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ENVIRONMENTAL SITE EVALUATION

Municipality: Prince Edward County

Lots:

Concession:

Municipal Address: 2876 County Road 10, Milford

Site District: 6E-15

Landowner: Micheal Scott

Planning Application Reference: N.A.

Description of Application: The landowner proposes to sever approximately 0.6 hectares from his property, leaving a retained parcel of approximately 1.1 ha, which is already developed with a house and a number of accessory buildings. The owner's intent is to develop the vacant lot with a retirement home, eventually selling the balance of the property.

Site Description:

The subject property is located on the south side of County Road 10, south of Mill Pond near the hamlet of Milford (Attachment 1). The site is an irregular L-shaped property, which consists of a highly modified northern portion adjacent to the County Road, and a long, southern leg that is more naturalized. Provincial mapping suggests that the wooded portion may be wetland, but we found that it was a deciduous woodland. This will be discussed in more detail below, but we did not find it to be wetland as defined by OWES. Within the woodland, there is a very indistinct channel that clearly conveys water periodically; it was dry at the time of our inspection.

Ecological Land Classification:

The ecological land classification (ELC) mapping for the property is provided in Attachment 2. As noted above, the northern portion of the property is designated as **Cultural (CU)**, after Lee et al. (1998), who describe this as a community type resulting from, or maintained by, cultural or anthropogenic-based disturbances. Here we found that most of the natural vegetation cover has been removed to accommodate residential structures and associated land use. Along with the house, there were accessory structures on the proposed retained, while the proposed new lot had disturbance such that it had a similar lack of natural vegetation cover. There was a scattered presence of Red Cedar, White Pine, Scotch Pine, and White Cedar, with European Buckthorn and Staghorn Sumac growth; other species noted included Canada Plum, New England Aster, and Goldenrod species, and (non-native) weedy species such as Catnip, Lady's Thumb, Viper's Bugloss, Pigweed, Lamb's-quarters, and (invasive) Dog-strangling Vine.

The southern portion of the site is wooded, with a channel cut through its length. We determined the woodland to be a **Dry – Fresh Deciduous Forest Ecosite (FOD4)**. The main tree species were Ash (both White Ash and Green Ash) and Maple (Freeman's

Maple, Silver Maple, and Red Maple), neither clearly dominant over the other. Lee et al. note that these vegetation characteristics can result from disturbance or management, and it was evident that there has been some past disturbance related to the channel. Other tree species noted were sparse, but included some Elm. We also observed Buckthorn, Riverbank Grape, Virginia Creeper, plus ground species such as Poison Ivy, Strawberry, *Oryzopsis*, and Panicked Aster.

The channel on the property appears to have been created to manage drainage, likely enhancing an existing route of drainage or ponding in an area of lower elevation. We have mapped the approximate location of the channel in Attachment 2, but we note that it was indistinct along much of its length. In contrast, the channel has been deepened and/or straightened more notably on the adjacent properties to the west and east. There was no water at the time of the site inspection, although we found spots where the substrate felt slightly spongy. We suspect that the channel may braid at some spots, basically making its way through the woodlands freely. We observed evidence that there is standing water in some areas for sufficient time to create water lines on trees (one spot noted was on the channel at about its center point on the site, and another further east but south of the actual channel). While this is not wetland, water is present and moving through the channel at some times of the year, likely associated with spring melt.

At the western end of the property, we found a small area of **Cattail Mineral Shallow Marsh Type (MAS2-1)**. This area was technically too small to map (Lee et al. 1998 recommend minimum polygon size of 0.5 hectares), and does not meet the minimum size requirements of the Ontario Wetland Evaluation System (OWES requires a minimum size of 2 hectares for wetland evaluation). It was only approximately 900 m² in size, with another estimated 350 m² on the adjacent lands to the west of the subject property. However, it was mapped to better demonstrate the vegetation characteristics of the site. Here we found a small patch of wetland, dominated by (non-native species) *Typha angustifolia* cattail and Reed Canary Grass. This type of vegetation is of lower ecological value than many other marsh types due to its dense growth, but we found water close to the surface here, and consider this area to be wetland. Interestingly, the patch was not along the line of the channel, and was clearly separated from it by upland woodland.

Is the Proposed Development:	
A. In a Provincially Significant Wetland or Coastal Wetland?	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No
Adjacent to a Provincially Significant Wetland or Coastal Wetland? The closest PWS is the Black Creek Wetland (which is also a core part of the Black Creek Valley Marshes and Forests ANSI), located approximately 840 m to the ESE, well beyond adjacent lands.	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No
B. In a Regionally Significant Wetland?	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No
Adjacent to a Regionally Significant Wetland?	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No
C. In/adjacent to an Unevaluated Wetland? Provincial mapping suggests the presence of wetland in the wooded block in the long, southern leg of the property. As shown in Figure 2, this block is a deciduous woodland, not wetland. However, we did	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No

<p>identify a small wetland patch (MAS2-1) on the property, in the far western corner of this area. It is located approximately 132 m from the proposed building site, so is beyond adjacent lands.</p>	
<p>D. In an Area of Natural and Scientific Interest?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>Adjacent to an Area of Natural and Scientific Interest? The closest (regionally significant) ANSI is the Black Creek Valley Marshes and Forests, which is located approximately 875 m to the ESE, well beyond adjacent lands. The closest provincially significant ANSI is the Sandbanks Coastal Sand Bar Dunes, over 10 km WSW of the property.</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>E. In the habitat of Species at Risk?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>Adjacent to habitat of Species at Risk? We checked the databases of the Natural Heritage Information Center (NHIC) and eBird. The subject property is located within UTM block 18UP3166, a 1-km² block for which two species at risk were recorded. Eastern Meadowlark (<i>Sturnella magna</i>) and Bobolink (<i>Dolichonyx oryzivorus</i>) are both grassland birds, both designated as Threatened species in Ontario. There is no appropriate habitat on the subject property for these species; the closest <i>potentially</i> suitable habitat is located approximately 120 m from the proposed house site on lands owned by others to the SSE (we did not investigate these privately-owned lands, but base this possibility on a review of satellite imagery). Development of the proposed lot will have no impact on Eastern Meadowlarks or Bobolinks.</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>F. In significant wildlife habitat?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>Adjacent to significant wildlife habitat? The Province provides guidance, through a series of technical documents and habitat criteria schedules, to assess the potential for significant wildlife habitat (SWH). SWH includes areas important for seasonal concentration of animals, rare or specialized vegetation communities, habitat for species of conservation concern, and animal movement corridors. We reviewed the criteria, and found that there is little potential for SWH on the property. We will discuss below only the criteria for which there is any potential.</p> <p><u>Seasonal Concentration of Animals:</u> Bat Maternity Colonies. Bat maternity colonies can be found in tree cavities, vegetation and often buildings. Any FOD ecosite can potentially provide habitat. The trees in the woodland were generally small; we did note a few large White Ash trees, but no snags. However, the SWH criteria require a minimum of over 10 large trees (greater than 25 cm dbh) per hectare, and this would not be considered to be a mature forest. It is our opinion that the woodland does not provide significant habitat for bat maternity colonies. Further, the proposed development site is located outside the woodland. As no tree loss will result, there is no potential to impact bat species.</p>	<p>Yes <input checked="" type="checkbox"/> <input type="checkbox"/> No</p>

<p><u>Specialized Wildlife Habitat:</u> Amphibian Breeding Habitat (Woodland). We noted areas within the FOD portion of the site that had characteristics suggesting vernal pooling. Due to the time of year, we had no way of assessing use by breeding amphibians (this would require fieldwork in early spring), but there appears to be potential for such use. Again, we note that the proposed development site is located outside the woodland. As no tree loss will result, there is no potential to impact to the vernal habitat within the woodland.</p> <p><u>Habitats of Species of Conservation Concern:</u> Special Concern and Rare Wildlife Species. In reviewing the NHIC database, we noted that two Special Concern species have been reported within UTM square 18UP3166. To this, we can add a third, evidence of which was noted during the site work. Reported were Midland Painted Turtle (<i>Chrysemys picta marginata</i>) and Northern Map Turtle (<i>Graptemys geographica</i>). We observed the remnants of a dead Snapping Turtle (<i>Chelydra serpentina</i>) on the property, and the landowner reported seeing others in the area. All three of these animals are designated as species of Special Concern in Ontario. There is no suitable habitat for these species on the property (this includes the small MAS2-1 area, which is characterized by very dense vegetation, and no open water), but we note that the Mill Pond on the north side of County Road 10 does offer appropriate habitat (within 120 m). Turtles may travel some distance for nesting purposes, so they may potentially cross the subject lands during this life stage. We considered that the proposed house location is of modest size and is within the cultural portion of the site, and that the area offers no features of value to nesting turtles, so it is our opinion that the development of the proposed lot will have no negative impact on turtle species. (We add that the landowner has recently placed a pad of gravel in the proposed house location, a substrate that could potentially attract nesting turtles in the spring. We recommend that the landowner consider placing exclusion fencing around the gravel to prevent turtles from accessing the site prior to approved construction.)</p>	
<p>G. Within 120 m of a waterbody? Mill Pond, part of the Black Creek system, lies north of County Road 10, approximately 90 m north of the property. Due to the distance of the setback and the intervening County Road and parallel residential development, it is our opinion that there will be no impact to the Mill Pond from development of the proposed lot.</p>	Yes <input checked="" type="checkbox"/> <input type="checkbox"/> No
<p>H. In fish habitat?</p>	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No
<p>Adjacent to fish habitat? Mill Pond, part of the Black Creek system, lies north of County Road 10, approximately 90 m north of the property. Given the direct</p>	Yes <input checked="" type="checkbox"/> <input type="checkbox"/> No

<p>connection of Black Creek to Lake Ontario, it is assumed that there are fish present in the system. Due to the distance from the site, however, and the intervening transportation corridor and residential development, it is our opinion that there will be no impact to fish or fish habitat from development of the proposed lot.</p>	
<p>I. In or Adjacent to Highly or Moderately Sensitive Lake Trout Lake?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>J. In a significant woodland? Policy 2.1.5 b) of the PPS states that: “Development and site alteration shall not be permitted in . . . (b) significant woodlands in Ecoregions 6E and 7E . . . unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.” To be considered significant woodlands for purposes of the PPS, a site must meet specific criteria related to its habitat (set out by OMNR 2010).</p> <p>The subject lands are located within Site District 6E-15, within which 37% of the ecodistrict remains as natural cover, primarily forest. Limestone plain deciduous and mixed forest complexes comprise 24% of the remaining natural cover, while clay plain deciduous forest complexes make up 14%; over 30% of the remaining natural cover is wetland, primarily marsh and swamp (Henson and Brodribb 2005). Quinte Conservation’s most recent Watershed Report Card found that approximately 30% of the Prince Edward Region watershed in forested (Quinte Conservation 2018).</p> <p>OMNR (2010) directs that where forest cover is 15 to 30% of the land cover, woodlands 20 ha in size or larger should be considered significant. Using the most conservative assessment, the greater woodland is approximately 2 ha in size, and would not be considered to be significant for size. (Size refers to the aerial extent of the woodland, regardless of ownership, so we included that portion of the woodland that lies south of the property, on lands owned by others.)</p> <p>The Natural Heritage Reference Manual (OMNR 2010) discusses other aspects of a woodland that should be considered for significance. We reviewed these features (ecological functions, uncommon characteristics, and economic and social functional values), but identified none that would be applicable.</p> <p>It is our opinion that this is not significant woodland for the purposes of the PPS.</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>Adjacent to a significant woodland?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>K. In a significant valleyland?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>
<p>Adjacent to a significant valleyland?</p>	<p>Yes <input type="checkbox"/> <input checked="" type="checkbox"/> No</p>

In our opinion, is a more detailed Environmental Impact Statement (EIS) required to demonstrate the appropriateness of the proposed development? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, which natural feature(s) should the assessment focus on?	
<u>Recommendations for Setback:</u> The proposed dwelling should provide a minimum setback of 30 m from the channel within the FOD4 woodland, and this requirement is met by the current proposal.	
<u>Recommendations for Mitigation:</u> Although no woodland clearing will be required, as a general recommendation there should be no removal of woody vegetation (trees and shrubs) between April 1 and August 30 in order to ensure compliance with the Migratory Birds Convention Act. This timing window ensures no harm to nesting birds during this sensitive period of their life cycle.	
<u>Environmental Impact Statement:</u> It is our opinion that the proposed undertaking will have no negative impact on the natural heritage features or on their ecological functions and that, assuming the implementation of our recommendations, the proposal is consistent with the intent of the Provincial Policy Statement.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Is monitoring recommended? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<u>Contacts, References & Literature Cited:</u> eBird. Online tool that provides a database of submitted bird sightings by citizen scientists, managed by the Cornell Lab of Ornithology . < http://ebird.org > Ecological Services. 2001. Life Science Areas of Natural and Scientific Interest in Site District 6E-15. Prepared for the Ontario Ministry of Natural Resources, Kingston office. 168 pp., plus map. Fish ON-line. Database created by the Ontario Ministry of Natural Resources and Forestry. < https://www.gisapplication.lrc.gov.on.ca/FishONLine/Index.html?site=FishONLine&viewer=FishONLine&locale=en-US > Henson, B.L. and K.E. Brodribb. 2005. Great Lakes Conservation Blueprint for Terrestrial Biodiversity: Volume 2 – Ecodistrict Summaries. Nature Conservancy of Canada. Completed as a partnership project between the Nature Conservancy of Canada and the Ontario Ministry of Natural Resources. 344 pp. Online at: < http://nhic.mnr.gov.on.ca/projects/conservation_blueprint/Terr_Vol2_final_e-version.pdf > iNaturalist. Online tool that provides a database of submitted species sightings by citizen scientists. iNaturalist is a joint initiative by the California Academy of Sciences and the National Geographic Society. < http://inaturalist.org >	

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario. First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Technology Transfer Branch. SCSS Field Guide FG-02. 225 pp.

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 <http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US >

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Provincial Policy Statement. 2020. Issued under Section 3 of the *Planning Act*. Province of Ontario. 53 pp.

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<http://quinteconservation.ca/UserFiles/File/2018files/OFFICIAL%20Watershed%20Report%20Card%20for%20Quinte%202018%20.pdf>

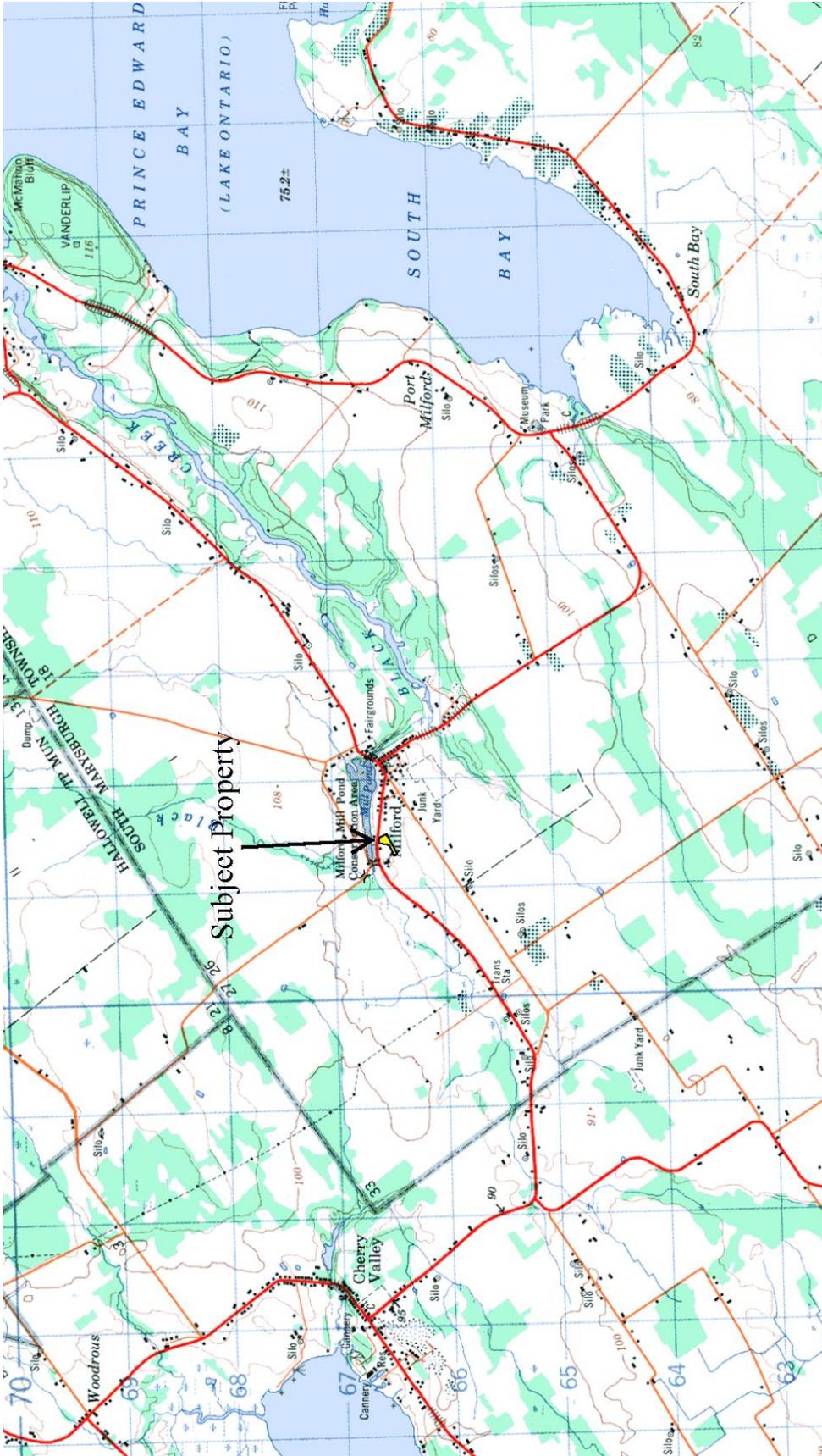
Environmental Site Evaluation Completed by: Mary Alice Snetsinger

Date of Site Inspection: September 30, 2021

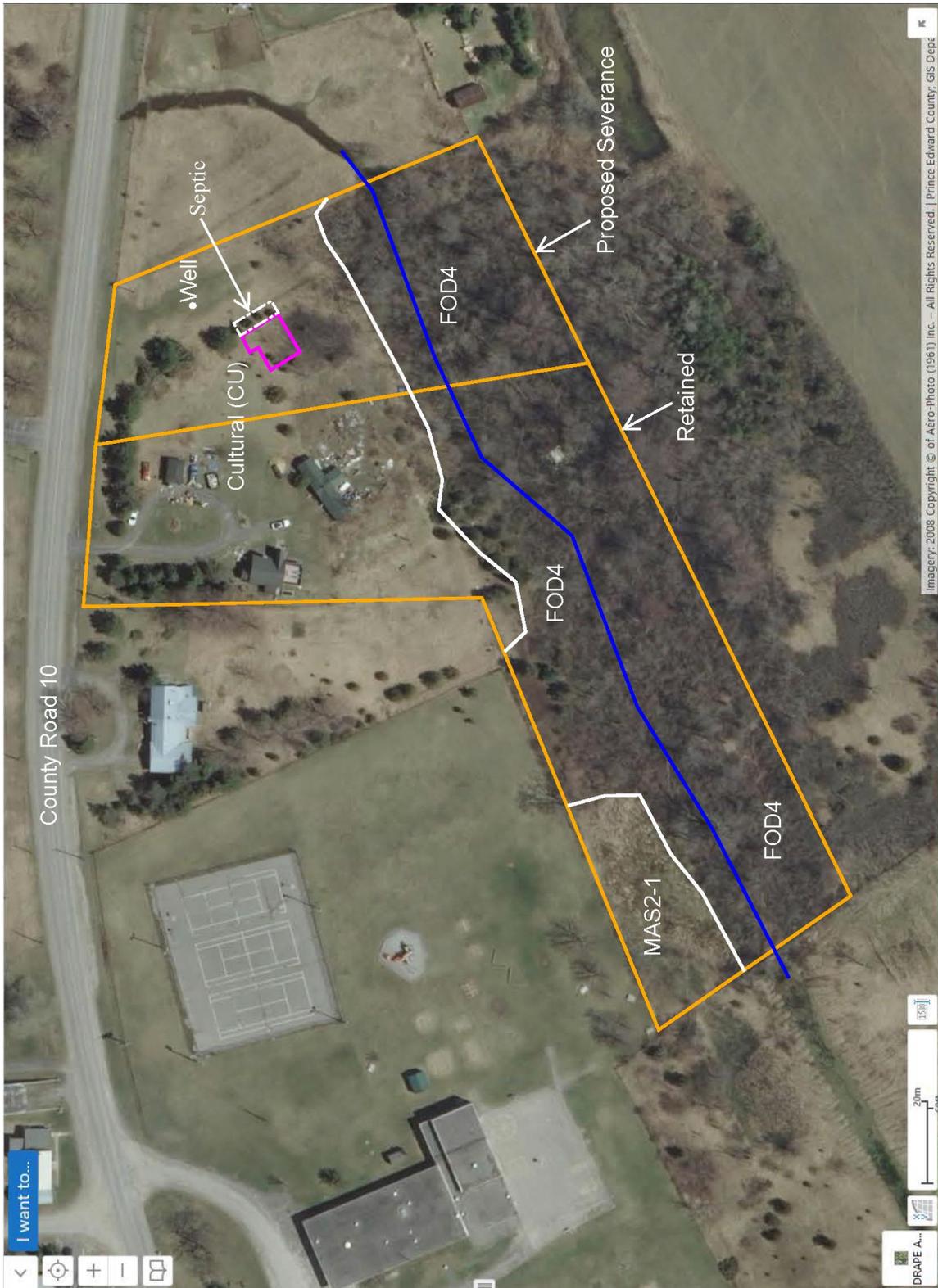
Date of Report: November 4, 2021

Signature:





Attachment 1. Annotated detail from topographic map Wellington (30 N/14). The approximate location of the subject property is highlighted.



Attachment 2. Ecological land classification of the subject property, ELC categories after Lee et al. (1998). House location marked in pink, with well and septic locations also indicated. Base image is DRAPE imagery from the County public GIS mapping.

Attachment 3. Site photographs taken by report author on September 30, 2021.



Photo 1. Area of the Cultural (CU) portion of the site where the proposed house will be located, looking south. Note scattered shrubs in the area, and deciduous woodland in the distance behind.



Photo 2. Within the maple-ash woodland (FOD4)



Photo 3. Within the maple-ash woodland.



Photo 4. An area within the FOD4 woodland showing the indistinct channel, the photo annotated with broken white lines to clarify.



Photo 5. One of the trees observed that suggests periodic standing water and/or ice action within the FOD4 woodland.



Photo 6. View looking NNE at the cattail/grass marsh patch (MAS2-1) on the retained lands.