141 O-at-Ka Road, Municipality of Hastings Highlands, County of Hastings

Environmental Impact Study

Prepared For:

Domenic Sacco

October 2024

CREATING QUALITY SOLUTIONS TOGETHER

Ainley GROUP

ENVIRONMENTAL IMPACT STUDY

for

141 O-at-Ka Road

Municipality of Hastings Highlands

Prepared by Ainley Group

October 2024

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1.0 INTRODUCTION

Ainley Group was retained to conduct an Environmental Impact Study (EIS) for the subject property identified as 141 O-at-Ka Road, Municipality of Hastings Highlands, County of Hastings. The subject property is identified as part of Lot 20, Concession 5 in the geographic Township of Herschel, Municipality of Hastings Highlands, County of Hastings (**Figure 1**).

Based on our understanding of the project, the client is looking to rebuild an existing cottage. A slight addition / expansion to the cottage is proposed as part of the reconstruction, and would result in a footprint expansion along the rear (east) of the cottage of approximately 3.0 m, and side (south) of the cottage of approximately 1 m. In addition to the above, the existing docks will be replaced with docks of an equal or lesser footprint, and existing rock within the water will be placed to better stabilize the existing shoreline. It is understood that the EIS is required due to the proximity of the proposed development to Baptiste Lake (i.e., within 30 m of the high-water mark). The existing site conditions at the time of field investigations are shown on **Figure 2**.

2.0 PURPOSE OF THE REPORT AND SCOPE OF WORK

This report is being prepared to document the environmental features of the subject property and to provide an overview of potential impacts from the undertaking on the study area environment in consideration of Provincial and municipal planning policies.

The Scope of Work, as outlined below, has been based on previous similar projects completed by Ainley Group and in accordance with the Ainley Group proposal (dated May 16, 2024). The scope of work for the investigation (as outlined in the proposal) included the following:

- Minimum of 1 site visit during field work appropriate season, or more site visits as required.
- Review of background data within the study limits (NHIC Make a Map, eBird) and agency consultation (i.e., MNRF, MECP), where applicable.
- Review of fish and fish habitat, including an assessment of the potential to impact fish and fish habitat.
- Ecological Land Classification (ELC) of vegetation communities.
- Species at risk (SAR) presence and habitat assessment.
- Analysis of possible impacts of development to natural heritage features.
- Mitigation recommendations.

3.0 SOURCES OF EXISTING BASELINE INFORMATION

The following resources were identified and used to review background data on terrestrial and aquatic species within or in close proximity to the study area as part of the existing conditions and impact assessment. Background information is included in **Appendix A**.

- MNRF – Land Information Ontario (LIO) / Natural Heritage Make-a-Map review for natural heritage data.
- Ebird - review for bird species observation data.
- Ontario Breeding Bird Atlas (OBBA) – review for bird species observation data.
- Ontario Reptile and Amphibian Atlas (ORAA) – review for herpetofaunal species observation data.
- iNaturalist – review for wildlife and vegetation species observation data.
- Aerial Photographs – review aerial photographs of the study area.
- Fish ON-Line – MNRF database of waterbodies and fish species present

Details pertaining to the above information sources and available information were utilized to compile existing conditions information in the study area, and are summarized in the existing conditions section of the report.

The sections below summarize the above information sources and available information.

MNRF LIO / Natural Heritage Make-a-Map (MNRF, 2023)

Mapping available from LIO and Natural Heritage Make-a-map identified one (1) waterbody, Baptiste Lake within or adjacent to the subject property boundaries. No Provincially Significant Wetlands (PSWs), unevaluated wetlands, or Areas of Natural or Scientific Interest (ANSIs) were identified within or adjacent to the subject property boundaries. Information provided by the NHIC also indicated species of concern present within the area, which included Ogden's Pondweed in the proximity of the subject property.

Ebird (Cornell Lab of Ornithology, 2023)

Ebird was reviewed to determine observations of bird species (including SAR) which have historically occurred in the study area. No eBird hotspots were noted to be present in proximity to the subject property.

Ontario Breeding Bird Atlas (Bird Studies Canada, 2023)

OBBA was reviewed to determine observations of bird species (including SAR) which have historically occurred in the study area.

Ontario Reptile and Amphibian Atlas (Ontario Nature, 2023)

ORAA was reviewed to determine observations of herpetofaunal species (including SAR) which have historically occurred in the study area.

iNaturalist (California Academy of Sciences and the National Geographic Society, 2023)

iNaturalist was reviewed to determine observations of wildlife and vegetation species (including SAR) which have historically occurred in the study area.

Aerial Photographs

Aerial photographs of the study area were reviewed to observe current conditions as well as changes in the study area to better understand the site ecology. The available imagery suggests that no significant changes occurred on the subject lands between 2012 and 2022.

Fish ON-Line (MNRF, 2022) – Waterbodies and Fish Inventory of Ontario

The MNRF's Fish ON-Line tool was reviewed to determine fish species which have been reported to be found within Baptiste Lake.

4.0 DATA COLLECTION METHODOLOGY

The following field survey protocols were completed to assess and document the presence of vegetative, wildlife, migratory and breeding birds, and herpetofaunal species within the study area. During the field survey, emphasis was placed on SAR with the potential to occur within the study area. Field surveys for respective ecological features were completed in accordance with the following methodology:

Vegetation

A vegetation field survey for species composition was completed within the study area on May 17, 2024. Photographs of the identified vegetation communities are shown in **Appendix B**, a species list is included in **Appendix C**, and ELC field forms are included in **Appendix D**.

Wildlife

Observations of incidental wildlife encounters (turtles, amphibians, birds, snakes, mammals) were recorded during the field visit on May 17, 2024. Any wildlife observations were noted along with locational information of the sighting. Specific attention was given to the evaluation for the presence of SAR during the field visits, including SAR turtles, birds, and vegetation.

During the survey, reference for specific habitat requirements for each species was per the *MNR - Significant Wildlife Habitat Technical Guide* (2000).

Fish and Fish Habitat

A fish and fish habitat field survey, including fish habitat mapping within the adjacent littoral zone of Baptiste Lake, was conducted during the field investigation completed on May 17, 2024.

Waterbody characteristics and habitat features were recorded while on-site and have been summarized in **Section 6.4.**

5.0 PLANNING POLICIES AND FRAMEWORK

The following planning policies and framework were reviewed and applied to establish the suitability of the proposed development in consideration of environmental impacts to the subject land and adjacent properties.

5.1 Provincial Planning Policy

The Provincial Planning Statement (PPS) (MMAH, 2024) outlines policies related to natural heritage features (Section 4.1) and water resources (Section 4.2). The *Planning Act* requires that planning decisions shall be consistent with the PPS.

According to the PPS, development and site alteration shall not be permitted in:

- Significant wetlands (in coastal areas or in Ecoregions 5E, 6E and 7E), and
- Significant coastal wetlands.

Similarly, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions, development and site alteration shall not be permitted within:

- Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E, and 7E,
- Significant woodlands (Ecoregions 6E and 7E, excluding islands in Lake Huron and the St. Marys River),
- Significant valley lands (Ecoregions 6E and 7E, excluding islands in Lake Huron and the St. Marys River),
- Significant wildlife habitat,
- Significant Areas of Natural and Scientific Interest (ANSI), and
- Coastal wetlands in Ecoregions 5E, 6E, and 7E.

Development and site alterations shall not be permitted in fish habitat or the habitat of endangered and threatened species, expect in accordance with provincial and federal requirements.

In addition, development and site alteration is not permissible on lands adjacent to the natural features and areas identified above unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that no negative impacts on natural features and functions will occur.

5.2 Hastings County Official Plan and Municipality of Hastings Highlands Zoning By-Law

5.2.1 Hastings County Official Plan

The County of Hastings has prepared an Official Plan with the intention that it will guide development activities in the County over a twenty year horizon. Official Plan documents (**Appendix E**) note the land use on the subject property to be Rural / Waterfront. Within this designation, the Waterfront area is defined as those lands extending inland 300 m from the high

water mark of lakes. Permitted uses within Rural / Waterfront designated lands include limited low density residential uses. Schedule B of the Official Plan indicates that the subject property falls within a Stratum I Deer Yard, and that Baptiste Lake is an "at capacity" Lake Trout lake. No other constraints are identified for the subject property.

5.2.2 Municipality of Hastings Highlands Zoning By-Law

The Municipality of Hastings Highlands has prepared a Zoning By-law to identify the permitted use of lands within the Municipality. Zoning mapping (**Appendix E**) indicates that the subject lands are zoned Waterfront Residential (WR). Amongst other things, the WR zoning permits the use of the property for a single detached dwelling or a seasonal dwelling.

It should be noted that the Municipality's Comprehensive Zoning Bylaw No. 2004-035 requires development to be no closer than 30 metres to the high water mark and requires a 30 metre natural vegetative buffer area along the shoreline. The existing dwelling was built before the zoning required this setback; however, it is interpreted that "grandfathering" would not apply to the proposed cottage addition. As such, these development plans require the support of an EIS.

6.0 EXISTING CONDITIONS

An existing condition review of the subject property was completed on May 17, 2024, during which it was noted that the subject property is generally part of low density residential (cottage) development along the shoreline of Baptiste Lake. Access to the subject property is via O-at-Ka Road. The existing conditions of the subject property are shown on **Figure 2**, in the photographic log (**Appendix B**), and are detailed in the following sections.

6.1 Land Use, Topography, and Drainage

Land use on the subject property is currently (and will continue to be) as a seasonal dwelling (low density residential; **Figure 2**). The surrounding area includes cottage properties to the north and south, waterbody (Baptiste Lake) to the west, and O-at-Ka Road to the east.

The topography of the subject property is sloped towards Baptiste Lake from east to west. The elevation of the property ranges from approximately 365 meters above sea level (masl) in the east limits of the subject property to approximately 355 masl along the Baptiste Lake shoreline.

Drainage on the subject property is interpreted to follow the site topography, with flow from the east to the west and ultimately to Baptiste Lake. No drainage features or watercourses were observed to be present on the subject property.

The site was noted to be primarily open (limited trees with larger grassed areas). The existing lot was noted to have a somewhat terraced construction, with recreational areas (i.e. fire pit / seating area, parking, etc.) set back at varying distances from the Baptiste Lake shoreline.

6.2 Surficial and Bedrock Geology

The subject property is located within the Algonquin Highlands physiographic region. The landform features of the study area consist of a relatively hilly landscape with forested areas, watercourses, and a mixture of permanent and seasonal residential features within the general project area.

Surficial geology in the study area is identified as a silty sand to sand-textured till on Precambrian terrain by the Ontario Geological Survey (OGS, 2003). Bedrock geology in the study area consists of Carbonate metasedimentary rocks marble, calc-silicate rocks, skarn, tectonic breccias. Grenville Supergroup and Flinton Group (Lumbers, 1976).

6.3 Vegetation and Vegetation Communities

The study area is located in ecoregion 5E – Georgian Bay Ecoregion, within the Ontario Shield ecozone, which is typically dominated by mixed and deciduous forest, with coniferous and sparse forests present in small quantities (MNRF, 2009). A field survey was completed by Ainley Group in May 2024 during which vegetative species and communities within the study limits were documented. Vegetation within the subject property was identified and categorized in accordance with the Ecological Land Classification (ELC) mapping, with vegetative communities assigned ELC codes consistent with the amended ELC classification tables (2013).

Vegetation communities within the study area consisted of Low Density Residential (CVR_1). The community is shown on **Figure 2**.

SAR or rare vegetation identified by NHIC as having the potential to exist within the study limits includes; Ogden's Pondweed (END). No SAR or rare vegetation was observed during the field survey completed by Ainley Group. A discussion regarding SAR vegetation and the subject property is provided in detail within **Section 6.6**.

The following sections provide a detailed summary of the vegetation and vegetative community observed within the study area during the field investigation in 2024. An aerial view of the subject property and respective vegetation community is shown in **Figure 2**.

6.3.1 Low Density Residential (CVR_1)

This community was observed across the entire study area, and is characterized by manicured lawn and selective landscaping. Vegetation species observed within this community included; Sugar Maple (*Acer saccharum*), Eastern White Pine (*Thuja occidentalis*), Balsam Fir (*Abies balsamea*), White Trillium (*Trillium grandiflorum*), Canada Mayflower (*Maianthemum canadense*), amongst other species.

6.4 Surface Water Features, Fish and Fish Habitat, and Aquatic SAR

The subject property is adjacent to Baptiste Lake. Baptiste Lake is a cold-water lake, which supports a lake trout fishery. Information from the Hastings County Official Plan indicates that the

lake is considered to be “at capacity” in terms of residential development. The lake is located approximately 15.4 kilometers (km) northwest of the community of Bancroft, Ontario. Baptiste Lake is approximately 2,226 hectares (ha) in area.

A review of fish and fish habitat along the shoreline was completed during the site visit on May 17, 2024. No fish species were observed; however, per the MNRF’s Fish ON-Line tool, the lake is known to contain a variety of warm and cold-water species, including; Lake Trout, Lake Whitefish, Largemouth Bass, Muskellunge, White Sucker, Bullhead, Smallmouth Bass, Cisco, Rock Bass, and Pumpkinseed (**Appendix A**). Per the MNRF’s general in-water work timing window guidelines and in consideration of the fish species identified to be present, a no in-water work timing window of October 1 to July 15, in any calendar year is considered to be appropriate. Fish habitat along the shoreline was observed to be dominated by rock, with substrate generally consisting of rounded stone in the nearshore area. The shoreline was also noted to contain several pieces of concrete rubble. Dock features were observed to be present along the water’s edge. Well established overhanging vegetation (i.e. mature trees) was observed along the shoreline adjacent to the property; however, limited aquatic vegetation was noted to be present.

It is understood that the existing dock features will be replaced with docks of an equivalent or smaller footprint. Further, it is understood that some of the existing rounded stone within the nearshore area will be placed to better stabilize the existing shoreline of the property, thereby minimizing the potential for future erosion and sedimentation.

A review of available DFO information was completed by Ainley Group in an effort to determine the potential for aquatic SAR within the project limits. Upon completion of the review, no aquatic SAR fish / mussel species were identified.

The DFO has prepared an Interim Code of Practice: Repair, Maintenance and Construction of Docks, Moorings and Boathouses. This Code of Practice can be used where the following applies:

- Work will not take place within the distribution area of molluscs listed under schedule 1 of the *Species at Risk Act;*
- Work will not take place within the critical habitat or residences or any other aquatic SAR;
- The work does not include the use of explosives, pile driving using impact hammer, removal of vegetation, natural wood debris, rocks, sand, or other materials from the banks, shoreline, or the bed or the waterbody;
- The work does not include the placing of fill, excavating or grading the bed or bank of the waterbody, or dredging;
- The work does not include the construction of a dock, mooring, or boathouse over aquatic vegetation;
- No temporary or permanent increase in the existing footprint below the ordinary high water mark (expect for the area of pipes, piles, poles, anchors, and cement blocks);
- Pile installation is only allowed in freshwater environments and must be completed using a vibratory hammer or drilling methods; and,
- Where the Measures to Protect Fish and Fish Habitat will be implemented including;
    - Protection of fish

- Protection of the riparian zone
- Protection of aquatic habitat
- Protection of fish and fish habitat from sediment
- Protection of fish and fish habitat from other deleterious substances

Based on our understanding of the proposed dock replacement, the above can be applied, and the Interim Code of Practice: Repair, Maintenance and Construction of Docks, Moorings and Boathouses should be utilized during dock replacement at the subject property.

It is understood that as part of the cottage reconstruction the existing septic system will be moved and setback further away from the shore of Baptiste Lake. The septic system is proposed to be moved to a flat area located approximately 30 – 40 m east of the existing dwelling, providing for a setback of approximately 45 m to 55 m from the shoreline. It is anticipated that this will be of benefit to Baptiste Lake, as it will provide additional buffer.

Provided the mitigation measures as outlined within **Section 8.0** are adhered to, no impacts to aquatic species, shoreline habitat, or aquatic SAR are anticipated as a result of the undertaking.

6.5 Birds, Wildlife, and Herpetofaunal Species and Habitat

Habitat within and adjacent to the subject property includes forested lands, and surface water communities, allowing for a wide variety of birds, wildlife, and herpetofaunal species with the potential to occur within the study limits. The following sections detail the species formerly reported to occur within the study area, as well as those observed during the field investigation completed by Ainley Group in 2024.

6.5.1 Bird Species

Incidental observations of bird species were documented within the study area during the field surveys in May 2024. Species which were incidentally observed are provided in the list below.

A total of four (4) bird species were observed (visually or audibly) within the study area. A summary of the species list (common names) is included below:

- Blackburnian Warbler (*Setophaga fusca*)
- Common Grackle (*Quiscalus quiscula*)
- Ovenbird (*Seiurus aurocapilla*)
- Red-eyed Vireo (*Vireo olivaceus*)

Species observation data from the OBBA (Square 18TQ69) indicates the presence of a wide variety of both upland and waterfowl species, which is to be expected given the variety of habitat present.

Additional information of SAR birds with the potential to occur within the study area, is provided in **Section 6.6**.

6.5.2 Wildlife / Herpetofaunal Species

Wildlife species within the study area were documented via direct observation and interpretation of sign (i.e., tracks, scat, vocalizations, etc.). Observations of wildlife species during the environmental investigation by Ainley Group in 2024 were limited to Red Squirrel (*Tamiasciurus hudsonicus*). However, the subject property and adjacent lands are also anticipated to provide habitat for other typical small to large mammals of southern Ontario including White-tailed Deer (*Odocoileus virginianus*), Moose (*Alces alces*), Raccoon (*Procyon lotor*), and Striped Skunk (*Mephitis mephitis*).

Incidental observations of herpetofaunal species that occurred during the field survey were documented. Although no herpetofaunal species were observed during the Ainley Group site visit, given the presence of Baptiste Lake, the general area is anticipated to provide suitable habitat for herpetofaunal species such as Snapping Turtle (*Chelydra serpentina*), and Northern Watersnake (*Nerodia sipedon sipedon*) amongst other species.

Additional information pertaining to SAR wildlife with the potential to occur within the study limits is provided in **Section 6.6**.

6.6 Significant Natural Heritage Functions / Features

As part of the EIS, the following natural heritage functions and features were reviewed for the subject property:

- Significant habitat of endangered and threatened species;
- Significant wetlands;
- Significant coastal wetlands;
- Significant woodlands;
- Significant valleylands;
- Significant areas of natural and scientific interest;
- Significant Wildlife Habitat.

6.6.1 Species at Risk

To evaluate potential for species at risk on the subject property a site assessment for SAR was completed, including a review of background data from other sources (i.e., Reptile and Amphibian Atlas, eBird, iNaturalist, and NHIC). Based on the background data sources (**Appendix A**) and previous experience in the general area, the following terrestrial species have been included for review:

Table 1: Species At Risk with the Potential to Occur within the Study Limit

Species (Scientific Name)	Species (Common Name)	Federal Status	Provincial Status
Myotis lucifugus	Little Brown Myotis	Endangered	Endangered
Myotis septentrionalis	Northern Myotis	Endangered	Endangered
Perimyotis subflavus	Tri-colored Bat	Endangered	Endangered
Myotis leibii	Eastern Small-footed Myotis	Endangered	Endangered
Potamogeton ogdenii	Ogden's Pondweed	Endangered	Endangered
Emydoidea blandingii	Blanding's Turtle	Endangered	Threatened
Sturnella magna	Eastern Meadowlark	Threatened	Threatened
Cardellina canadensis	Canada Warbler	Threatened	Special Concern
Hylocichla mustelina	Wood Thrush	Threatened	Special Concern
Contopus virens	Eastern Wood-pewee	Special Concern	Special Concern
Chelydra serpentina	Snapping Turtle	Special Concern	Special Concern
Danaus plexippus	Monarch	Special Concern	Special Concern
Coccothraustes vespertinus	Evening Grosbeak	Special Concern	Special Concern
Falco peregrinus	Peregrine Falcon	Special Concern	Special Concern
Haliaeetus leucocephalus	Bald Eagle	Not at Risk	Special Concern

During field visits completed by Ainley Group in 2024 no SAR were observed at or adjacent to the subject property.

As part of the evaluation, habitat requirements of the terrestrial SAR identified with the potential to exist were compared against the habitat types present and species observations on the subject property. The results of this assessment are provided in **Table 2**.

Based on a review of the existing conditions, the proposed development is generally anticipated to have limited potential to impact the SAR identified for the subject property. While the vegetation community on the subject property is not considered to be a forest, the mature trees present may have the potential to support bat and forest bird species. Vegetation clearing (removal of 2 White Pine and 1 White Cedar) is anticipated as a result of the proposed development. Any vegetation clearing should respect the active season for bats and migratory breeding birds, with no clearing completed between April 1 and September 30, in any calendar year.

Measures to limit impacts to those species identified with the potential to be impacted by the development are discussed further in **Section 8.0**.

6.6.2 Significant Wetlands and Coastal Wetlands

Per the Natural Heritage Reference Manual (MNRF, 2010), a coastal wetland is defined as:

a) any *wetland* that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, St. Mary's, St. Clair, Detroit, Niagara and St. Lawrence Rivers); or

b) any other *wetland* that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located 2 kilometers upstream of the 1:100-year floodline (plus wave run-up) of the large water body to which the tributary is connected.

No significant wetlands have been identified on the subject property by MNRF or were observed during the site visit by Ainley Group in 2024. As such, no impacts to significant or coastal wetlands are anticipated as a result of the undertaking.

6.6.3 Significant Woodlands

Significant Woodlands within the region have been mapped by Hastings County within 'Schedule B – North' of their Official Plan (2018; **Appendix E**). No Significant Woodlands have been identified on the subject property by Hastings County. As such, no impacts to Significant Woodlands are anticipated as a result of the undertaking.

6.6.4 Significant Valleylands or Areas of Natural and Scientific Interest (ANSI)

No Significant Valleylands or ANSIs have been identified on the subject property by Hastings County (2018) or MNRF (2023). As such, no impacts to Significant Valleylands or ANSIs are anticipated as a result of the undertaking.

6.6.5 Significant Wildlife Habitat

In accordance with the *NHRM* (OMNR, 2010), there are four categories of significant wildlife habitat including the following:

- Rare vegetation communities or specialized habitat for wildlife.
- Habitat of species of conservation concern.
- Animal movement corridors.
- Habitats of seasonal concentrations of animals.

Criteria for confirmed significant wildlife habitat are provided in *Significant Wildlife Habitat Criteria Schedules for Ecoregion 5E* (OMNR, 2015).

Background information from the Hastings County Official Plan Schedule B indicates that the subject property falls within a Stratum 1 deer yard. While development in general has the potential to impact wintering deer, vegetation communities on the subject property are not consistent with core wintering habitat (i.e. dense conifers including White Cedar and Eastern Hemlock) for deer and the proposed development will be maintained within the existing area of development disturbance on the subject property and no vegetation removal is proposed. No impacts to wintering deer are anticipated as a result of the undertaking.

No other Seasonal Concentration Areas, Rare Vegetation Communities, Specialized Habitat for Wildlife, Habitat for Species of Conservation Concern, or Animal Movement Corridors were identified during field surveys within the study area.

7.0 PROPOSED DEVELOPMENT

The development is proposed to include the reconstruction of an existing cottage dwelling and relocation of the associated septic system. The proposed dwelling will generally be in the location of the existing footprint; however, requires an expansion to the rear (east) of approximately 3.0 m, and expansion to the side (south) of approximately 1.0 m. The proposed dwelling will be approximately 9.0 m x 13.0 m, and will utilize the existing deck footprints. The proposed dwelling will not encroach any closer to the water than the existing. In addition, the existing septic system is proposed to be removed, with a new system being constructed approximately 30 m – 40 m east of the existing cottage dwelling. A new foundation will be constructed. It is recommended that excavation associated with foundation construction be minimized to the extent possible given the proximity of the proposed development to Baptiste Lake. The proposed development is shown in **Appendix F**.

In addition to the above, the existing docks will be replaced with docks of an equal or lesser footprint, and existing rock within the water will be placed to better stabilize the existing shoreline of the subject property.

Typical construction aspects of the proposed development are likely to include excavation and grading for the proposed new foundation / dwelling addition and movement of the septic. No modifications are proposed to the existing shoreline.

8.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section of the report describes the potential impacts on the natural heritage environment associated with the proposed development. It also outlines proposed mitigation measures, in consideration of standard development practices, in order to minimize or prevent negative impacts from the undertaking.

8.1.1 Erosion and Sediment Control

Potential Impacts

Any required excavation and related site grading activities, may result in the release of sediment into the adjacent natural features. In addition, exposed soils and/or stockpiles of excess material (such as earth, rock) can result in sediment transport to these areas during rain events.

Mitigation

In order to mitigate the transport of sediment during construction and post-development, environmental protection measures should be incorporated into the construction process. To ensure protection of the surrounding natural environment the following should be undertaken during development:

- All construction activities including maintenance procedures will be controlled to prevent entry of deleterious substances into the natural environment. Vehicular maintenance and refueling will be conducted at least 30 m from wetlands or waterways.
- During construction and grading activities, silt barrier or other suitable erosion and sediment controls should be placed along the downgradient boundary of the construction zone, as well as around any stockpiled materials to reduce the potential for sedimentation. The erosion control barrier should remain in place until the grading area becomes sufficiently vegetated to limit erosion and sedimentation potential. Once the site is stabilized, the erosion control barriers can be removed.
- Monitor the weather during construction in an effort to avoid exposed soils and forecasted precipitation events.
- Exposed soils associated with grading areas should be minimized to the extent possible.
- Run-off from construction materials and any stockpiles shall be contained and discharged so as to prevent entry of sediment to the adjacent environment.

8.1.2 Surface Water Contamination and Debris Accumulation

Potential Impacts

During construction activities, the potential for accidental fuel or lubricant spillage, debris accumulation, and subsequent contamination to surface water is increased.

Mitigation

To prevent the contamination of any surface water features (i.e. Baptiste Lake) within and adjacent to the project area during construction, precautions should be taken to avoid accidental spillage or discharge of chemical contaminants (e.g., gasoline, oils and lubricants). These precautions require refueling to be carried out a minimum of 30 m from surface water features in a controlled

manner so as to prevent fuel spillage. In addition, an emergency spill response kit should be on site at all times. In the event that a spill occurs, proper containment, clean up and reporting, in accordance with provincial requirements, should be undertaken.

The Contractor will be required to take all necessary precautions to prevent the accumulation of litter and construction debris in any natural areas within and outside of the construction grading limits. All materials used or generated (e.g., organics, soils, debris, stockpiles) should be disposed of or stored in a manner that mitigates their entry to the adjacent Baptiste Lake.

8.1.3 Vegetation

Potential Impacts

Construction activities are anticipated to require the removal of two (2) White Pine, and one (2) White Cedar. These trees are located at the rear of the existing dwelling. It is understood that no riparian trees are proposed for removal.

Mitigation

The Municipality of Hastings Highlands Bylaw 2021-006 enforces restrictions around tree removal adjacent to waterbodies (i.e. along shoreline areas). Further, the Municipality of Hastings Highlands also has a Tree Canopy Policy which serves to protect tree canopy cover in or adjacent to significant natural features such as significant woodlands, significant valleylands, and waterbodies. Construction activities on the subject property (and associated vegetation removal) are required to be completed in accordance with the above noted by-laws / policies; however, it should be noted that Bylaw 2021-006 allows for the reasonable removal of trees where a Building Permit has been issued.

Tree removal should include appropriate tree felling and grubbing procedures in order to minimize impacts on surrounding vegetation.

Migratory breeding birds are protected under the *Migratory Birds Convention Act, 1994*. Under this act it is unlawful to kill or destroy migratory breeding birds or active nests. To avoid impacts to migratory birds, vegetation removal (as necessary) during development of the subject property should be avoided between early April and late August (migratory bird breeding and nesting period; Environment and Climate Change Canada, 2018). Further, it should be noted that occupied migratory bird nests are protected at any time of the year (including outside of the migratory bird breeding and nesting period). Should a migratory bird nest be found to be occupied outside of the migratory bird breeding and nesting period, then any activity that may harm or damage the nest or occupying individual must cease until the nest is no longer occupied.

A discussion of mitigation associated with SAR is provided in **Section 7.1.6**.

8.1.4 Wildlife and Bird Migration

Potential Impacts

Potential impacts to wildlife and bird migration are anticipated to predominantly be associated with footprint excavation and grading activities, and are expected to generally be temporary in nature.

Mitigation:

To limit potential impacts, care should be taken during construction to avoid incidental contact with wildlife.

8.1.5 Species at Risk (SAR)

Potential Impacts

As discussed in **Section 6.6.1** and **Table 2**, the proposed development is generally anticipated to have limited potential to impact the SAR identified for the subject property. The mature trees present on the subject property are considered to have the potential to support bat species which may utilize them for day roosting activities. Vegetation clearing has the potential to impact SAR bats and / or birds.

Mitigation

Mitigation measures for protection of SAR should include the following:

- Any clearing of vegetation with a diameter at breast height greater than 10 cm should respect the active season for bats, with no clearing completed between April 1 and September 30, in any calendar year. This will also provide protection for SAR migratory and breeding birds which have the potential to be present.
- The construction contractor should be familiar with the SAR noted in this report. If SAR are identified during construction, all works in the immediate area should cease and the MECP must be contacted for direction on how to proceed.
- Harassment to SAR should not occur during construction activities.

8.1.6 Environmentally Sensitive Areas

Potential Impacts

No rare vegetation communities were identified by the MNRF or NHIC within the study limits, nor were any identified during field investigation for ELC.

Baptiste Lake is considered to be a generally sensitive feature.

Mitigation measures as outlined in **Sections 8.1.1** and **8.1.3** are anticipated to limit impacts to these features.

8.1.7 Fisheries, Associated Habitat, and In-Water Works

Potential Impacts

The existing docks will be replaced with docks of an equal or lesser footprint, and existing rock within the water will be placed to better stabilize the existing shoreline of the subject property. Further, as development will occur adjacent to Baptiste Lake, there is potential for sedimentation, surface water contamination, and debris accumulation within the littoral zone of the lake.

It is understood that the septic system for the reconstructed cottage will be moved to a location approximately 30 – 40 m east of the existing dwelling. It is anticipated that this will be of benefit to Baptiste Lake as it will provide an increased buffer.

Mitigation Measures:

In order to ensure no impacts to Baptiste Lake, the following mitigation measures should be considered:

- Implementation of erosion and sediment controls as described in **Section 8.1.1**.
- Implementation of surface water contamination and debris accumulation controls as described in **Section 8.1.2**.
- No in-water work is to be completed between October 1 and July 15, in any calendar year.
- The Interim Code of Practice: Repair, Maintenance and Construction of Docks, Moorings and Boathouses should be utilized during dock replacement at the subject property.

8.1.8 Long Term Use (Cumulative Impacts)

Potential Impacts

Cumulative impacts are generally defined as impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (Clark, 1994). In regards to the proposed development at 141 O-at-Ka Road, there are no anticipated changes to the use of the property. While the proposed dwelling is slightly larger, no cumulative impacts are anticipated as a result of the cottage reconstruction and septic movement. As noted previously, it is anticipated that relocation of the septic system (45 m to 55 m from Baptiste Lake) will serve to benefit the lake by providing additional setback that isn't currently present.

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

Based on the review of the background information, and the field visit completed in 2024, the following conclusions have been made. These conclusions are to be considered in addition to

the information presented in **Section 8.0** which provides a summary of potential impacts and mitigation measures.

- The lot is located adjacent to Baptiste Lake, which is understood to be an at-capacity Lake Trout lake.
- The existing cottage dwelling at 141 O-at-Ka Road is proposed to be reconstructed with a modest increase to the footprint (mainly to the rear of the existing cottage) and relocation of the septic system to a site approximately 30 m to 40 m from the existing cottage dwelling. The reconstructed cottage dwelling will maintain the setbacks from shoreline observed within the existing dwelling.
- No SAR were observed during the field visit by Ainley Group.
- Impacts to SAR are anticipated to be minimal as a result of the undertaking.

9.2 Recommendations

As a result of the aforementioned conclusions, the following recommendations are made:

- All construction activities including maintenance procedures will be controlled to prevent entry of deleterious substances into the natural environment. Vehicular maintenance and refueling will be conducted at least 30 m from wetlands or waterways.
- During construction and grading activities, silt barrier or other suitable erosion and sediment controls should be placed along the downgradient boundary of the construction zone, as well as around any stockpiled materials to reduce the potential for sedimentation. The erosion control barrier should remain in place until the grading area becomes sufficiently vegetated to limit erosion and sedimentation potential. Once the site is stabilized, the erosion control barriers can be removed.
- Monitor the weather during construction in an effort to avoid exposed soils and forecasted precipitation events.
- Exposed soils associated with grading areas should be minimized to the extent possible.
- Run-off from construction materials and any stockpiles shall be contained and discharged so as to prevent entry of sediment to the adjacent environment.
- To prevent the contamination of any surface water features (i.e. Baptiste Lake) within and adjacent to the project area during construction, precautions should be taken to avoid accidental spillage or discharge of chemical contaminants (e.g., gasoline, oils and lubricants). These precautions require refueling to be carried out a minimum of 30 m from surface water features in a controlled manner so as to prevent fuel spillage. In addition, an emergency spill response kit should be on site at all times. In the event that a spill occurs, proper containment, clean up and reporting, in accordance with provincial requirements, should be undertaken.

- The Contractor will be required to take all necessary precautions to prevent the accumulation of litter and construction debris in any natural areas within and outside of the construction grading limits. All materials used or generated (e.g., organics, soils, debris, stockpiles) should be disposed of or stored in a manner that mitigates their entry to the adjacent Baptiste Lake.
- The Municipality of Hastings Highlands Bylaw 2021-006 enforces restrictions around tree removal adjacent to waterbodies (i.e. along shoreline areas). Further, the Municipality of Hastings Highlands also has a Tree Canopy Policy which serves to protect tree canopy cover in or adjacent to significant natural features such as significant woodlands, significant valleylands, and waterbodies. Construction activities on the subject property (and associated vegetation removal) are required to be completed in accordance with the above noted by-laws / policies.
- Tree removal should include appropriate tree felling and grubbing procedures in order to minimize impacts on surrounding vegetation.
- Migratory breeding birds are protected under the *Migratory Birds Convention Act, 1994*. Under this act it is unlawful to kill or destroy migratory breeding birds or active nests. To avoid impacts to migratory birds, vegetation removal (as necessary) during development of the subject property should be avoided between early April and late August (migratory bird breeding and nesting period; Environment and Climate Change Canada, 2018). Further, it should be noted that occupied migratory bird nests are protected at any time of the year (including outside of the migratory bird breeding and nesting period). Should a migratory bird nest be found to be occupied outside of the migratory bird breeding and nesting period, then any activity that may harm or damage the nest or occupying individual must cease until the nest is no longer occupied.
- To limit potential impacts, care should be taken during construction to avoid incidental contact with wildlife.
- Any clearing of vegetation with a diameter at breast height greater than 10 cm should respect the active season for bats, with no clearing completed between April 1 and September 30, in any calendar year. This will also provide protection for SAR migratory and breeding birds which have the potential to be present.
- The construction contractor should be familiar with the SAR noted in this report. If SAR are identified during construction, all works in the immediate area should cease and the MECP must be contacted for direction on how to proceed.
- Harassment to SAR should not occur during construction activities.
- No in-water work is to be completed between October 1 and July 15, in any calendar year.
- The Interim Code of Practice: Repair, Maintenance and Construction of Docks, Moorings and Boathouses should be utilized during dock replacement at the subject property.

Provided these recommendations are followed, Ainley Group is of the opinion that the dwelling reconstruction, dock replacement, and shoreline stabilization will not result in negative impacts to natural heritage features in the study area.

10.0 CLOSURE

Ainley Group has prepared this Environmental Impact Study per the terms of reference in an effort to describe the proposed development, summarize potential impacts due to the undertaking, and identify mitigation measures and monitoring commitments to limit potential impacts, and to identify any future studies required.

11.0 REFERENCES

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FIGURES

141 O-AT-KA ROAD
HASTINGS COUNTY

N

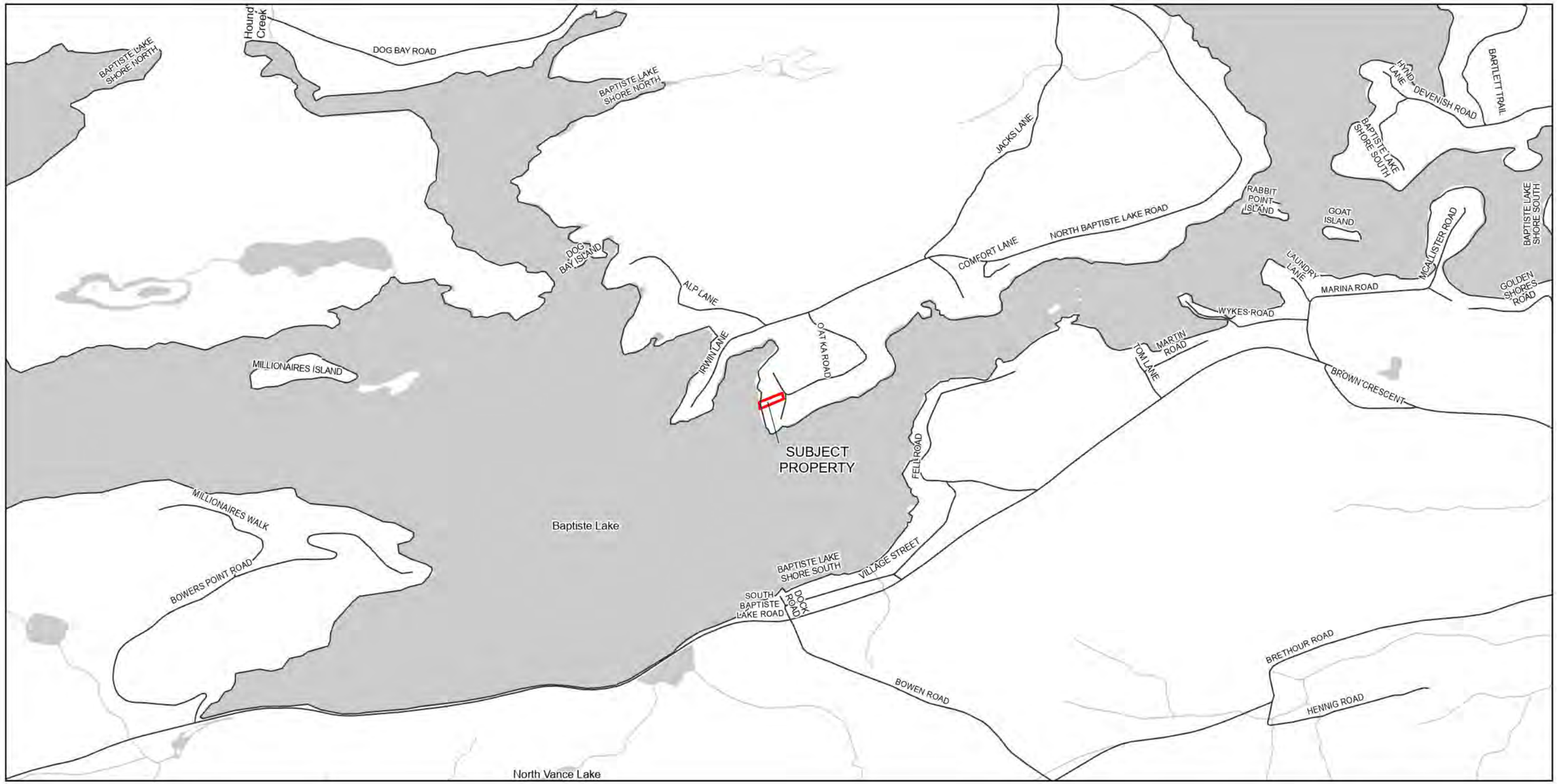
Minley CONSULTING ENGINEERS PLANNERS

FIGURE 1

REGIONAL LOCATION PLAN

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

ELC COMMUNITIES

SUBJECT PROPERTY

CVR_1 LOW DENSITY RESIDENTIAL

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

141 O-AT-KA ROAD HASTINGS COUNTY	N
Ainley GROUP CONSULTING ENGINEERS PLANNERS	FIGURE 2
EXISTING CONDITIONS	

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

APPENDIX A
Background Data

iNaturalist

Search

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- Community
  - People
  - Projects
  - Journal Posts
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- More
  - Taxa Info
  - Guides
  - Places
  - Site Stats
  - Help
  - Getting Started
  - Understanding Projects
  - Educator's Guide
  - Video Tutorials
  - Curator Guide
- Log In or Sign Up

Observations

Filters

Show

- [ ] Wild
- [ ] Captive
- [x] Verifiable
- [ ] Research Grade
- [ ] Needs ID
- [ ] Threatened
- [ ] Introduced
- [ ] Popular
- [ ] Has Sounds
- [ ] Has Photos

Description / Tags blue, butterfly, etc.

Categories

Rank

High

Low

Sort By

Date Added

Desc

Date Observed

January
February
March
April

Any Exact Date YYYY-MM-DD Range Start End Months

More Filters

Person

Username or User ID

Project

Name or URL slug, e.g. my

Place

Place

Photo Licensing All

Reviewed

Any Yes No

Date Added

Any Exact Date YYYY-MM-DD Range Start End

Update Search Reset Search Filters

Identify Atom Download

Species

Location Go

Custom Boundary

30

observations

30

species

23

Identifiers

13

Observers

Map Grid List

Media	Name	User	Observed	Place	Added
	Scaly Pelt Lichen Peltigera praetextata	dnreid	Oct 8, 202311:09 AM EST	Baptiste Lake, Hastings Highlands, ON, CA	Oct 8, 202312:35 PM EST

Media	Name	User	Observed	Place	Added
	Needs ID 1				
4	Common Ink Cap Coprinopsis atramentaria Needs ID 1	rjblaney	Oct 2, 20235:05 PM EST	Village St, Hastings Highlands, ON, CA	Oct 2, 20235:11 PM EST
	Rock Bass Ambloplites rupestris Research Grade 4	gardensavvy	Sep 4, 20236:09 PM EST	Baptiste Lake, Hastings Highlands, ON, CA	Sep 4, 20238:07 PM EST
	Large-leaved Aster Eurybia macrophylla Research Grade 2	sarahgrace27	Aug 31, 20238:18 AM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Sep 3, 20238:54 AM EST
	Northern Bush Honeysuckle Diervilla lonicera Needs ID 1	sarahgrace27	Aug 30, 20237:30 PM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Aug 30, 20237:31 PM EST
	Allegheny Blackberry Rubus allegheniensis Needs ID 1	sarahgrace27	Aug 30, 20236:54 PM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Aug 30, 20236:54 PM EST
	Common Bracken Pteridium aquilinum Research Grade 2	sarahgrace27	Aug 30, 20236:53 PM EST	Baptiste Lake, Hastings Highlands, ON, CA	Aug 30, 20236:53 PM EST
	Bigtooth Aspen Populus grandidentata Research Grade 2	sarahgrace27	Aug 30, 20236:52 PM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Aug 30, 20236:52 PM EST
	Field Goldenrod Solidago nemoralis Needs ID 1	sarahgrace27	Aug 30, 20236:50 PM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Aug 30, 20236:50 PM EST
	Round-leaved Dogwood Cornus rugosa Research Grade 2	sarahgrace27	Aug 30, 20236:49 PM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Aug 30, 20236:49 PM EST
	Common Blue Wood Aster Symphyotrichum cordifolium Needs ID 1	sarahgrace27	Aug 30, 20236:48 PM EST	O-At-Ka Road, Hastings Highlands, ON, CA	Aug 30, 20236:49 PM EST
3	European Hornet Vespa crabro Research Grade 3	firehazard	Aug 27, 20235:56 PM EST	Hastings Highlands, ON, CA	Aug 27, 20235:56 PM EST
3	White Baneberry Actaea pachypoda Research Grade 2	firehazard	Aug 14, 20232:24 PM EST	Hastings Highlands, ON, CA	Aug 14, 20232:27 PM EST
3	Bluebead Lily Clintonia borealis Research Grade 3	firehazard	Aug 14, 20232:23 PM EST	Hastings Highlands On K0l2s0, Hastings Highlands, ON, CA	Aug 14, 20232:26 PM EST
4	Blood Red Russula Russula rosacea Needs ID 1	firehazard	Aug 14, 20232:22 PM EST	Hastings Highlands On K0l2s0, Hastings Highlands, ON, CA	Aug 14, 20232:25 PM EST
	Tamarack Larix laricina Needs ID 1	firehazard	Jul 27, 20236:31 PM EST	Baptiste Lake, Hastings Highlands, ON, CA	Jul 30, 20236:12 PM EST
	Chanterelles Genus Cantharellus Needs ID 2	rudy154	Aug 8, 20227:41 AM EST	Bancroft, ON K0L 1C0, Canada	May 13, 20239:52 AM EST
	Eastern North American Destroying Angel Amanita bisporigera Needs ID 1	rudy154	Aug 8, 20227:07 AM EST	Bancroft, ON K0L 1C0, Canada	May 13, 20239:51 AM EST
	Milky Conecap Conocybe apala Needs ID 1	rudy154	Jul 2, 20229:43 AM EST	Hastings, CA-ON, CA	May 13, 20239:50 AM EST
2	Northern Starflower Lysimachia borealis Research Grade 2	pipsissewa1	May 22, 202210:56 AM EST	Baptiste Lake, Hastings Highlands, ON, CA	May 22, 20224:35 PM EST
	Genus Dacrymyces Needs ID 1	nina_smit	Apr 14, 202211:08 AM AST	Hastings Highlands, ON, CA	Apr 14, 202211:08 AM AST
	Purplepore Bracket Trichaptum abietinum Needs ID 1	nina_smit	Apr 14, 202211:04 AM AST	Hastings Highlands, ON, CA	Apr 14, 202211:04 AM AST
	Hoof Fungus Fomes fomentarius Research Grade 2	nina_smit	Apr 14, 202211:03 AM AST	Hastings Highlands, ON, CA	Apr 14, 202211:04 AM AST
	Genus Trametes Needs ID 1	nina_smit	Apr 14, 202211:00 AM AST	Fell Rd, Hastings Highlands, ON, CA	Apr 14, 202211:01 AM AST
	Virgin's-Bower Clematis virginiana Research Grade 2	heather933	Aug 18, 20209:29 AM EDT	Maynooth, ON K0L 2S0, Canada	Aug 18, 202011:14 AM EDT
	Red-berried Elder Sambucus racemosa Research Grade 2	heather933	Jul 1, 20205:36 PM EDT	Hastings, CA-ON, CA	Jul 1, 20205:37 PM EDT
3	Peregrine Falcon Falco peregrinus Research Grade 3	edwardrooks	September 2019	Ontario, CA	September 2019
	Spotted Tussock Moth Lophocampa maculata Research Grade 2	mcdc	Sep 2, 20191:13 PM EDT	Hastings Highlands, ON, Canada	Sep 2, 20191:15 PM EDT
3	Northern Short-tailed Shrew Blarina brevicauda Research Grade 2	erondel	Jul 28, 20191:25 PM EDT	121 Fell Rd, Hastings Highlands, ON, CA	Jul 28, 20191:25 PM EDT
	Pear-shaped Puffball Apioperdon pyriforme Research Grade 4	maxwellmatchim	Dec 11, 201812:52 PM EST	Hastings Highlands, Hastings Highlands, ON, CA	Dec 14, 20183:09 PM EST

NHIC Data

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

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1067897	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii	SNA	END	END	18TQ6598	

NATURECOUNTS

Atlas Data Summary

Select a type of data summary: Provincial Summaries | Regional Summaries | **Species Lists** | Participant Statistics

Select a province and/or a region, or enter a 7-digit square number to view a species list with the highest breeding code reported to date. Click on a column name to sort.

Ontario | All regions | 18TTQ69 | Go

Sort Order	Species	Max. Br. evid.	Squares
187	Canada Goose	FY	1
222	Trumpeter Swan	H	1
288	Wood Duck	FY	1
343	Mallard	FY	1
453	Ring-necked Duck	P	1
530	Hooded Merganser	AE	1
788	Wild Turkey	H	1
791	Ruffed Grouse	FY	1
1071	Rock Pigeon (Feral Pigeon)	AE	1
1340	Mourning Dove	FY	1
1796	Black-billed Cuckoo	S	1
2644	Ruby-throated Hummingbird	D	1
2950	Virginia Rail	T	1
3282	Killdeer	H	1
3436	American Woodcock	S	1
3945	Common Loon	FY	1
4392	American Bittern	T	1
4509	Great Blue Heron	NY	1
4584	Turkey Vulture	H	1
4594	Osprey	NY	1
4874	Eurasian/American Goshawk	H	1

NATURECOUNTS

4969	Broad-winged Hawk	AE	1
5378	Barred Owl	D	1
5894	Belted Kingfisher	H	1
6370	Yellow-bellied Sapsucker	NY	1
6499	Downy Woodpecker	CF	1
6511	Hairy Woodpecker	NY	1
6658	Pileated Woodpecker	H	1
6716	Northern Flicker	NY	1
6810	Merlin	AE	1
9368	Eastern Wood-Pewee	T	1
9383	Alder Flycatcher	AE	1
9390	Least Flycatcher	S	1
9409	Eastern Phoebe	AE	1
9583	Great Crested Flycatcher	AE	1
9646	Eastern Kingbird	AE	1
10406	Blue-headed Vireo	T	1
10417	Philadelphia Vireo	S	1
10418	Warbling Vireo	T	1
10423	Red-eyed Vireo	AE	1
11401	Blue Jay	FY	1
11524	American Crow	FY	1
11568	Common Raven	FY	1
11734	Black-capped Chickadee	NY	1
12547	Tree Swallow	AE	1
13826	Golden-crowned Kinglet	FY	1
13848	White-breasted Nuthatch	FY	1
13865	Red-breasted Nuthatch	CF	1
13894	Brown Creeper	T	1
13975	House Wren	AE	1

NATURECOUNTS

14236	European Starling	FY	1
14358	Gray Catbird	AE	1
14372	Brown Thrasher	CF	1
14412	Eastern Bluebird	FY	1
14511	Veery	FY	1
14520	Hermit Thrush	T	1
14525	Wood Thrush	D	1
14632	American Robin	NY	1
15359	Cedar Waxwing	FY	1
16424	Evening Grosbeak	H	1
16572	Purple Finch	FY	1
16718	Pine Siskin	S	1
16731	American Goldfinch	P	1
16895	Chipping Sparrow	S	1
16998	White-throated Sparrow	AE	1
17027	Savannah Sparrow	T	1
17043	Song Sparrow	NE	1
17057	Swamp Sparrow	NY	1
17174	Eastern Meadowlark	T	1
17286	Baltimore Oriole	T	1
17296	Red-winged Blackbird	CF	1
17314	Brown-headed Cowbird	H	1
17324	Common Grackle	CF	1
17372	Ovenbird	T	1
17376	Northern Waterthrush	S	1
17386	Black-and-white Warbler	T	1
17400	Nashville Warbler	T	1
17418	Mourning Warbler	AE	1
17434	Common Yellowthroat	CF	1

NATURECOUNTS

17460	Northern Parula	S	1
17476	Magnolia Warbler	S	1
17481	Blackburnian Warbler	S	1
17484	Yellow Warbler	CF	1
17493	Chestnut-sided Warbler	CF	1
17498	Black-throated Blue Warbler	T	1
17508	Pine Warbler	T	1
17510	Yellow-rumped Warbler	T	1
17550	Black-throated Green Warbler	T	1
17616	Canada Warbler	T	1
17662	Scarlet Tanager	AE	1
17699	Northern Cardinal	S	1
17715	Rose-breasted Grosbeak	CF	1
17749	Indigo Bunting	T	1

Total: 96 breeding species

Note: the statistics and species lists presented on this page are based on accepted records (including records pending review) with breeding evidence.

Birds Canada
P.O. Box 160
115 Front Street
Port Rowan ON N0E 1M0
Phone: 519-586-3531
Toll-free: 1-888-448-2473
Email: hello@birdscanada.org

Birds Canada (Ontario Office)

NATURECOUNTS

NatureCounts is a program of Birds Canada, and a partner of the Avian Knowledge Network

Species list in taxonomic order for square 18TQ69

All species

Number of rows of data displayed below: 8.

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
1	Blanding's Turtle	1	2013	2013
3	Midland Painted Turtle	3	1998	2017
6	Snapping Turtle	2	2017	2017
12	Eastern Gartersnake	1	1961	1961
29	Green Frog	2	1961	1966
33	Spring Peeper	2	1998	1998
36	American Toad	2	1961	1966
40	Blue-spotted Salamander	1	2014	2014

TEA home page | Main atlas page

APPENDIX B
Photographic Log

Photo 1 – Rear of existing dwelling showing trees requiring removal (May 17, 2024).

Photo 2 – Existing shoreline area looking north (May 17, 2024).

Photo 3 – Existing shoreline area looking south (May 17, 2024).

Photo 4 – Proposed new septic area (May 17, 2024).

Photo 5 – Typical vegetation from Low Density Residential (CVR_1) vegetation community (May 17, 2024).

Photo 6 – Typical vegetation from Low Density Residential (CVR_1) vegetation community (May 17, 2024).

APPENDIX C
Vegetation Species List

App C - Vegetation Species List
141 O-at-Ka Road

Scientific Name	Common Name	S Rank	N Rank	G Rank	Exotic Status	Coefficient of Conservatism	Coefficient of Wetness	CVR_1
Thuja occidentalis	Eastern White Cedar	S5	N5	G5		4	-3	x
Abies balsamea	Balsam Fir	S5	N5	G5		5	-3	x
Pinus strobus	Eastern White Pine	S5	N5	G5		4	3	x
Symphyotrichum cordifolium	Heart-leaved Aster	S5	N5	G5		5	5	x
Taraxacum officinale	Common Dandelion	SNA	N5	G5	SE5		3	x
Trifolium repens	White Clover	SNA	NNA	GNR	SE5		3	x
Betula papyrifera	Paper Birch	S5	N5	G5		2	3	x
Corylus cornuta	Beaked Hazelnut	S5	N5	G5		5	3	x
Fagus grandifolia	American Beech	S4	N4	G5		6	3	x
Tilia americana	Basswood	S5	N5	G5		4	3	x
Lysimachia borealis	Northern Starflower	S5	N5	G5		6	0	x
Thalictrum dioicum	Early Meadow-rue	S5	N5	G5		6	3	x
Fragaria virginiana	Wild Strawberry	S5	N5	G5		2	3	x
Prunus serotina	Black Cherry	S5	N5	G5		3	3	x
Acer saccharum	Sugar Maple	S5	N5	G5		4	3	x
Maianthemum canadense	Wild Lily-of-the-valley	S5	N5	G5		5	3	x
Polygonatum biflorum	Giant Solomon's Seal	S4	N4	G5		8	3	x
Trillium erectum	Red Trillium	S5	N5	G5		6	3	x
Trillium grandiflorum	White Trillium	S5	N5	G5		5	3	x
Poaceae	Grasses	-	-	-				x

APPENDIX D
Field Forms

Wildlife

Weather information is recorded on the **Wildlife data card**. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 141 0-Av-KA		POLYGON: 1	
SURVEYOR(S) DD/SE	DATE May 18/24		UTME
START	END	UTMZ	UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☑ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE			**COVER**		
☐ OPEN WATER ☐ SHALLOW WATER ☑ SURFICIAL DEP. ☐ BEDROCK			☐ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER			

HT CODES: 1 = >25 m 2 = 10<HT≤25 m 3 = 2<HT≤10 m 4 = 1<HT≤2 m 5 = 0.5<HT≤1 m 6 = 0.2<HT≤0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION:							BA:	
SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50
STANDING SNAGS:		< 10		10 - 24		25 - 50		> 50
DEADFALL / LOGS:		< 10		10 - 24		25 - 50		> 50

ABUNDANCE CODES: N = NONE R = RARE O = OCCASIONAL A = ABUNDANT

COMM. AGE .		PIONEER		YOUNG		MID-AGE		MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE: CVR-1
INCLUSION	CODE:
COMPLEX	CODE:

Notes: Low Density Residential

ELC

STAND & SOIL CHARACTERISTICS

SITE:

POLYGON:

DATE:

SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC

PLANT SPECIES LIST

SITE: 141 & A5-K1 RD.

POLYGON: 1

DATE: MAY 17/17

SURVEYOR(S): DD/SR

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
W. PINE					
SUG. MAPLE					
W. TRILLIUM					
STARFLOWER					
W. BIRCH					
HEARTLEAF ASTER					
CAN. MAYFLOWER					
GRASS 1					
BL. CHERRY					
C. DANDELION					
W. STRAWBERRY					
BASSWOOD					
AM. BEECH					
W. CEDAR					
E. MEADOW RUE					
SM. SOLOMON'S SEAL					
R. TRILLIUM					
BEAKED HAZEL					
W. CREEPER					
BALS. FIR					

SPECIES CODE	LAYER 1	2	3	4	COLL.

R. E. VIREO

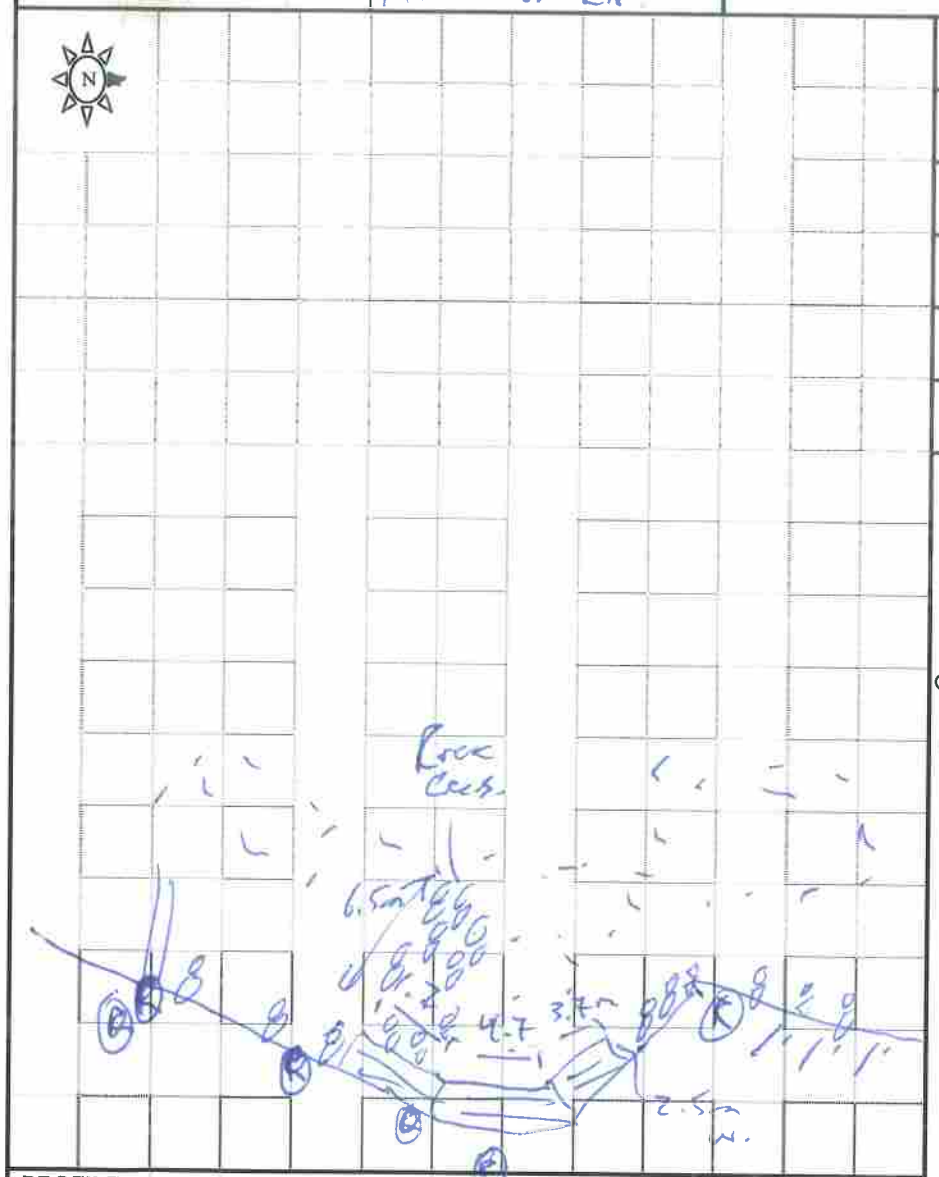
BLACKBURNIAN

C. GRACKLE

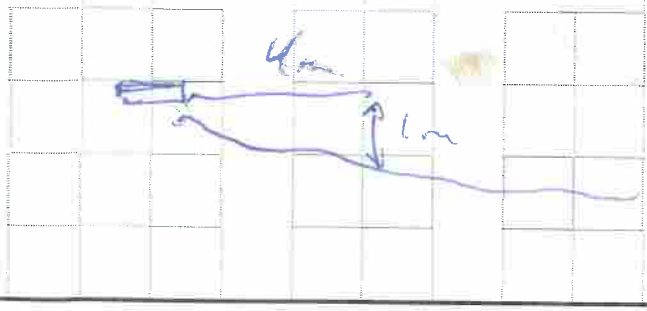
ONT. BIRD

WARBLER

SECTION IDENTIFIER:	SECTION LOCATION:	SECTION LENGTH (m):	SCALE (cm / m):
	141 0-AT-KA		



PROFILE: Horz. Scale Vert. Scale



PROJECT #:

MAPPER: DCD

NAME OF WATERBODY: BATTISTE LAKE

CROSSING #:

STATION #:

DATE: DD-MMM-YY 17/MAY/24.

LEGEND

10d depth (cm)
6w width

➡ Riffle
⇨ Run/Glide
⬭ Pool
▒ Island/Bar

▒ Fine Substrate
Gravel Substrate

oOooO Cobble /Boulder
*** * *** Debris

CT Cattail
SV/FV Submerg/Float Veg

EV Emergent Vegetation
W Watercress

Fe Iron Staining
/////// Eroded Bank

XXX Riprap / Other Stabilization

⊂⬭ Instream Log/Tree
^^^ Dam/Weir/Obstruction

® Riparian Tree

├► Seep/Spring
-------- Undercut Bank

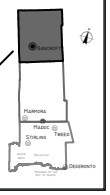
— Barrier to Fish Movement
-S- Seasonal Barrier

-x--x- Fence line
└┘ Culvert

APPENDIX E
Official Plan and Zoning Schedules

Hastings County Official Plan

Land Use Designations
OP-A Schedule



This is to certify that this map was adopted as Official Plan Schedule OP-A of the County of Hastings Official Plan 2017-0030. Plot Date: 12/18/2017 Signing Date: 12/19/2017

Jim Duffin, C.A.O.-Clerk of Hastings County

Rodney Cooney, Warden of Hastings County

This schedule forms a part of the County of Hastings Official Plan and must be read in conjunction with the written text. Visit www.hastingscounty.com for the full Official Plan. Please refer to secondary plan schedules for detailed mapping of urban areas. Some special policy areas may also have detailed maps within the text.

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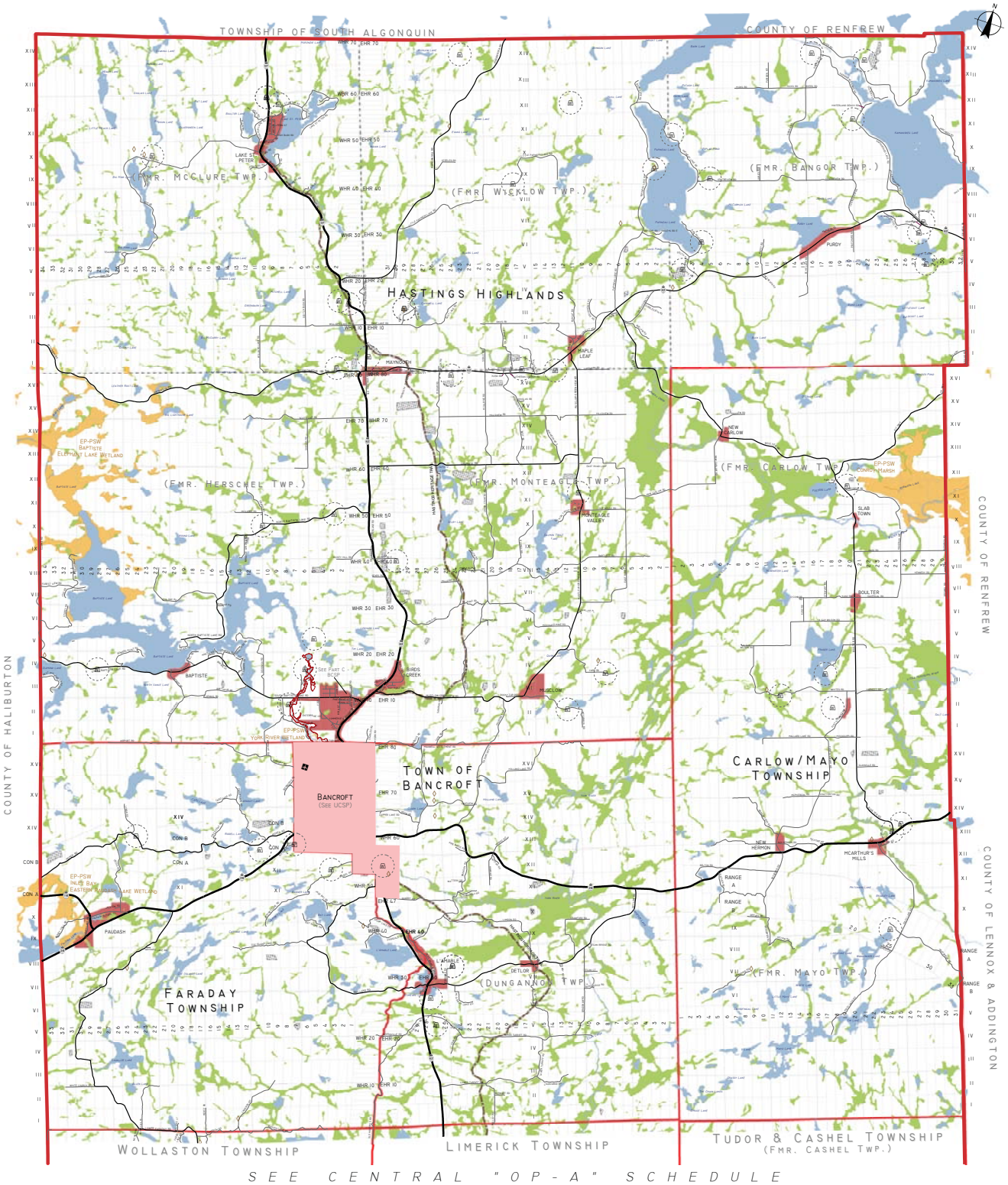
June 22, 2018

Land Use Designations
- Prime Agriculture
- Rural/Waterfront
- Environmental Protection
- Environmental Protection - Provincially Significant Wetland
- Extractive (Large Site)
- Extractive (Small Site)
- Urban
- Hamlet
- Waterbody
- Wellhead Protection Area
- Intake Protection Zone
- Issues Contributing Area
- Well Head Protection Area - E
- Waste Management
- Site Specific Policy Area (Large Site)
- Site Specific Policy Area (Small Site)
- Engineered Floodline

Geographic Features
- Non Official Plan Area
- Lot & Concession Line
- Geographic Township Boundary
- Municipal Boundary
- County Boundary

Infrastructure
- Highway (Prov. & Fmr. Provincial)
- Collector Road (Former County)
- Municipal Road
- Railway
- Hastings Heritage Trail
- TransCanada Trail
- Airfield

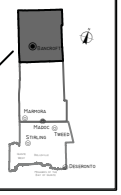
0 1 2 3 4 5 Kilometres



Hastings County Official Plan

Natural Heritage Features & Areas

OP-B Schedule



This is to certify that this map was adopted as Official Plan Schedule OP-B of the County of Hastings Official Plan 2017-0030.
Plot Date: 12/18/2017 Signing Date: 12/19/2017

Jim Duffin, Clerk of Hastings County

Rodney Cooney, Warden of Hastings County

This schedule forms a part of the County of Hastings Official Plan and must be read in conjunction with the written text. Visit www.hastingscounty.com for the full Official Plan. Please refer to secondary plan schedules for detailed mapping of urban areas. Some special policy areas may also have detailed maps within the text.

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June 22, 2018

Natural Heritage Features

- Significant Woodland
- Areas of Natural or Scientific Interest (EP-ANSI)
- Areas of Natural & Scientific Interest (Small Site)
- Significant Valleyland
- Conservation Authority Land
- Provincial Parks & Conservation Reserves
- Crown Land

Significant Wildlife Habitat

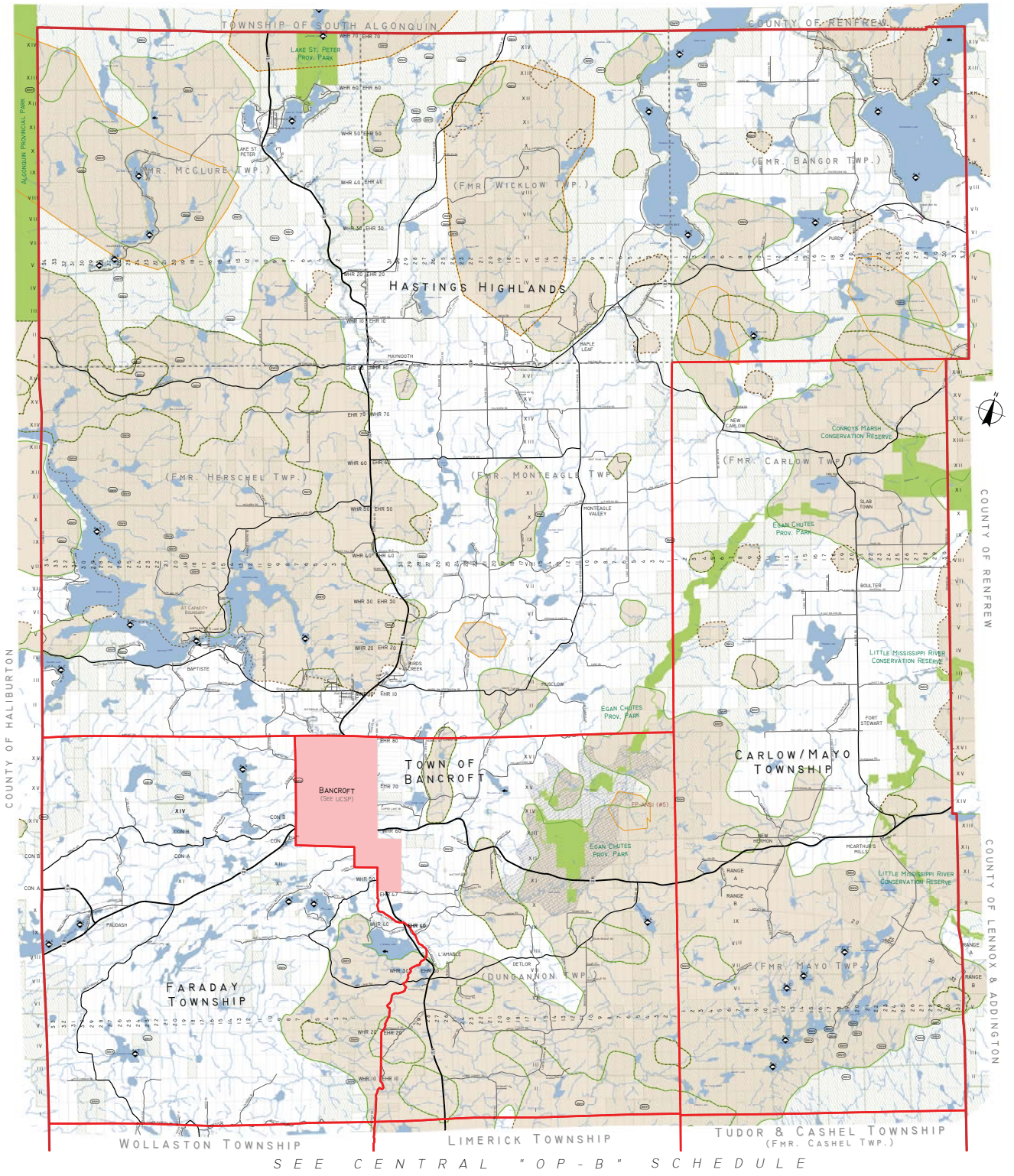
- Deer Yard (Stratum I)
- Deer Wintering Area (Stratum 2)
- Moose Early Wintering Area
- Significant Wildlife Habitat (Small Site)
- Lake Trout Lake At Capacity (LTL-AC)
- Lakes Managed for Lake Trout (LTL-C)

Geographic Features

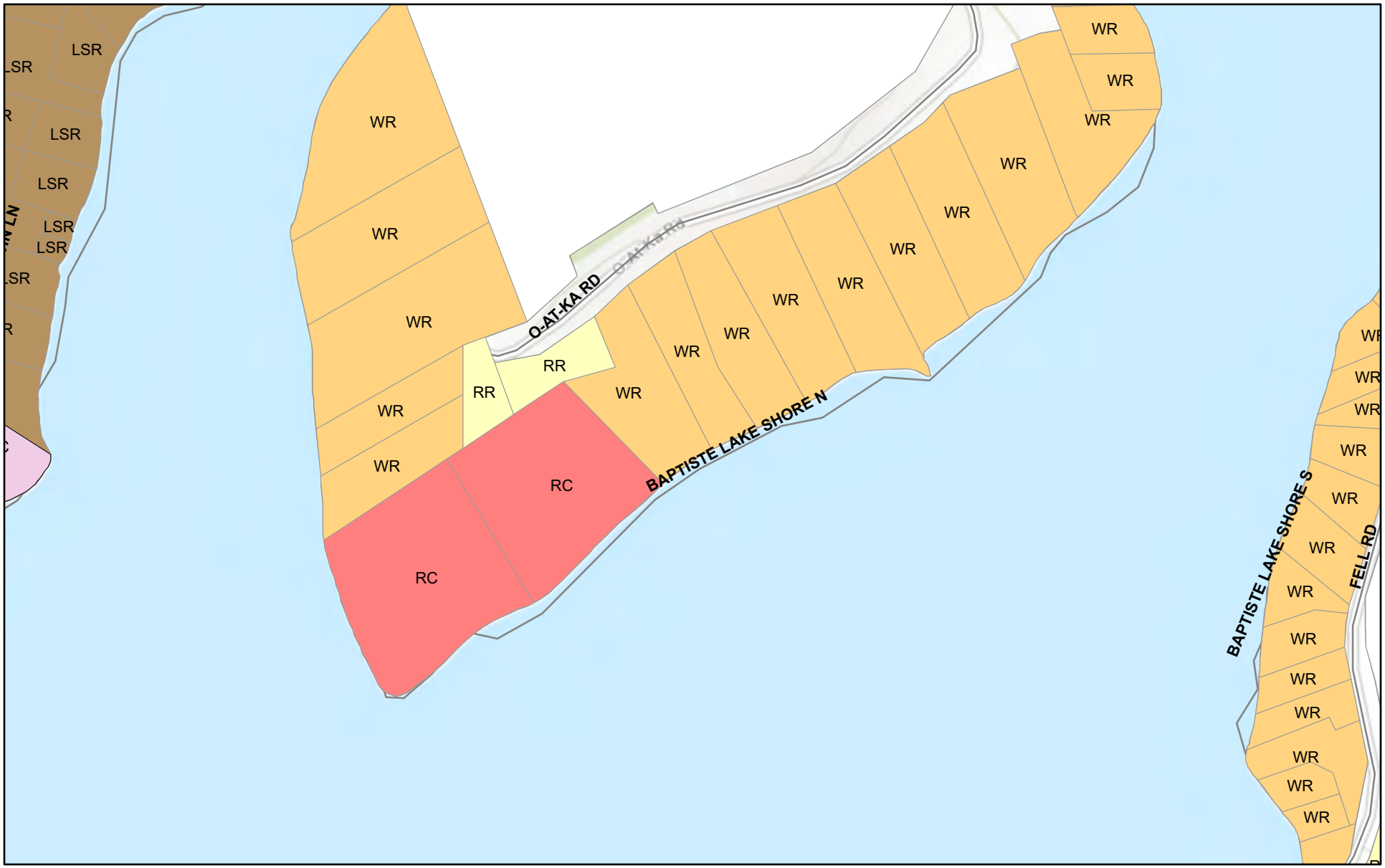
- Stream/Creek
- Boundary of Ecoregion 6E (See 4.3.5)
- Watercourse & Waterbody
- Non Official Plan Area
- Urban Secondary Plan Area
- Lot & Concession Line
- Geographic Township Boundary
- Municipal Boundary
- County Boundary

Infrastructure

- Highway (Prov. & Fmr. Provincial)
- Collector Road (Former County)
- Municipal Road



Municipal Zoning



2024-08-07, 2:51:43 p.m.

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

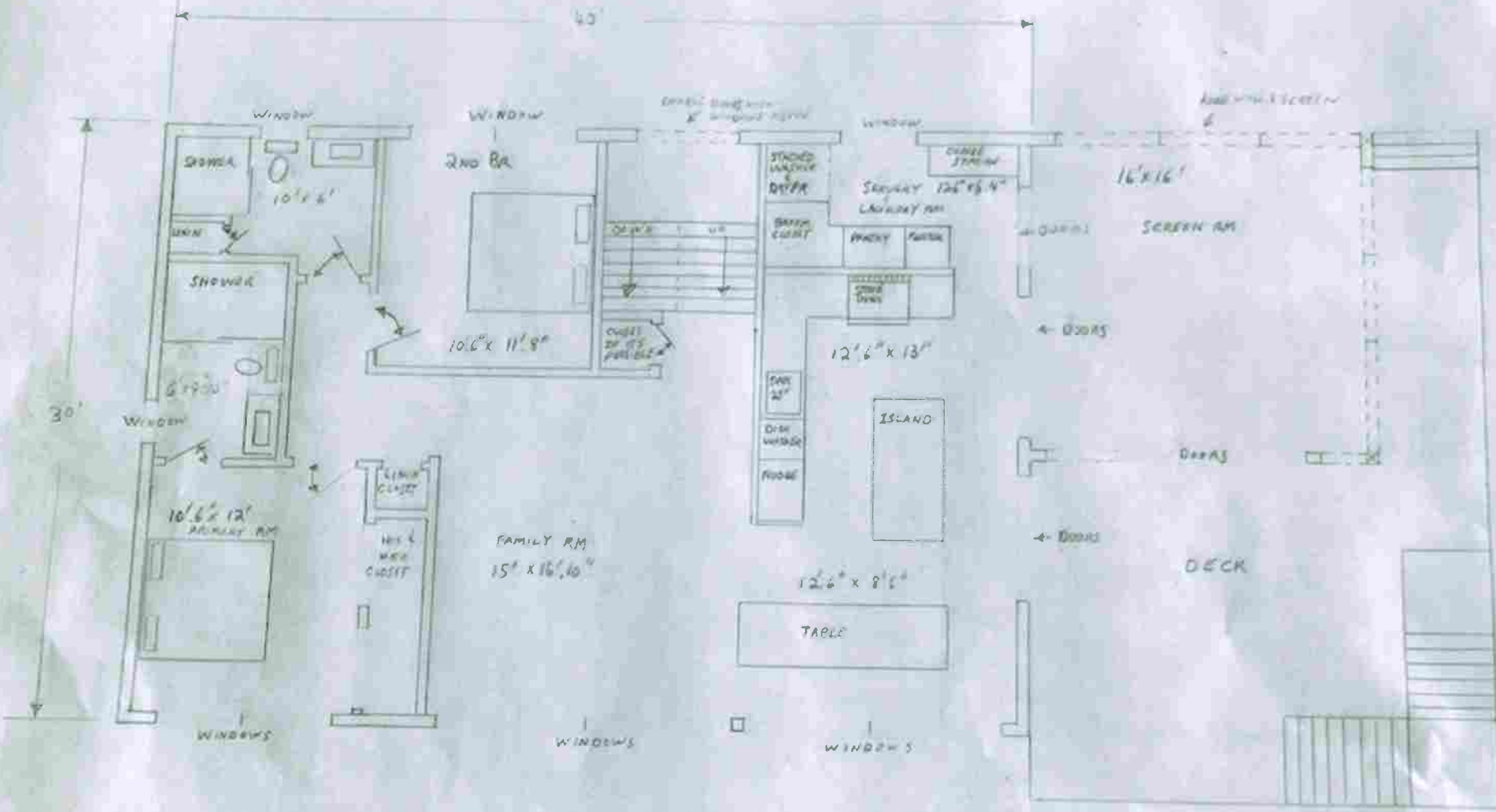
Hastings Highlands Zoning

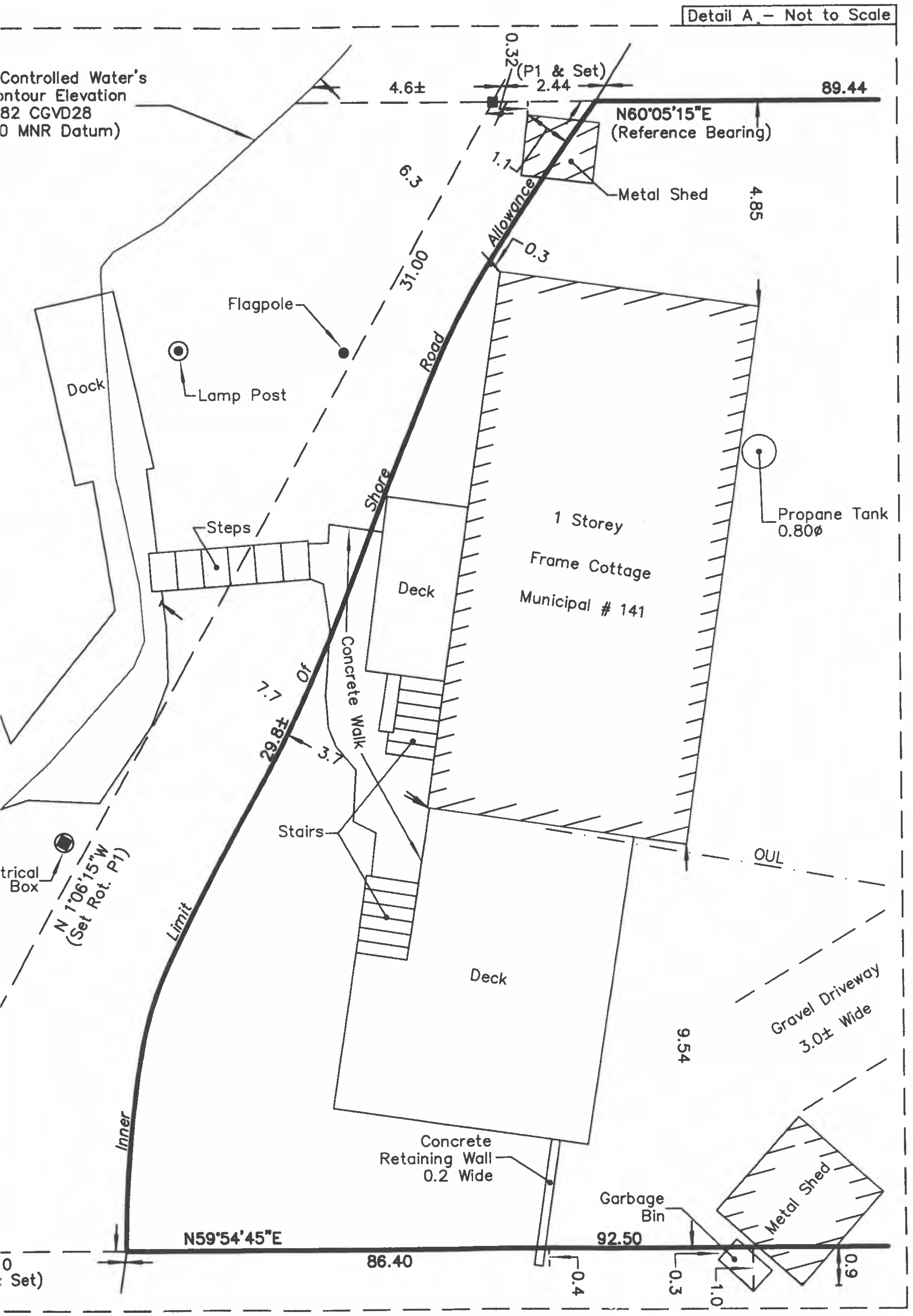
- Marginal Agriculture (MA)
- Rural Residential (RR)
- Limited Service Residential (LSR)
- Waterfront Residential (WR)
- Recreational/Resort Commercial (RRC)
- Rural Commercial (RC)
- Property Information
- Roads

Hastings County, Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA, AAFC, NRCan

Public Access

APPENDIX F
Design Drawings


40'
30'
WINDOW
WINDOW
2ND BR
WINDOW
SHOWER
10' x 6'
SHOWER
10'6" x 11'8"
WINDOW
10'6" x 12'
FAMILY RM
15' x 16'10"
WINDOWS
WINDOWS
WINDOWS
STACKED WASHER & DRYER
PANTRY
12'6" x 13'
ISLAND
DISH WASHER
FRIDGE
12'6" x 8'6"
TABLE
16' x 16'
SCREEN RM
← DOORS
DOORS
← DOORS
DECK

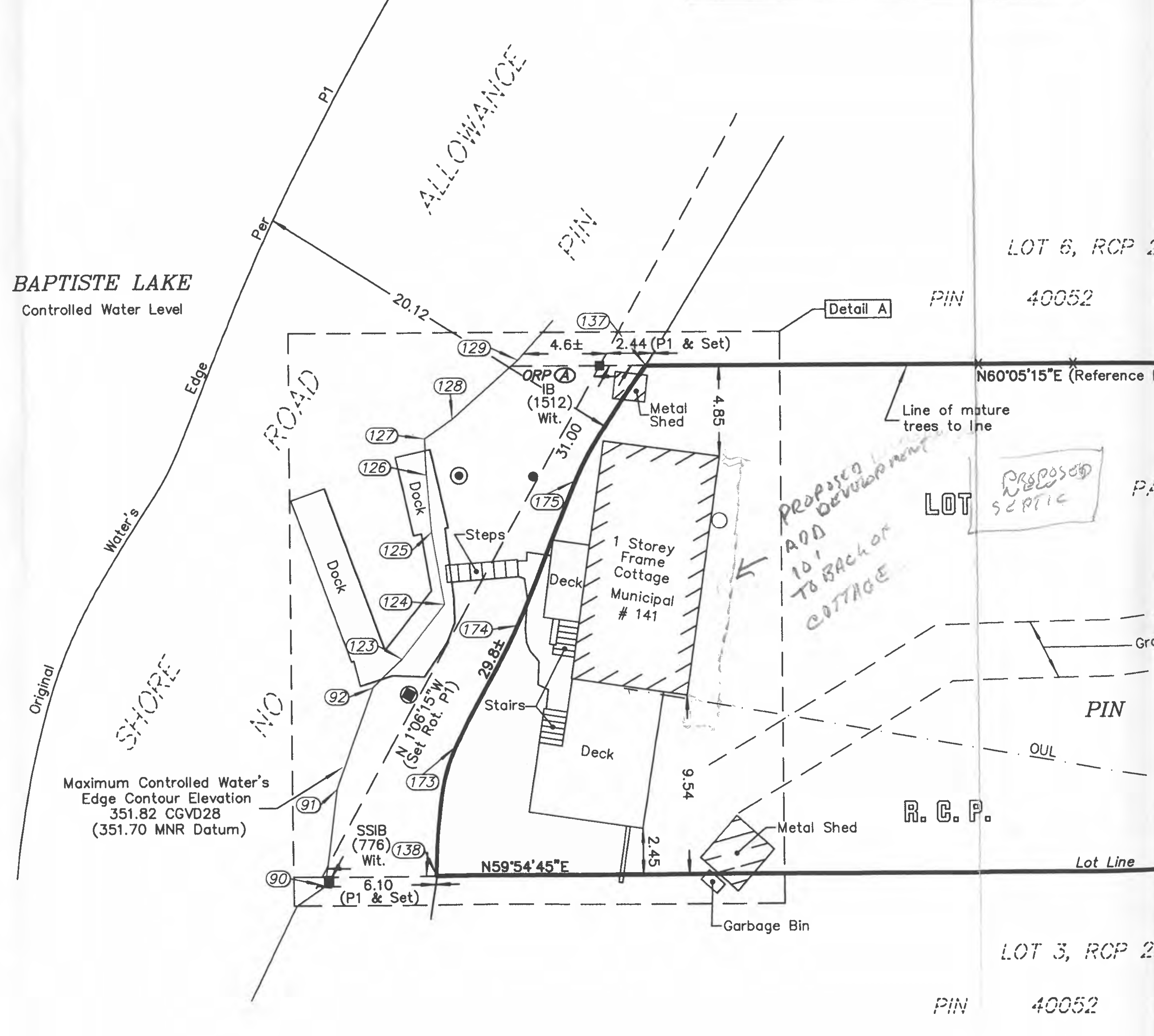


Detail A – Not to Scale
Controlled Water's
ontour Elevation
82 CGVD28
0 MNR Datum)
4.6±
0.32
(P1 & Set)
2.44
89.44
N60°05'15"E
(Reference Bearing)
1.1
Metal Shed
6.3
Allowance
0.3
4.85
31.00
Flagpole
Road
Lamp Post
Dock
Propane Tank
0.80ø
Shore
1 Storey
Frame Cottage
Municipal # 141
Steps
Deck
Concrete Walk
7.7
Of
29.8±
3.7
Stairs
OUL
trical
Box
N 1°06'15"W
(Set Rot. P1)
Limit
Deck
Gravel Driveway
3.0± Wide
9.54
Inner
Concrete
Retaining Wall
0.2 Wide
Garbage
Bin
Metal Shed
N59°54'45"E
92.50
86.40
0.4
0.3
1.0
0.9
Set)

PART B

THIS PLAN MUST BE READ IN CONJUNCTION WITH THE SURVEY REPORT DATED JULY 28, 2022.

THIS REPORT WAS PREPARED FOR CURRENT TRANSACTIONS INVOLVING DOMENIC & SUSANNA SACCO AND THE UNDERSIGNED ACCEPTS NO RESPONSIBILITIES FOR USE BY OTHER PARTIES.



P1
ALLOWANCE
PIN
Per
20.12
BAPTISTE LAKE
Controlled Water Level
LOT 6, RCP 2
PIN 40052
Detail A
137
129
4.6±
2.44 (P1 & Set)
N60°05'15"E (Reference B
ORP A
IB
(1512)
Wit.
Metal
Shed
4.85
Line of mature
trees to line
ROAD
128
127
126
31.00
175
Edge
Dock
1 Storey
Frame
Cottage
Municipal
141
PROPOSED
ADD
10'
TO BACK OF
COTTAGE
PROPOSED
SEPTIC
LOT
PA
Steps
Deck
125
124
174
Water's
Dock
123
29.8±
92
N 1°06'15"W
(Set Rot. P1)
Stairs
Deck
PIN
OUL
Gra
Original
SHORE
NO
173
9.54
Maximum Controlled Water's
Edge Contour Elevation
351.82 CGVD28
(351.70 MNR Datum)
91
SSIB
(776)
Wit.
138
R. C. P.
Metal Shed
2.45
90
6.10
(P1 & Set)
N59°54'45"E
Lot Line
Garbage Bin
LOT 3, RCP 2
PIN 40052

OBSERVED REFERENCE POINTS (ORPs) DERIVED FROM GNSS OBSERVATIONS USING REAL TIME NETWORK (RTN), UTM ZONE 18, NAD83 (CSRS) v7.1 epoch 2010.
COORDINATES TO RURAL ACCURACY PER SEC. 14 (2) OF O.REG.