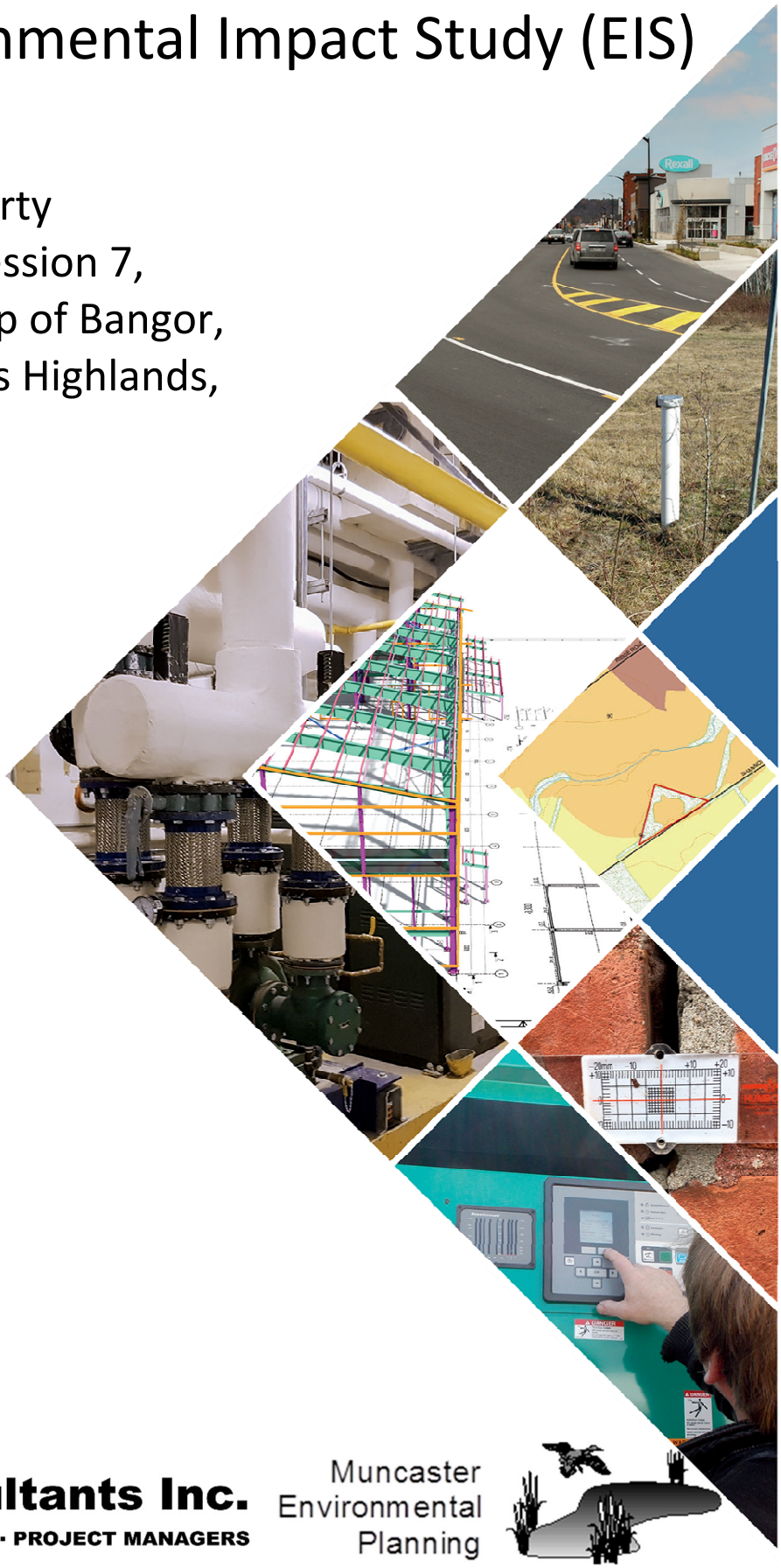
Scoped Environmental Impact Study (EIS)

FINAL

Reed/Ruppert Property
Part of Lot 17, Concession 7, Geographic Township of Bangor, Township of Hastings Highlands, Hastings County

December 19, 2024

Jp2g Project # 24-7085A



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Muncaster Environmental Planning

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Maps

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1 Introduction

The purpose of this report is to provide details regarding Species at Risk (SAR) and their potential habitat on and adjacent to the subject lands located at 139D Pine Ridge Lane, as well as provide details on fish habitat and water quality within Purdy Lake located adjacent to the subject lands, in support of a permission application. A permission application for the subject lands is needed in order to permit an addition to the existing cottage, in the area of the water setback from Purdy Lake.

The location of the subject lands is shown on **Map 1**.

2 Site Context

The subject lands are located near the end of Pine Ridge Lane on Purdy Lake, within Part of Lot 17, Concession 7, in the Geographic Township of Bangor, now in the Township of Hastings Highlands. The subject lands as shown on **Map 1** are approximately 1.0 acre in land area with 63.7 metres of water frontage on Purdy Lake. The Pine Ridge Lane right-of-way travels through the subject lands, as shown on **Map 2**.

The subject lands are currently designated Rural on Schedule "OP-A" to the Hastings County Official Plan. Purdy Lake is also designated as a "Lake Trout Lake At Capacity" in the Hastings County Official Plan, 2018.

The subject lands are zoned Limited Service Residential (LSR) under the Township of Hastings Highlands Zoning By-law.

The subject lands are primarily vacant woodlands and contain an existing cottage, trailer, bunkie, sheds and a septic system. The land use in the vicinity of the subject lands as shown on **Map 1** includes vacant woodlands, crown land and existing waterfront residential development along Pine Ridge Lane on Purdy Lake.

3 Description of Proposed Development

The existing cottage, trailer, shed and septic system on the subject lands are located within the area of the 30-metre water setback from Purdy Lake. The existing trailer and a portion of the existing deck between the cottage and the trailer will be removed and a 34.8 m2 addition to the existing cottage will be constructed at the rear of the existing cottage, approximately 22 metres from the highwater mark of the Lake. The proposed addition will not be located any closer to the highwater mark of the Lake than the existing cottage which is located approximately 12 metres from the highwater mark of the Lake.

The approximate size and the location of the existing buildings and structures are shown on **Map 2**.

The approximate dimensions and location of the proposed cottage addition has also been shown on **Map 2**, however, the exact dimensions and location will be determined once it has been fully designed.

4 Existing Conditions

A site visit to the subject lands was carried out by Bryana Kenny on the morning of November 19, 2024 under partly sunny conditions, with a light breeze and an air temperature of approximately 7°C. The southern portion of the subject lands is currently developed, however much of the lands to the south of the access road are forested. The northern portion of the subject lands are also forested and contain the existing storage shed.

The topography of the site has a moderate slope down from the access road towards the shoreline of the Lake. The soils on the subject lands are considered to be Rockland according to the Soils of Hastings County (North Sheet), Soil Survey Report No. 27 (Agriculture Cananda, 1987). Soils on the subject lands were observed to be sandy with large rocks and bedrock outcrops also scattered throughout the subject lands.

The 2008 Ecological Land Classification (ELC) terminology is used below to describe the main vegetation communities on site. The approximate location of each vegetation community is shown on **Map 2**.

4.1 Residential (CVR)

An existing cottage, trailer, deck, septic system, driveway, access road and storage shed are located within the main developed area of the subject lands (Photos 1 & 2) in the central portion of the property as shown on **Map 2**.

Photo 1 – Existing Cottage & Deck.
View Looking North.

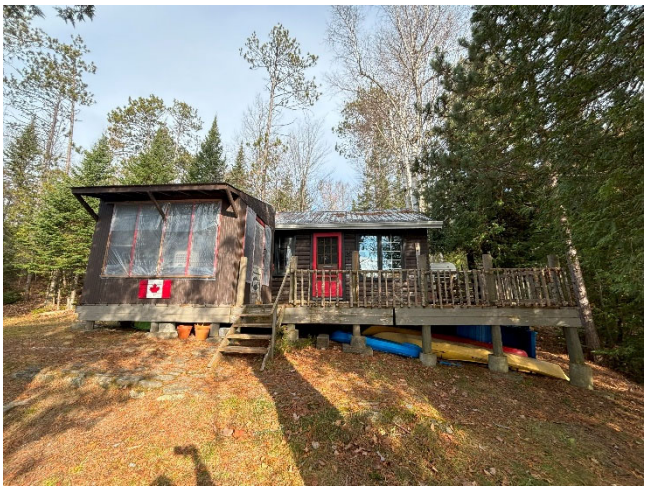
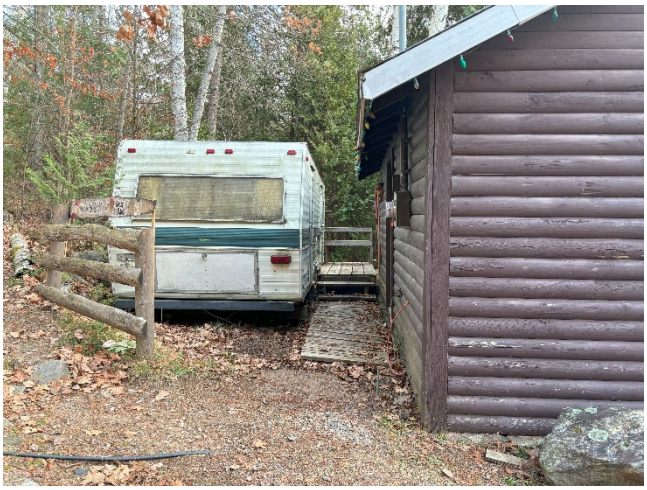


Photo 2 – Existing Trailer at Back of Cottage.
View Looking East.

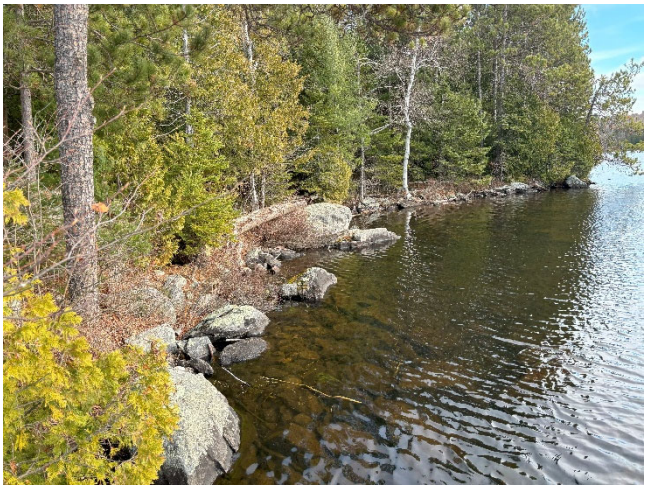


4.2 Mixed Forest (FOM)

A mixed forest is located over the majority of the subject lands as well as along the rocky shoreline of the subject lands (Photos 3 & 4) as shown on **Map 2**. Vegetation noted within the mixed forest includes white birch, sugar maple, white pine, red pine, easter white cedar, red oak, balsam fir and large tooth aspen trees.

Photo 3 – Mixed Forest in Front of Cottage.
View Looking East.

Photo 4 – Mixed Forest Along Shoreline..
View Looking Northeast.



5 Natural Heritage Features and Areas

Schedule B of the Hastings County Official Plan (County of Hastings Planning & Development Department, 2018) was reviewed for Natural Heritage Features and Areas on and adjacent to the subject lands. No natural heritage features or areas are identified on the subject lands, however a Deer Wintering Area (Stratum 2) is located on the adjacent lands to the northeast as shown on **Map 1**.

5.1 Significant Habitat of Endangered and Threatened Species

The Ministry of Natural Resources and Forestry (MNRF) "Make a Map: Natural Heritage Areas" website (Ministry of Natural Resources and Forestry, 2023) was reviewed for species at risk occurrences for the subject lands. Data available for the 1 km x 1 km grid cell (UTM Grid: 18TR8625) containing the subject lands, included an occurrence of Hill's Pondweed and Ogden's Pondweed (*Potamogeton hillii X Potamogeton zosteriformis*) as well as a colonial waterbird nesting area.

Based on a review of air photography and a site visit to the property there is potential for other species at risk to occur on the subject lands as well. A discussion on the reported species at risk by MNRF as well as for other SAR that have the potential to utilize the site and adjacent lands are addressed in alphabetical order in the following paragraphs.

5.1.1 Bats (Most Species Endangered)

If bats are using the subject lands or adjacent lands as habitat, there is the potential for impacts as a limited number of trees will need to be removed to accommodate the proposed development, however it is anticipated that the removal of woody vegetation within this area will not significantly impact any bat habitat that may be present in the overall area, provided the tree removal timing windows outlined in Section 6 are properly adhered to.

5.1.2 Blanding's Turtle (Threatened), Snapping Turtle (Special Concern) & Other Turtle Species

Purdy Lake could potentially be utilized by Blanding's turtle, snapping turtle or other turtle species. In order to ensure no adverse impacts (direct or indirect) occur on any turtle species that may be utilizing Purdy Lake as habitat, the timing windows for site disturbances and/or silt fencing around the work areas as outlined in Section 6 are to be properly adhered to.

5.1.3 Butternut (Endangered)

During the site visit to the subject lands, a butternut survey was completed for the subject lands. No butternut trees were noted on or adjacent to the subject lands, however, as there is private property to the east and west of the subject lands, butternut trees may have been missed. If any butternut trees are noted in or adjacent to the proposed work areas, a butternut health assessment will need to be completed for those trees and healthy butternuts are not to be removed or harmed until an overall benefit for the species has been provided following MECP protocols.

5.1.4 Eastern Whip-poor-will (Threatened)

A large forested area (crown land and private land) which is intermixed with waterbodies, watercourses and wetlands is located to the north of the subject lands. As the proposed addition will be located primarily within an existing disturbed area (in the footprint of the existing trailer and a portion of the existing deck as well as within an existing cleared area), limited tree removal will be needed to accommodate the proposed addition. Therefore the direct and indirect impacts on this species and their habitat, if present, will be minimal and the resulting habitat will still be able to be utilized by this species, post development. In order to ensure no adverse impacts occur on this species, the timing windows for tree removal outlined in Section 6 of this report are to be properly adhered to.

It should also be noted that Eastern whip-poor-will is proposed to be downlisted to special concern, as of January 31, 2025.

5.1.5 Hill's Pondweed (Special Concern) and Ogden's Pondweed (Endangered)

Suitable habitat is present in Purdy Lake for Hill's Pondweed and Ogden's Pondweed. No development is proposed within the lake, so there will be no direct impacts on this species, if present. Any indirect impacts on these species, can be mitigated provided the mitigation measures in Section 6 of this report are properly adhered to.

5.2 Significant Wildlife Habitat

5.2.1 Deer Wintering Area (Stratum 2)

Schedule B of the Hastings County Official Plan (County of Hastings Planning & Development Department, 2018) identified a Deer Wintering Area (Stratum 2) on the adjacent lands to the northeast of the subject lands as shown on **Map 1**.

The proposed addition will be located at least 120 metres from the mapped deer wintering area and will be located primarily within an existing disturbed area. Therefore given that the proposed addition is located outside of the mapped deer wintering area and as limited trees will need to be removed to accommodate the proposed addition, no adverse impacts (direct or indirect) as a result of the proposed development are anticipated to occur on the adjacent deer wintering area, provided the mitigation measures in Section 6 of this report are properly adhered to.

5.2.2 Colonial Waterbird Nesting Area

The Ministry of Natural Resources and Forestry "Make a Map: Natural Heritage Areas" website (Ministry of Natural Resources and Forestry, 2024) identified a colonial waterbird nesting area (wildlife concentration area) in the grid cell containing the subject lands. As the proposed development will occur primarily within an already disturbed area on the subject lands, no adverse impacts (direct or indirect) as a result of the proposed development are anticipated to occur on any waterfowl nesting areas on/adjacent to the subject lands, provided the mitigation measures in Section 6 of this report are properly adhered to.

5.3 Fish Habitat / Water Quality

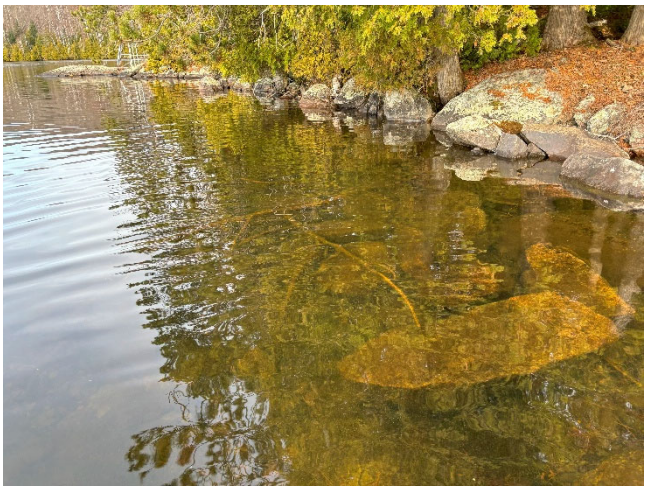
Purdy Lake is located to the southwest of the subject lands.

The Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) "Fish ON-Line" website (NDMNRF, 2024) was reviewed for fish occurrences for Purdy Lake. The following fish species were observed by MNRF in Purdy Lake: brook trout, lake trout, northern pike, rock bass, smallmouth bass, walleye, white sucker and yellow perch.

The Department of Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Mapping Tool was also reviewed for aquatic species at risk within 1 kilometre of the subject lands, however no aquatic SAR are reported.

During the November 19, 2024 site visit to the subject lands, the near-shore fish habitat along the shoreline of the subject lands was mapped as shown on **Map 2** (Photo 5). The shoreline of the subject lands is rocky and moderately slopes towards the lake. Very little vegetation was noted in the lake itself. Large rocks, stones, pebbles, as well as fallen needles, branches and logs were noted in the bottom of the lake. No sensitive fish habitat features, such as coarse beds for potential fish spawning, were noted along the shoreline of the subject lands.

Photo 5 – Site Conditions of Near Shore Fish Habitat.
View Looking Northwest.



The County Official Plan and the Township's Zoning By-law require a 30 m wide setback from the highwater mark of a waterbody (Section 5.9.2 of the Township's Zoning By-law) and associated 30 metre wide natural vegetative buffer strip (Section 5.4.5.8 of the Hastings County Official Plan).

In this case, the existing cottage, decks and trailer are located within the area of the water setback, approximately 12 metres from the highwater mark of the Lake. The existing trailer and a portion of the existing deck (located at the back of the existing cottage) are proposed to be removed and a new addition to the cottage will be constructed in its place, approximately 22 metres from the highwater mark of the lake. The location of the highwater mark of the lake as shown on **Map 2** was determined based on a site visit to the property as well as air photo interpretation.

The proposed development will not have a greater impact on the quality of the lake water, natural features, or neighbouring properties than what currently exists for the following reasons:

- The proposed addition will be constructed primarily within an existing disturbed area (over the same general footprint of the existing trailer and a portion of the existing deck footprint), which will limit the amount of tree removal required;
- The proposed addition will be located at the back of the existing cottage and will therefore not be located any closer to the highwater mark of the Lake the existing cottage/deck;
- The lands within the water setback are moderately sloping, treed and the rocky nature will help prevent erosion and will allow the infiltration of rainfall to occur.

To ensure that no negative impacts occur on the fish habitat/water quality of Purdy Lake as a result of the proposed development on the property, the mitigation measures recommended in section 6 of this report should be properly adhered to.

A conceptual layout for the proposed addition within the area of the water setback is shown on **Map 2**. The size and location of the proposed addition could change as it has not been designed yet. Provided, the proposed addition is located at least 22 metres from highwater mark of the Lake, this report does not need to be amended to show the correct location and size of these features once they have been designed.

6 Recommendations

The conditions of the existing setback include a well treed, rocky moderate slope from the existing cottage to the Lake. It is anticipated that the conditions of the reduced setback for the proposed addition, in conjunction with the mitigation measures below will not have a greater impact on the quality of the lake water, natural

features, or neighbouring properties than what currently exists and will provide the same ecological functions of a 30 metre setback in less ideal conditions. This report does not need to be amended as long as the proposed addition is located in accordance with item 2a below:

1. In order to ensure no adverse impacts occur on potential breeding birds or species at risk which may be using the subject lands or adjacent lands as habitat, the following mitigation measures should be properly adhered to:

    a. To protect bats, no tree or shrub removal should occur between March 15th and November 30th, unless an evening late spring/summer bat survey and detailed snag survey is completed by a qualified professional within five days of the woody vegetation removal. If these surveys identify no trees being used as roosting habitat in the vicinity of the work area, then the tree removal is permitted.

    b. The following mitigation measures are recommended in order to mitigate the potential impacts on turtle species from the proposed works:

        i. Specific site preparation work requiring clearing of vegetation and construction activities should be undertaken between October 16th and April 14th, which is outside of the more active season for turtles.

        ii. If the proposed works will occur between April 15th and October 15th, in order to prevent potential movement of turtle species into the proposed work area, a properly installed and maintained temporary exclusion barrier (for example silt fencing) should be erected as per the Reptile and amphibian exclusion fencing | ontario.ca around any areas where the proposed works will occur prior to all site preparation and construction activities, or prior to May 1st, whichever is earlier.

        iii. Once the work areas are surrounded by properly dug in fencing and prior to further site alterations, the work areas are to be searched for turtles. Any turtles observed during the construction phase are to be relocated outside of the work area as required to ensure they are not endangered by the construction activities.

    c. If any Butternut trees are noted in or adjacent to the proposed work areas, a Butternut Health Assessment is to be completed for these trees. Healthy butternuts are not to be removed or harmed until an overall benefit for the species has been provided following MECP protocols.

    d. Nests and eggs of many bird species are protected under federal and/or provincial legislation such as the Migratory Birds Convention Act and the Fish and Wildlife Conservation Act. In order to protect breeding birds, no tree or shrub removal should occur between April 15th and August 15th, unless a breeding bird survey is completed by a qualified professional within five days of the woody vegetation removal, which identifies no nesting activity in the vicinity of the work area.

    e. In order to avoid attracting wildlife into the work area, the work area is to be kept clear of garbage and standing water.

    f. If any SAR (alive or injured) are observed or if a nest is observed during construction, activity in the area is to stop and the Ministry of Environment, Conservation and Parks (MECP) and a biological consultant contacted immediately.

    g. Any occurrences of species at risk found on site should be submitted to the Natural Heritage Information Centre as soon as possible.

    h. If any SAR are discovered throughout the course of the work and/or should any SAR or their habitat be potentially impacted by on site activities, MECP should be contacted and operations

be modified to avoid any negative impacts to SAR or their habitat until further direction is provided by MECP.

2. To ensure that no adverse impacts occur on Purdy Lake and the fish habitat/water quality within the Lake or on the adjacent deer wintering area, the following recommendations should be properly adhered to:

   a. The new addition is to be constructed at least 22 metres from the highwater mark of the lake.

   b. A 12 metre wide buffer area in front of the existing cottage and deck is to be maintained along the shoreline of Purdy Lake. This buffer area should be maintained substantially in a natural vegetated state, with the exception of the existing shoreline activity area along Purdy Lake as well as the limbing of trees to provide for a view of the Lake and the removal of dead or diseased trees.

   c. Vegetation on the subject lands outside of the buffer area should also remain in a natural state as much as possible, except for the clearing of portions of the property to allow for the construction of structures.

   d. Roof runoff should be controlled by directing water runoff to the rear of the new structures through the use of eave troughs and rain barrels or to a grassed area.

   e. The extent of exposed soils is to be kept to a minimum at all times. Re-vegetation with native trees and shrubs of exposed, non-developed areas is to be achieved as soon as possible and should only use locally appropriate native species.

   f. Erosion and sediment control measures are a critical component of the construction work. Effective sediment and erosion control measures are to be maintained until complete re-vegetation of disturbed areas is achieved. Silt fencing is to be installed along the downgradient edges of the work areas. It is important that fencing is properly dug-in to treat any surface water flow and is maintained as required, including removal of accumulated sediment.

   g. Additional mitigation measures to minimize the potential for inputs of sediments and other contaminants into the Lake and the environment in general include proper maintenance on construction equipment with respect to refuelling, washing and fluid changes, and proper disposal of fluids, filters and other waste materials. None of this work should take place within 30 metres of any surface water features.

7 Conclusion

The site conditions permit objectives of preserving soil and water quality, desired by the 30m setback, to be achieved with a reduced setback for the proposed addition in the area of the water setback, that will be built primarily within an existing disturbed area on the subject lands.

The fish habitat/water quality of Purdy Lake and the shoreline vegetation will not be adversely impacted and the existing/proposed reduced setback to the proposed addition will not result in the pollution of the air, water or soil. The proposal will also minimize stormwater flows and potential erosion and will not adversely impact any species at risk, or the deer wintering area or colonial waterbird nesting area on adjacent lands.

With the above mentioned mitigation measures properly adhered to, there will be no negative impacts on the quality of the lake water, natural features, or neighbouring properties resulting from the proposed future development. Therefore the proposed development will be consistent with the Provincial Planning Statement (PPS), 2024 and the County of Hastings Official Plan, 2018.

8 References

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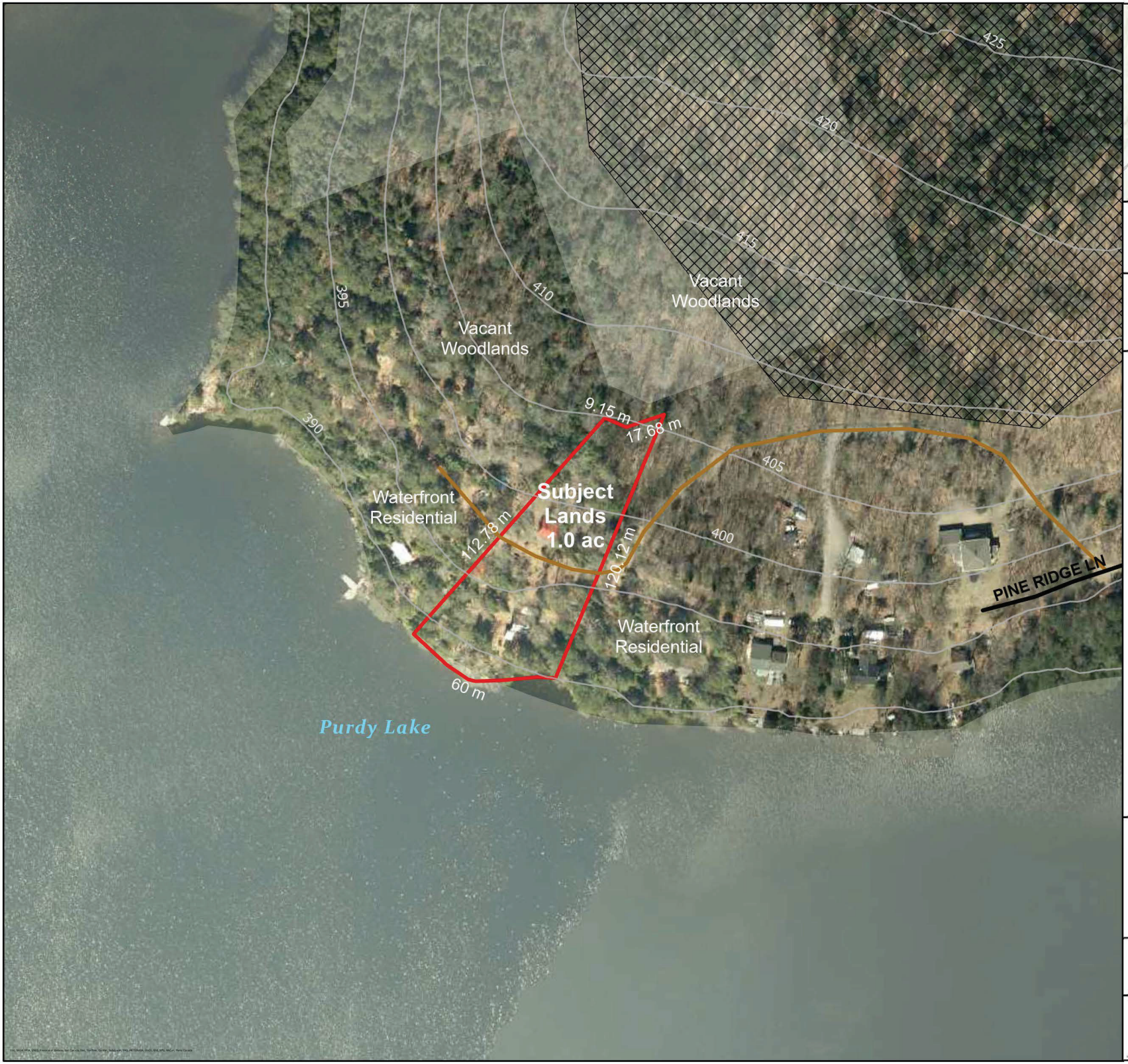

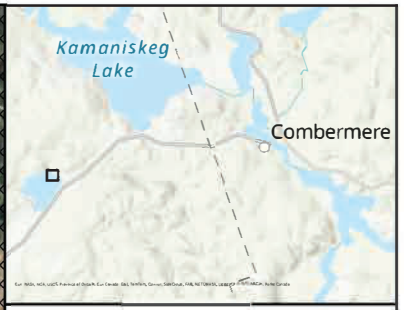

24-7085A
139D PINE RIDGE LANE
TOWNSHIP OF HASTINGS HIGHLANDS

MAP 1:
SITE & SURROUNDING LAND USE

LEGEND

- Roads
- Contours
- Access Road
- Subject Lands
- Deer Wintering Area (Stratum 2)
- Crown Land

1:2,000
1 cm = 20 meters

0 5 10 20
Meters

PROJECT NO.	DATE:
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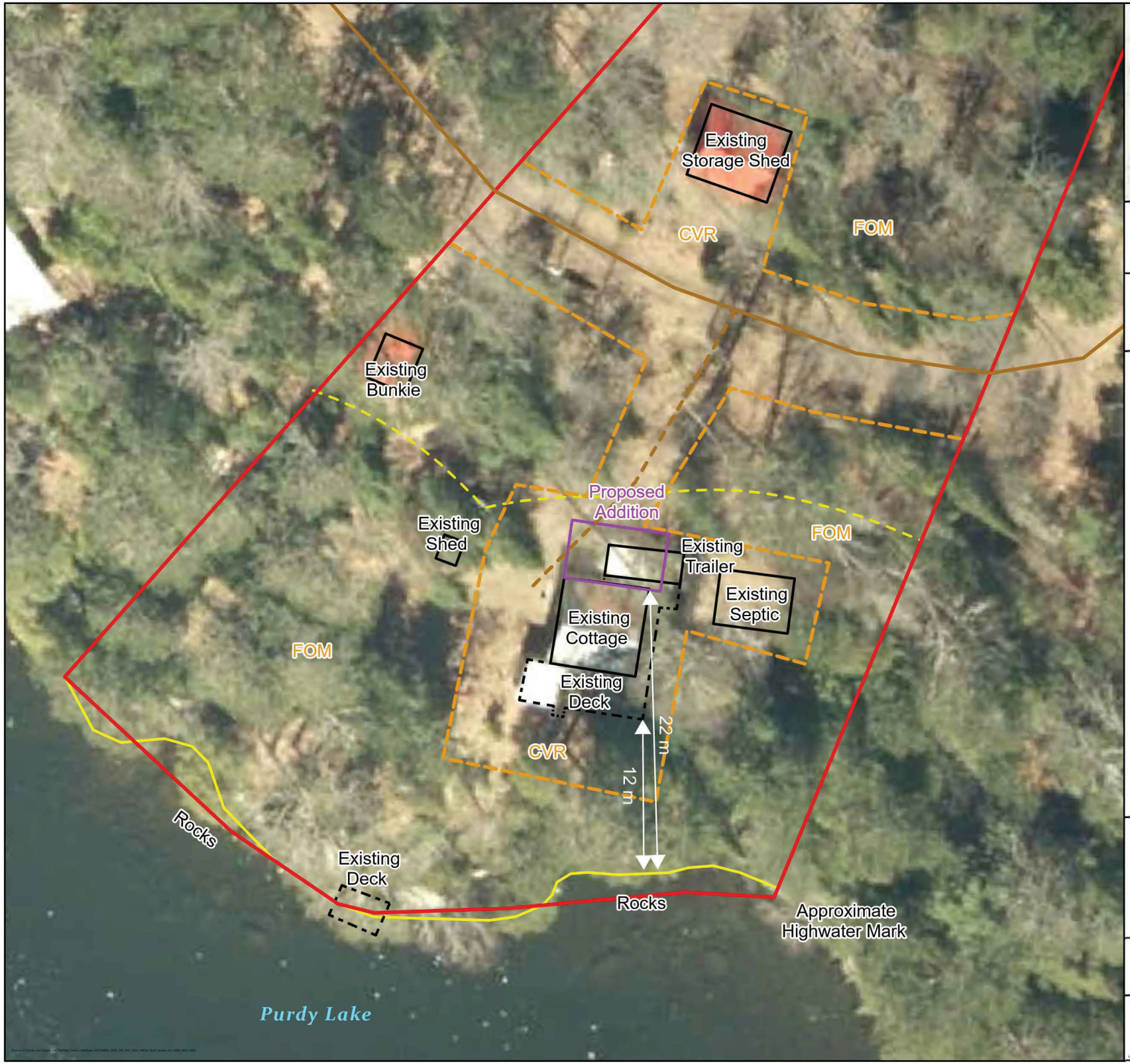

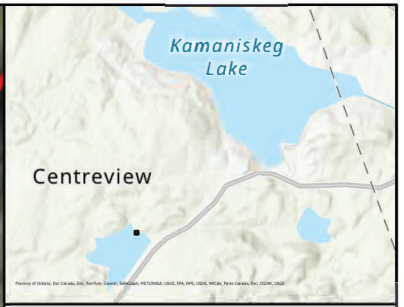

24-7085A
139D PINE RIDGE LANE
TOWNSHIP OF HASTINGS HIGHLANDS

MAP 2:
SUBJECT LANDS

LEGEND

- Roads
- Subject Lands
- Existing Buildings & Structures
- Proposed Addition
- Existing Deck
- Approximate Highwater Mark
- Driveway
- Access Road
- 30 m Water Setback
- Vegetation Communities

1:400
1 cm = 4 meters

0 1.5 3 6
Meters

PROJECT NO.	DATE:
24-7085A	12/16/2024

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