surveys.

If the results of the surveys indicate that Confirmed SWH is present within the area of impact, additional mitigation measures may be required to ensure that no impacts to SWH occur.

5.3 Erosion and Sediment Control

It is recommended that an Erosion and Sediment Control Plan (ESCP) be developed and implemented to minimize the risk of sedimentation into the drainage feature and/or wetland during all phases of development.

The ESCP should include:

- Installation of sediment fence around the entire site before construction activities commence to prevent soil deposition into the drainage feature and wetland.
- Waste material should be contained and stabilized outside of the wetland buffer area. Alternatively, waste materials should be removed off-site.



- Inspection and maintenance of erosion and sediment control measures and structures should take place during the course of construction.
- Erosion and sediment control measures and structures should be repaired if damage occurs.
- Non-biodegradable erosion and sediment control materials are to be removed after all disturbed ground has been permanently stabilized.
- Site isolation measures for containing stockpiled material should be implemented.
- A response plan should be developed that will be implemented immediately in the event of a sediment release or spill of a deleterious substance.
- An emergency spill response kit, including the appropriate absorbency materials, will be on site at all times. Proper containment, clean up and reporting, in accordance with provincial requirements, is required.

5.4 Species at Risk/Wildlife

The background review and field investigations determined 28 species of conservation concern had recent or historically confirmed presence in the area surrounding the Subject Property. The SAR Screening Assessment (**Table 4**) identified suitable habitat on the Subject Property for 12 of those species.

SAR or potential SAR habitat was found throughout the property in forested and wetland communities.

5.4.1 Black Ash

Multiple Black Ash trees were observed within the G130Tt ecosite, the wetland ecoelement found within the G058Tt ecosite, and the G129Tt ecosite. These Black Ash trees will be included in the protected wetland area and the associated 30 m buffer. It is unlikely that Black Ash trees will occur outside wetlands; however, it is possible that they occur in upland ecosites. Therefore, it is recommended that a Black Ash survey be conducted in the area of proposed development by a qualified biologist, prior to the development of a site plan to confirm the presence/absence of any Black Ash.

5.4.2 Turtles

While no confirmed SAR turtle habitat was identified through background research and field investigations, it is anticipated that the wetland communities on the Subject Property provide suitable habitat for many species of turtles. However, nesting habitat is anticipated to be limited to the open areas adjacent to the G141N community which receives adequate sun exposure. This area is protected from development by the proposed 30 m buffer on all wetland features on the Subject Property; therefore, further mitigation to avoid impacts to SAR turtles is not required.



5.4.3 Birds and Bats

Potential habitat for various SAR bird, birds listed on Schedule 1 of the Migratory Bird Regulations (MBR), and SAR bat species was identified as being present within, or adjacent to the area of the proposed severances.

Birds listed on Schedule 1 of the MBR construct nests that are utilized year over year either by the same individual, or individuals of another species and are therefore granted more protection than other bird species. In order to ensure compliance with the MBR and ESA, the following mitigation measures are required:

- A nest sweep for all species listed on Schedule 1 of the MBR must be conducted
 in the area of proposed development prior to vegetation removal. If a nest from
 a species on Schedule 1 is identified, monitoring for a specified time (typically 1
 to 3 years) is required to determine if that nest is currently being utilized.
 Alternatively, a permit application can be submitted to remove the tree/nest if
 avoidance is not possible.
- As the Subject Property contains potentially suitable foraging and nesting habitat for the Eastern Whip-poor-will (Threatened), it is recommended that Eastern Whip-poor-will surveys be conducted in the area of proposed development prior to the completion of a site plan to confirm the presence/absence of this SAR species on the Subject Property.
- As the Subject Property contains potentially suitable roosting habitat for SAR bat species, it is recommended that an acoustic sampling program targeting bat species and snag density surveys be conducted prior to the development of a site plan to confirm the presence/absence of any SAR bats and their habitat in the area of the proposed development.
- Any vegetation clearing must occur outside of the breeding bird season of April 1st to August 31st.
 - o If this time period is unavoidable, alternatively, a nest sweep for birds and an assessment of bat roosting activity must be conducted by a qualified biologist, prior to any clearing of vegetation on-site.
 - Following a bird nest sweep, vegetation removal must be completed within 72 hours. If it is not completed within this time period, an additional sweep is required.
 - o If, during a nest sweep, bird nests are encountered, all construction activities should cease, and a buffer should be placed around the location until after **August 31**st. The size of the buffer will be dependent on the species and should be consulted with the MNRF and/or MECP.
- The MECP and/or MNRF must be contacted in the case that any rare or SAR species are identified during pre-construction or throughout the construction phases.



5.4.4 Snakes

The preferred habitat for Eastern Hog-nosed Snake according to the COSEWIC Assessment and Status Report (2021) consists of well-drained, loose or sandy soil, open woods, brushland, and forest edge, often in close proximity to water. Suitable habitat for Eastern Hog-nosed Snake exists within the G058Tt and G043Tt ecosites which consist of dry maple forests that extend beyond the Subject Property. American Toads, a preferred prey species, were observed within these ecosites. However, these ecosites lack significant open areas reducing access to sun exposure for basking.

While the forested communities on the Subject Property are not anticipated to provide core habitat for Eastern Hog-nosed Snakes as loose, sandy substrates are not present, the potential for them to move throughout those communities exists. In order to ensure no impacts to snakes occurs during construction, the area of impact should be isolated using 60 cm tall wildlife exclusionary fencing. The fence should be made of hardware cloth (1/4 inch mesh or smaller) to ensure snakes cannot climb the fence, and to ensure that snakes are not harmed from the fence material (MNRF, 2016).



6.0 Conclusions

Given the results of background review and on-site investigations, long-term adverse impacts to natural heritage features, associated habitat, and local wildlife populations are not anticipated to be resultant from the proposed severances and eventual development, provided that the environmental protection/mitigation measures outlined herein are implemented. Appropriate implementation of the mitigation measures outlined herein will ensure that proposed activities do not conflict with the natural heritage policies set out by the County of Haliburton, the Province of Ontario or other relevant environmental legislation.

If you have any further questions, please do not hesitate to contact the undersigned.

Prepared by:

Marc Whipp, B.Sc.

Field Biologist

Reviewed by:

Ben Radford, B.Sc. Project Biologist

MW/BR/jh



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Appendix A

Statement of Limitations



Statement of Limitations

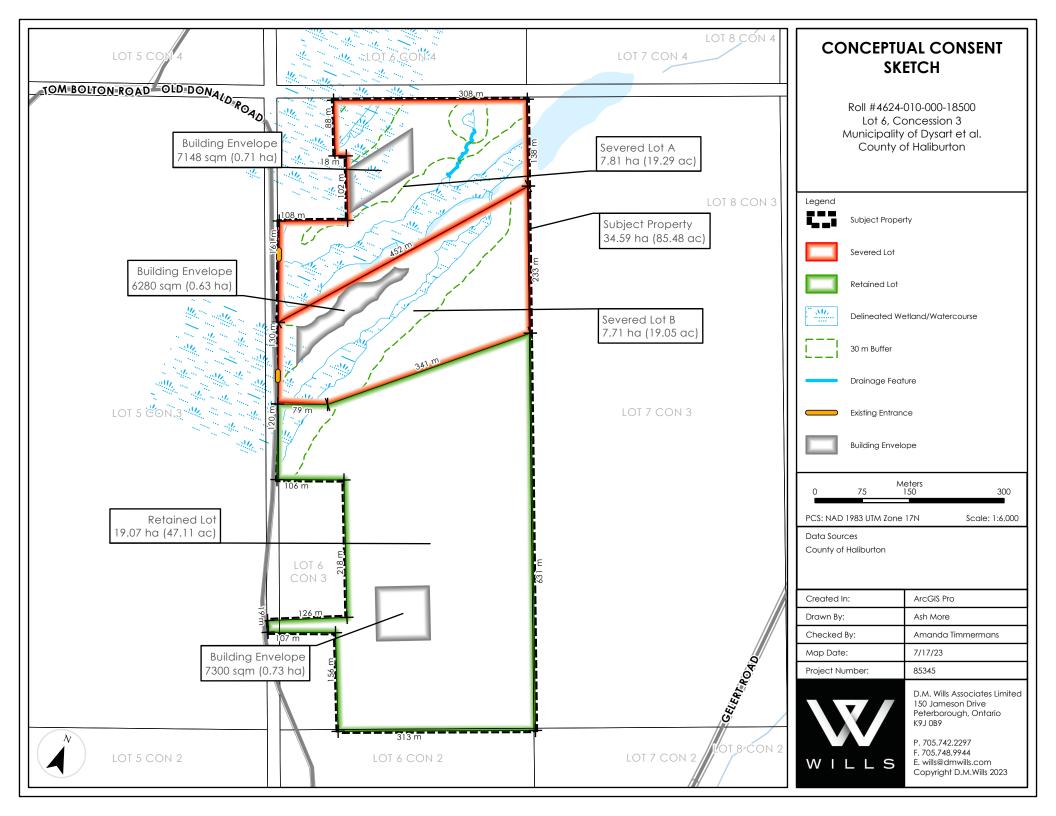
This report is provided solely for the benefit of Mr. Todd Emmerson and not for the benefit of any other party. No other party shall be entitled to rely on this report or any information, documents, records, data, interpretations, advice or opinions or other materials given to Mr. Todd Emmerson by D.M. Wills Associates Limited (Wills). The report relates solely to the specific project for which Wills has been retained and shall not be used or relied upon by any third party for any variation or extension of this project or any other purpose. Any unpermitted use by any third party shall be at such party's own risk.

The conclusions and recommendations outlined in the Environmental Impact Study are based on the results and findings associated with the scope of field investigations as outlined in **Section 2** of this report, as they relate to The Project, as described in **Section 1.0**.

Appendix B

Site Plan

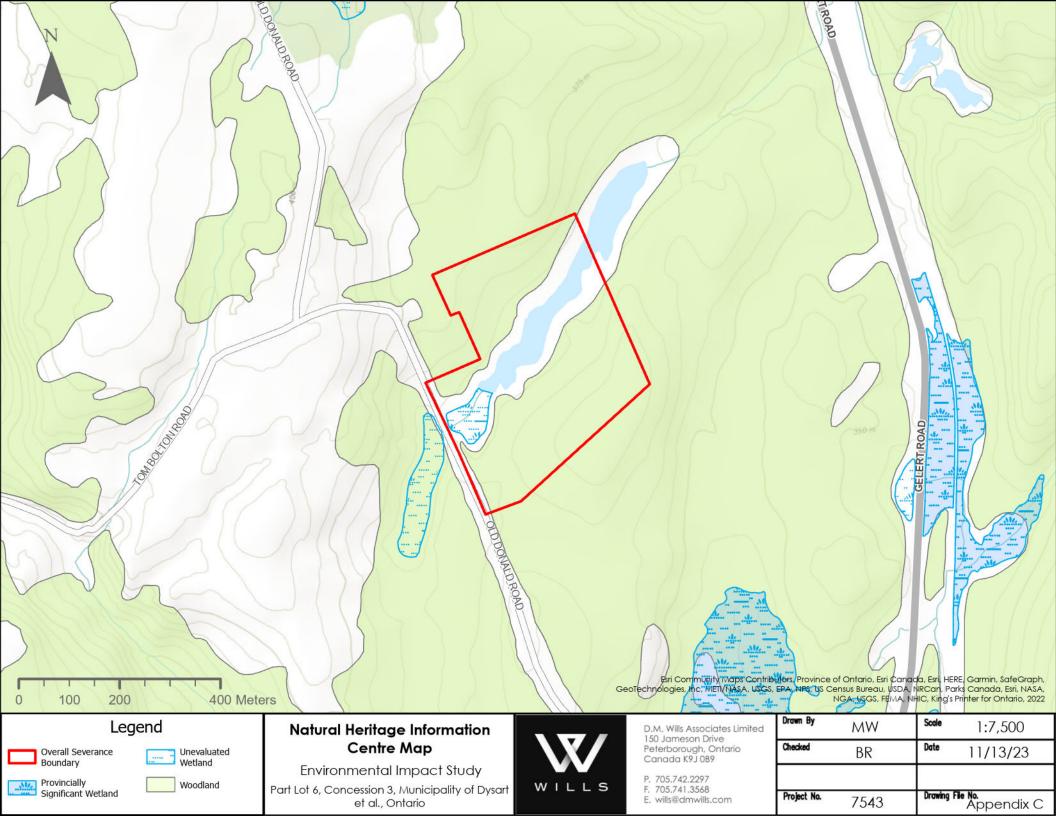




Appendix C

NHIC Map





Appendix D

Records of Correspondence



From: Ben Radford

To: <u>"korsan@dysartetal.ca"</u>

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Date: January 24, 2023 10:34:00 AM

Attachments: <u>image001.jpg</u>

image002.jpg Study Area.jpg

Good morning Kris,

My name is Ben Radford from D.M. Wills Associates Limited in Peterborough. Todd Emmerson has contracted us to complete the EIS as part of the planning process for his severance application on Old Donald Road. I am looking to confirm the scope of the EIS with you.

We have included the following as the scope of the EIS to meet the concerns of the Municipality:

- Assessment of the Subject Property in the areas of the two proposed severances, plus 120 m (Study Area, see attached figure where the green represents the Study Area)
- Three Amphibian Call Surveys in accordance with the Marsh Monitoring Protocol
- Two Breeding Bird Surveys
- Wetland boundary delineation
- Watercourse boundary delineation
- Ecological Land Classification mapping of the Study Area
- Species at Risk Screening Assessment
- Deer Wintering Assessment
- Identify additional Significant Wildlife Habitat
- ElS report that identifies all constraints within the Study Area, identifies building
 envelopes within the two severed lots, and provides mitigation measures to
 ensure no impacts to the environment occur, where possible

Please let me know if the scope above is adequate. I would be happy to discuss if you have any questions.

Thanks, Ben

From: Stephanie MacLaren <stephmaclaren@gmail.com>

Sent: November 30, 2022 11:44 AM **To:** Henrietta Duff hduff@dmwills.com

Cc: Todd Emmerson < temmerson 916@gmail.com>

Subject: Fwd: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

2 of 2 regarding Emmerson Land.

With thanks

----- Forwarded message ------

From: **Kris Orsan** < korsan@dysartetal.ca> Date: Thu, Nov 10, 2022 at 11:50 AM

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road To: Adam Kozlowski akozlowski@haliburtoncounty.ca, Todd Emmerson

<temmerson916@gmail.com>

Cc: Alana L. Lacy alacy@haliburtoncounty.ca, Tammy Wilson

<twilson@dysartetal.ca>

Good morning Todd,

The municipality can provide the following preliminary comments:

- Proposal will be subject to a Planning Justification that includes an analysis of how the proposal is consistent with the Provincial Policy Statement and conforms to the provisions of the County of Haliburton Official Plan and the Dysart et al Official Plan.
- Proposal will be subject to a Site Evaluation Report including scoped EIS
 to address Deer wintering, wetland areas, and possible species at risk and
 habitat on the property.
- Proposal will be subject to a Site Development Plan showing proposed building envelopes for proposed lots.
- Please label the final sketch by labelling "severed lot" and "retained lot" for the proposed lots.
- Existing zoning is Rural Type 1 (RU1) zone, the proposed lots do not meet the minimum requirements for lot frontage or lot area. The proposed will be subject to a zoning by-law amendment.
- Pending recommendations of the Environmental study, the proposed may be subject to a severance agreement or site plan agreement.
- Subject to Parkland Dedication fee.
- And subject to additional conditions which may be raised during the review of the application.

Please note the foregoing is for your information only and it should be clearly understood that you must satisfy yourself with respect to the success of an application to the appropriate approval agency. Consultation with neighbouring property owners and other agencies that may have an interest, is advised.

The Municipality reserves the right to make further comments and/or require further conditions upon a review of a complete application, additional

information, public input and/or any site visit that may be conducted. The recommendations from the required background reports may affect the success of an application.

Provincial Policies, Official Plan Policies and By-law provisions do change from time to time. The policies that are in effect at the time that the application is made to the appropriate approval agency will apply.

Kind regards,



Kris Orsan, CPT
Senior Planner
Municipality of Dysart et al
135 Maple Ave. Box 389 Haliburton, ON, KOM 1S0
Tel: (705) 457-1740 ext. 626

Fax: (705) 457-1964



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Follow us on Twitter at: www.twitter.com/dysartonline

From: Adam Kozlowski < <u>akozlowski@haliburtoncounty.ca</u>>

Sent: October 14, 2022 2:11 PM

To: Todd Emmerson < temmerson916@gmail.com >

Cc: Kris Orsan < korsan@dysartetal.ca>; Alana L. Lacy < alacy@haliburtoncounty.ca>

Subject: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Hi Todd – we've taken a look at the property and provided some info on the proposed new lots. The sketch is attached.

The northernmost lot would have an area of 8.3 hectares (20.5 acres) with 360

feet of frontage on Old Donald.

The lot to the south would have an area of 6.3 hectares (15.5 acres) with 570 feet of frontage on Old Donald.

County Official Plan comments:

-There is a wetland and watercourse that bisects both of the proposed new lots. An Environmental Impact Study/Site Evaluation Report is required for each lot to identify suitable building and septic envelopes that will not impact any natural features. This study is done by an environmental consultant.

-Deer Wintering Area is identified along the west area of the severed lots. A Deer Wintering assessment will be required. This assessment can be part of the above Environmental/Site Evaluation study.

I've also CC'ed Kris Orsan, Senior Planner with Dysart for municipal comments.

Once you've received all the comments and if you decide to proceed, we can organize a zoom meeting to go over the requirements, process and timing.

Adam Kozlowski, MCIP, RPP Senior Planner

County of Haliburton Box 399 Minden, Ontario KOM 2KO

Phone: 705-286-1333 ext. 248

Fax: 705-286-4829

E-mail: <u>akozlowski@haliburtoncounty.ca</u>



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 From:
 Kris Orsan

 To:
 Ben Radford

 Cc:
 Adam Kozlowski

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Date: January 25, 2023 3:18:05 PM

Attachments: <u>image001.jpq</u>

image002.jpg

Good afternoon Ben,

I believe what you have provided appears to cover the items that were to be included into the EIS for the subject property. Please see section 17.5.2 of the <u>Municipal Official Plan</u> which provides further details related to requirements of an EIS.

Based on municipal mapping the property appears to have some moderate slopes within the scoped area. This will likely be covered when addressing the suitable building envelope on the subject property but thought I would note it for your information. The rest of the property appears to be fairly level with very minimal elevation change.

Further as this is a two-tier process with the County of Haliburton being the approval authority, I have included the Senior Planner Adam Kozlowski on this correspondence should the County have any additional requirements for the scope of the EIS.

I hope this helps, but should you have any further please do not hesitate to let me know.

Kind regards,

Kris.

From: Ben Radford < BRadford@dmwills.com>

Sent: January 24, 2023 10:35 AM **To:** Kris Orsan korsan@dysartetal.ca

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

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Good morning Kris,

My name is Ben Radford from D.M. Wills Associates Limited in Peterborough. Todd Emmerson has contracted us to complete the EIS as part of the planning process for his severance application on Old Donald Road. I am looking to confirm the scope of the EIS with you.

We have included the following as the scope of the EIS to meet the concerns of the Municipality:

 Assessment of the Subject Property in the areas of the two proposed severances, plus 120 m (Study Area, see attached figure where the green represents the Study Area) Three Amphibian Call Surveys in accordance with the Marsh Monitoring Protocol

- Two Breeding Bird Surveys
- Wetland boundary delineation
- Watercourse boundary delineation
- Ecological Land Classification mapping of the Study Area
- Species at Risk Screening Assessment
- Deer Wintering Assessment
- Identify additional Significant Wildlife Habitat
- ElS report that identifies all constraints within the Study Area, identifies building envelopes within the two severed lots, and provides mitigation measures to ensure no impacts to the environment occur, where possible

Please let me know if the scope above is adequate. I would be happy to discuss if you have any questions.

Thanks, Ben

From: Stephanie MacLaren <<u>stephmaclaren@gmail.com</u>>

Sent: November 30, 2022 11:44 AM **To:** Henrietta Duff < hduff@dmwills.com >

Cc: Todd Emmerson < temmerson916@gmail.com >

Subject: Fwd: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

2 of 2 regarding Emmerson Land.

With thanks Stephanie

----- Forwarded message -----

From: **Kris Orsan** <<u>korsan@dysartetal.ca</u>>
Date: Thu, Nov 10, 2022 at 11:50 AM

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road To: Adam Kozlowski akozlowski@haliburtoncounty.ca, Todd Emmerson

<temmerson916@gmail.com>

Cc: Alana L. Lacy <alacy@haliburtoncounty.ca>, Tammy Wilson

<twilson@dvsartetal.ca>

Good morning Todd,

The municipality can provide the following preliminary comments:

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Kind regards,

Kris

Kris Orsan, CPT Senior Planner Municipality of Dysart et al 135 Maple Ave. Box 389 Haliburton, ON, KOM 1SO

Tel: (705) 457-1740 ext. 626

Fax: (705) 457-1964 korsan@dysartetal.ca



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Find us on Facebook at: http://www.facebook.com/Dysartetal

Follow us on Twitter at: www.twitter.com/dysartonline

From: Adam Kozlowski akozlowski@haliburtoncounty.ca

Sent: October 14, 2022 2:11 PM

To: Todd Emmerson < temmerson916@gmail.com >

Cc: Kris Orsan < korsan@dysartetal.ca>; Alana L. Lacy < alacy@haliburtoncounty.ca>

Subject: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Hi Todd – we've taken a look at the property and provided some info on the proposed new lots. The sketch is attached.

The northernmost lot would have an area of 8.3 hectares (20.5 acres) with 360 feet of frontage on Old Donald.

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County Official Plan comments:

-There is a wetland and watercourse that bisects both of the proposed new lots. An Environmental Impact Study/Site Evaluation Report is required for each lot to identify suitable building and septic envelopes that will not impact any natural features. This study is done by an environmental consultant.

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I've also CC'ed Kris Orsan, Senior Planner with Dysart for municipal comments.

Once you've received all the comments and if you decide to proceed, we can organize a zoom meeting to go over the requirements, process and timing.

Adam Kozlowski, MCIP, RPP Senior Planner

County of Haliburton Box 399 Minden, Ontario KOM 2KO

Phone: 705-286-1333 ext. 248

Fax: 705-286-4829

E-mail: <u>akozlowski@haliburtoncounty.ca</u>



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From: Ben Radford

To: <u>Adam Kozlowski</u>; <u>Kris Orsan</u>

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Date: February 9, 2023 10:09:00 AM

Attachments: image001.jpg

image002.jpg

Thanks Adam. Yes, as part of the EIS, we will provide building envelopes (if possible) following our constraints analysis based on site conditions and the natural features that are present.

Have a good day, Ben

From: Adam Kozlowski <akozlowski@haliburtoncounty.ca>

Sent: Thursday, February 9, 2023 10:05 AM

To: Kris Orsan <korsan@dysartetal.ca>; Ben Radford <BRadford@dmwills.com> **Subject:** RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Gentlemen – sorry for the delayed response.

Ben – the components of the EIS in your list below look complete. At the higher level, what we're looking for are viable building envelopes on site once the natural feature setbacks etc. are factored in.

Adam

From: Kris Orsan < korsan@dysartetal.ca>

Sent: January 25, 2023 3:17 PM

To: Ben Radford < <u>BRadford@dmwills.com</u>>

Cc: Adam Kozlowski akozlowski@haliburtoncounty.ca

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

Good afternoon Ben,

I believe what you have provided appears to cover the items that were to be included into the EIS for the subject property. Please see section 17.5.2 of the <u>Municipal Official Plan</u> which provides further details related to requirements of an EIS.

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Further as this is a two-tier process with the County of Haliburton being the approval authority, I have included the Senior Planner Adam Kozlowski on this correspondence should the County have any additional requirements for the scope of the EIS.

I hope this helps, but should you have any further please do not hesitate to let me know.

Kind regards,

From: Ben Radford < <u>BRadford@dmwills.com</u>>

Sent: January 24, 2023 10:35 AM **To:** Kris Orsan < korsan@dysartetal.ca>

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

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Please let me know if the scope above is adequate. I would be happy to discuss if you have any questions.

Thanks, Ben

From: Stephanie MacLaren < stephmaclaren@gmail.com >

Sent: November 30, 2022 11:44 AM

To: Henrietta Duff < hduff@dmwills.com >

Cc: Todd Emmerson < temmerson916@gmail.com >

Subject: Fwd: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

2 of 2 regarding Emmerson Land.

With thanks Stephanie

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From: **Kris Orsan** < <u>korsan@dysartetal.ca</u>> Date: Thu, Nov 10, 2022 at 11:50 AM

Subject: RE: Possible 2 new lots from 4624 010 000 18500 Old Donald Road To: Adam Kozlowski akozlowski@haliburtoncounty.ca, Todd Emmerson

<temmerson916@gmail.com>

Cc: Alana L. Lacy <alacy@haliburtoncounty.ca>, Tammy Wilson

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Kind regards,

Knis

Kris Orsan, CPT Senior Planner Municipality of Dysart et al

135 M. J. A. D. 200 H. E. L. C

135 Maple Ave. Box 389 Haliburton, ON, KOM 1S0

Tel: (705) 457-1740 ext. 626

Fax: (705) 457-1964 korsan@dysartetal.ca



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Find us on Facebook at: http://www.facebook.com/Dysartetal

Follow us on Twitter at: www.twitter.com/dysartonline

From: Adam Kozlowski akozlowski@haliburtoncounty.ca

Sent: October 14, 2022 2:11 PM

To: Todd Emmerson <temmerson916@gmail.com>

Cc: Kris Orsan <korsan@dysartetal.ca>; Alana L. Lacy <alacy@haliburtoncounty.ca>

Subject: Possible 2 new lots from 4624 010 000 18500 Old Donald Road

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I've also CC'ed Kris Orsan, Senior Planner with Dysart for municipal comments.

Once you've received all the comments and if you decide to proceed, we can organize a zoom meeting to go over the requirements, process and timing.

Adam Kozlowski, MCIP, RPP Senior Planner

County of Haliburton

Box 399 Minden, Ontario K0M 2K0

Phone: 705-286-1333 ext. 248

Fax: 705-286-4829

E-mail: akozlowski@haliburtoncounty.ca



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From: Ben Radford

To: sarontario@ontario.ca

Subject: Part Lot 6, Concession 3, Municipality of Dysart et al. - SAR Information Request

Date: January 30, 2023 2:04:00 PM

Attachments: <u>image001.jpg</u>

Subject Property.jpg

Good afternoon,

My name is Ben Radford from D.M. Wills Associates Limited in Peterborough. We have been contracted to complete an EIS on a parcel of land located at Part Lot 6, Concession 3 in in the Municipality of Dyusart el., County of Haliburton, see the attached map for details. The client is proposing to sever two parcels of land and retain one lot. Through background research, we have identified the following Species at Risk (SAR) as having the potential to be present on the Subject Property:

- Algonquin Wolf (Threatened)
- Bald Eagle (Special Concern)
- Bank Swallow (Threatened)
- Barn Swallow (Threatened)
- Blanding's Turtle (Threatened)
- Bobolink (Threatened)
- Canada Warbler (Special Concern)
- Chimney Swift (Threatened)
- Common Nighthawk (Special Concern)
- Eastern Hog-nosed Snake (Threatened)
- Eastern Meadowlark (Threatened)
- Eastern Musk Turtle (Special Concern)
- Eastern Ribbonsnake (Special Concern)
- Eastern Whip-poor-will (Threatened)
- Eastern Wood-pewee (Special Concern)
- Evening Grosbeak (Special Concern)
- Golden-winged Warbler (Special Concern)
- Least Bittern (Threatened)
- Little Brown Myotis (Endangered)
- Olive-sided Flycatcher (Special Concern)
- Peregrine Falcon (Special Concern)
- Red-headed Woodpecker (Endangered)
- Rusty Blackbird (Special Concern)
- Snapping Turtle (Special Concern)
- Tri-coloured Bat (Endangered)
- Wood Thrush (Special Concern)

If you could please confirm and/or add/remove SAR from this list, that would be greatly appreciated.

In addition, could you please provide the Active Turtle Season and the Breeding Bird Season for the Subject Property.

Thanks,

Ben



Ben Radford, B.Sc. · Project Biologist

D.M. Wills Associates Limited

150 Jameson Drive · Peterborough, ON · K9J 0B9 Cell: 705-768-4296 · Fax: (705) 748-9944

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From: Ben Radford

To: <u>adam.wakefield@ontario.ca</u>

Subject: Part Lot 6, Concession 3 Municipality of Dysart et al. - Natural Heritage Information Request

Date: January 30, 2023 1:10:00 PM

Attachments: Subject Property.jpg

image001.jpg

Good afternoon Adam,

D.M. Wills Associates Ltd. (Wills) has been contracted to complete an EIS for a parcel of land located at Part Lot 6, Concession 3 within the Municipality of Dysart et al., Haliburton County. Please see the attached map for details on the Subject Property. Through background research, various natural heritage features have been identified. A large woodland exists throughout the Subject Property, as well as multiple unevaluated wetlands and a PSW at the south end. Additionally, a watercourse runs through the middle portion of the Subject Property. Municipality of Dysart et al. mapping indicates that a Stratum 2 Deer Wintering Area exists throughout the western portion of the Subject Property. An on-site Deer Yard Assessment is scheduled to take place on January 31, 2023 to assess the Deer Yard on the property.

Wills' would like to request any additional information you may have on these natural heritage features, as well as any fisheries information you may have for the watercourse; review of Fish ON-Line did not provide any information.

If you have any questions, please do not hesitate to contact me.

Thanks, Ben



Ben Radford, B.Sc. · Project Biologist

D.M. Wills Associates Limited

150 Jameson Drive · Peterborough, ON · K9J 0B9 Cell: 705-768-4296 · Fax: (705) 748-9944

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From: NHI ParrySound (MNRF)

To: Ben Radford

Subject: RE: Part Lot 6, Concession 3 Municipality of Dysart et al. - Natural Heritage Information Request

Date: February 1, 2023 10:38:02 AM

Attachments: <u>image001.jpg</u>

Hello Ben

You did a very thorough review of natural heritage features. I had a look at our records and I didn't find any fisheries information for the watercourse on site, nor did I find any other information you haven't already identified.

I did notice that there are a number of SAR records in the area so I would recommend that you contact MECP at sarontario@ontario.ca for detailed SAR information – if you haven't done so already.

I realize that the changes in MNRF district boundaries may be confusing for a while but if you require natural heritage information for the Parry Sound, Bracebridge and Minden areas, please send your request to NHI.parrysound@ontario.ca. If your request falls outside our district boundary, I will gladly forward it to the appropriate contact.

Regards,

karine

Karine Bériault (she/her/elle)
Management Biologist/Biologiste, gestion des ressources
Parry Sound Work Centre/Centre de travail de Parry Sound
Ministry of Natural Resources and Forestry (MNRF)/
ministère des Richesses naturelles et des Forêts (MRNF)

Phone/tel.: 705-346-1431

From: Ben Radford < <u>BRadford@dmwills.com</u>>

Sent: January 30, 2023 1:10 PM

To: Wakefield, Adam (MNRF) < <u>Adam.Wakefield@ontario.ca</u>>

Subject: Part Lot 6, Concession 3 Municipality of Dysart et al. - Natural Heritage Information Request

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Thanks, Ben



Ben Radford, B.Sc. · Project Biologist

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Appendix E

Site Photographs



Photo # 1

Location: 17T 693794.73E 4985363.40N

Photo Direction: N/A

Date: 2023/06/13

Photo Description:

Ecosite G130Tt - Intolerant Hardwood Swamp.



Photo # 2

Location: 17T 693908.00E 4985376.69N

Photo Direction: N/A

Date: 2023/06/13

Photo Description:

Ecosite G058Tt - Dry to Fresh, Coarse: Maple Hardwood.



Photo # 3

Location: 17T 693979.05E 4985447.82N

Photo Direction: N/A

Date: 2023/06/13

Photo Description:

Wetland ecoelement located within the northeast corner of ecosite G058Tt.



Photo #4

Location: 17T 693992.50E 4985407.37N

Photo Direction: N/A

Date: 2023/05/31

Photo Description:

Drainage feature draining from the wetland ecoelement within the G058Tt ecosite into the G141N ecosite.





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Photographic Log

Client Name: Mr. Todd Emmerson

Project #: 7543

Site Location: Part Lot 6, Concession 3, Municipality of Dysart et al., Ontario

Page #: 1 of 3

Photo # 5

Location: 17T 693957.52E 4985253.36N

Photo Direction: N/A

Date: 2023/05/31

Photo Description:

Ecosite G141N - Mineral Meadow

Marsh.



Photo # 6

Location: 17T 693901.02E 4985069.87N

Photo Direction: N/A

Date: 2023/06/13

Photo Description:

Ecosite G042Tt - Dry, Sandy: Maple Hardwood.



Photo # 7

Location: 17T 693938.49E 4985004.84N

Photo Direction: N/A

Date: 2023/06/13

Photo Description:

Ecosite G129Tt - Organic Rich Conifer Swamp.



Photo #8

Location: 17T 694095.23E 4985187.78N

Photo Direction: N/A

Date: 2023/06/13

Photo Description:

Ecosite G107Tt - Fresh, Silty to Fine Loamy: Maple Hardwood





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Photo # 9

Location: 17T 693901E 4985405N

Photo Direction: N/A

Date: 2023/01/31

Photo Description:

Deer Yard assessment plot DYA03.





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