

June 22, 2023

Peer Review of Environmental Impact Study for Osaca Whitepine Subdivision, Osaca, Ontario

Prepared for

Municipality of Port Hope



north-south
ENVIRONMENTAL

Introduction

The Municipality of Port Hope (MPH) is currently reviewing an application for a Draft Plan of Subdivision and Zoning By-law Amendment for 5868 County Road 65, Part of Lot 27, Concession 5 in the village of Osaca (herein referred to as the “subject property”).

Policy C5.2.2 of the MPH Official Plan requires that a proponent complete an Environmental Impact Study (EIS) in accordance with Section C20.3 of the Official Plan. As part of the application an EIS was prepared by D.M. Wills Associates Limited (herein referred to as “Wills”), dated December, 2022 on behalf of Hillstreet Developments Ltd.

Scope of Peer Review

This peer review of the EIS submitted by Wills (December 2022) (herein referred to as the ‘Wills EIS’) was undertaken in consideration of the standards by which an EIS should fulfill certain requirements to ensure that a development application will conform with applicable natural heritage policies and legislation. General guidance for undertaking an EIS to determine if a development proposal is consistent with the Provincial Policy Statement can be found in Section 13.0 of the Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005, Second Edition (Ontario Ministry of Natural Resources 2010) [NHRM 2010].

The Municipality of Port Hope provides specific direction for completing an EIS in Port Hope, as outlined in the Official Plan under Section C20.3. This policy identifies that the purpose of the EIS is to “determine whether a proposed development or infrastructure undertaken within or adjacent to lands identified as Natural Heritage on Schedules B or B1 or Natural Hazards on Schedules B2 or B1 will result in negative impacts to the feature or its ecological function and to determine whether a particular development is appropriate and to recommend necessary mitigation measures where development is deemed to be appropriate in accordance to the policies of this Plan”. Furthermore, policy C5.2.2 requires that “any proponent of development or site alteration within or adjacent to lands classified as Natural Heritage shall demonstrate in accordance with provincial legislation, policies and appropriate guidelines and to the satisfaction of Council that there shall be no negative impacts on the natural feature or the ecological function for which the area has been identified, that cannot be mitigated. Proponents proposing development within or adjacent to natural heritage features as defined in Table 1 shall complete an environmental impact study in accordance with Section C20.3 of this Plan.”

The scope of an EIS is in part based on the scale of the proposed development and potential for impacts, as determined in consultation with the GRCA. The peer review of the Wills EIS has been undertaken with consideration of the “matters to address” and the purpose of an EIS as outlined in Section C20.3 of the Port Hope OP, to determine if the Wills EIS prepared for the subject lands is

adequate to assess conformity and consistency with relevant natural environment policies and legislation.

In order to support the peer review, a site visit was conducted on June 8, 2023, with Sal Spitale and Patrick Strzalkowski of North-South Environmental Inc. (external peer reviewer with the Municipality of Port Hope), ecologists from Wills, and staff from the Ganaraska Region Conservation Authority (GRCA) and the Municipality of Port Hope. In addition, the wetland boundary and woodland dripline was surveyed.

The following documents were reviewed in addition to the Wills EIS to inform an understand of natural heritage and ecological matters:

- Tree Inventory and Preservation Plan Report, 5868 County Road 65, Port Hope. Kuntz Forestry Consulting Inc., 28 March 2023.
- Draft Plan of Subdivision, D.G. Biddle and Associates Ltd., February 21, 2023.
- Geotechnical Investigation - Proposed Residential Development, 5868 County Road 65, Port Hope, ON. Cambium Inc. November 2022.
- Hydrogeological Study report, Osaca Hillstreet Subdivision, County Road 65, Osaca, Ontario. D.M. Wills Associates Ltd. December 2022.

There are several main concerns with the EIS: 1) the EIS does not include a sufficient level of field survey or assessment of adjacent lands in order to fully assess natural features and ecological functions on adjacent lands, 2) the description of the proposed development does not include a sufficient level of detail to undertake a thorough impact assessment, and 3) the conclusions of the EIS are not sufficiently supported to demonstrate the proposed development will not result in a negative impact to the natural features and their ecological functions on the subject property and adjacent lands.

It is recommended that the EIS be revised to address the comments provided below in the comment table. Further, it is recommended that the ecological consultant provide a response to each comment and work with the public agencies and NSE to address the comments prior to resubmitting the EIS to expedite the process.

Please contact the undersigned if you have any questions or require clarification on the comments.

Sincerely,



Sal Spitale

Principal, Senior Ecologist
North-South Environmental Inc

Comments

| Comment # | Section | NSE Comment - June 2023 |
|-----------|--|--|
| 1. | Executive Summary | Please update Executive summary following a revision to the EIS to address the comments provided below. |
| 2. | 1.0 - Introduction | It is noted that "under the Provincial Policy Statement (2020), Ganaraska Region Conservation Authority (GRCA) can request an EIS to help guide recommendations for applications for development within, or adjacent to, natural heritage features and areas". Please note that the PPS makes no reference to conservation authorities ability to request an EIS. It is through the Municipality of Port Hope (MPH) Official Plan (OP), s. C5.2.2 that identifies the requirement to complete an EIS, with guidance for an EIS identified in s. C20.3 of the MPH OP. Please update this section of the EIS to provide the correct reference to the requirement for an EIS. |
| 3. | 1.0 - Introduction | The third paragraph makes reference to the EIS demonstrating that "there will be no negative ecological or hydrological impacts on the natural heritage system, connectivity, and linkages associated with the site and surrounding area." Please review s. C20.3 of the MPH OP regarding the purpose and requirements of an EIS and update the references in the EIS accordingly. |
| 4. | 1.1 - Subject Property / Project Details | The study area should be identified on all figures and illustrate all natural features and areas within 120 m (i.e., adjacent lands as identified on Table 1 in the MPH OP) of the proposed development / subject property. Please update all figures accordingly, including showing the boundary of the Osaca Provincially Significant Wetland (PSW), Osaca - Ganaraska River Life Science Area of Natural and Scientific Interest (LS - ANSI) and watercourses. |
| 5. | 2.1 - Background Review | Please provide a list of all background material reviewed. |
| 6. | 2.1 - Background Review | The term Valued Ecosystem Services is noted in the "Designated Areas" section. The Natural Heritage Information Centre does not make reference to Valued Ecosystem Services. This is not a term used in natural heritage planning in Ontario or is a term used to describe natural heritage features and areas . Furthermore, the term "Designated Areas" is not used in the PPS, Natural Heritage Reference Manual or municipal OP. Please replace the term "Designated Areas" with "natural heritage features and areas", which is a defined term in the PPS and more accurately refers to features that may be found to be "significant" and to which natural heritage policies apply. |
| 7. | 2.1 - Background Review | Appendix C includes an e-mail to the MECP regarding species at risk known from the general area. There is no reply from the MECP in the EIS. Please include the reply from the MECP regarding the request for information regarding species at risk. |
| 8. | 2.2 - Field Investigations | Please provide a table of field investigations, noting date, survey undertaken, weather, time of start and finish of survey. |
| 9. | 2.2 - Field Investigations | There appears to only be one vegetation survey completed to inform the Ecological Land Classification on June 21, 2022. No spring or fall vegetation survey was completed. A spring and summer vegetation inventory should be completed. Alternatively, follow a precautionary approach and protect vegetation to ensure the development will not result in a negative impact. |
| 10. | 2.2 - Field Investigations | Please note, the first and second round of the amphibian surveys were completed outside of the recommended dates for these surveys (e.g., 1 st round for amphibian surveys in Central Region should take place between April 15 th and April 30 th , 2 nd round between May 15 th and May 30 th). Missing the early survey period could result in an under-representation of amphibian use of the habitat within the study area. Amphibian surveys should be completed during the appropriate time. If surveys are not undertaken at the appropriate time, a precautionary approach should be applied. Please see comment below regarding Significant Wildlife Habitat for Woodland and Wetland Amphibian Breeding Habitat. |
| 11. | 2.2.1 - Ecological Land Classification | At a site-level ELC should be completed to Vegetation Type. There appears to be a sufficient vegetation description and soil assessment to classify vegetation communities to Vegetation Type. Please identify the Vegetation Type for each community mapped. |
| 12. | 2.2.1 - Ecological Land Classification | No vegetation list has been provided. Please include a table of vegetation documented during surveys, indicating which vegetation communities each species was recorded in. |
| 13. | 2.2.1 - Ecological Land Classification | Within the swamp communities, Black Ash was documented. Black Ash is listed as Endangered in Ontario. That said, the ministry has temporarily suspended protections for Black Ash for a period of two years (January 26, 2022 - January 25, 2024). During this time, proponents will not need to seek authorizations for activities that impact Black Ash and its habitat. However, the EIS should acknowledge the status of Black Ash. Please update appropriate sections of the EIS accordingly. |

| Comment # | Section | NSE Comment - June 2023 |
|-----------|---|--|
| 14. | 2.2.1 - Ecological Land Classification | Please indicate at what depth mottles and gleys were observed in the soil cores, if they were detected. |
| 15. | 2.2.2 Breeding Bird Surveys | <p>The point count locations for the breeding bird surveys were located along the edge of the woodland. Bird survey point locations should be located within the habitat to the extent possible (i.e., to the edge of the property) to document birds utilizing that habitat. Point count locations should have been located within the woodland, up to 120 m from the proposed development footprint. This is important to document indicator species of Significant Wildlife Habitat, as well as Species at Risk that have been recorded within the vicinity of the subject property.</p> <p>It is recommended that breeding bird surveys be completed within the woodland up to the edge of the property line (within 120 m of the proposed development) to document species inhabiting the woodland and assess the ecological function of the habitat in order to determine sensitivity to development and inform appropriate buffers.</p> |
| 16. | 2.2.3 - Amphibian Call Surveys | See comment #10 above regarding survey period. This is particularly relevant for early breeding species, such as Chorus Frog, which are known to breed early during the first round of surveys (e.g., early to mid-April) and are much less vocal following their brief breeding period (1-2 weeks). It is recommended surveys be completed during the appropriate time of year. |
| 17. | 2.2.4 - Headwater Drainage Feature | Please note, the TRCA Evaluation, Classification and Management of Headwaters Drainage Features: Guidelines document identifies that the first survey should be completed during the Spring freshet (late March - mid-April). That said, the outcome of the assessment may not change based on the management recommendation provided in Section 4.2 of the EIS. Please provide an explanation for why the first survey was not completed during the recommended timing window. Please provide rationale to support a position that the first survey did not need to occur during the recommended timing window, if that is the position of the author of the EIS. |
| 18. | 2.2.4 - Headwater Drainage Feature | Please note, Figure 3 does not identify the locations of watercourses, including the HDFs as noted in Section 2.2.4 of the EIS. Please update Figure 3 to clearly illustrate the location of the headwater drainage features. Also, please clearly identify the location of all watercourses, including those identified as cold water fish habitat on Figure 3. |
| 19. | 2.2.6 - Incidental Wildlife Observations | The list of incidental wildlife species includes Common Nighthawk, as species listed as Special Concern. There is no further discussion of this species in the EIS, including within the Species at Risk Assessment (Section 2.2.7). If no suitable habitat is present within the study area (including adjacent lands), please provide an assessment and explanation to support an opinion that dedicated crepuscular bird surveys are not required. |
| 20. | 2.2.7 - Species at Risk Assessment | Please review the NHIC list for the overlapping and adjacent 1 km squares and note which species were documented in the NHIC list and during what year they were last observed if this information is available. |
| 21. | Table 2 - Species at Risk Screening Table | <p>It is not clear why the likelihood of occurrence was noted as "low" or "moderate" for some species for which habitat is present in the study area (including adjacent lands). As an example, Canada Warbler is noted as having a "low" likelihood of occurrence even though there is suitable habitat in the forest/swamp complex and this species was documented in two of the adjacent NHIC squares to the west of the subject property. Please indicate species likelihood of occurrence as "moderate" if there is suitable habitat present, and "high" for species which are more likely to be present (e.g., Wood Thrush).</p> <p>Also, the comment that a forest breeding bird species was not "observed or heard" gives the impression that surveys were undertaken with the forest habitat. Breeding bird survey locations were placed at the edge of the woodland rather than within the woodland where these species are more likely to be on territory (e.g., Wood Thrush territory is further interior from the woodland edge). As such, the lack of observations is not evidence that these species are not breeding within the woodland or that the woodland does not provide suitable habitat for these species.</p> |
| 22. | Table 2 - Species at Risk Screening Table | There are SAR bats that have a potential for using the trees on and the subject property as maternity roost habitat. No surveys were completed yet tree removal is proposed. Moreover, there is no correspondence from the MECP regarding proposed removal of trees and potential adverse impacts to SAR habitat. It is recommended that the MECP be consulted to determine if acoustic surveys should be completed for SAR bats and what steps should be taken to avoid contravening the Endangered Species Act. |
| 23. | 3.0 - Regulatory Context | Please include a section that reviews relevant Federal Legislation, particularly the Fisheries Act, Species at Risk Act, and the Migratory Bird Convention Act. |
| 24. | 3.1 - Provincial Policy Context | There is a direct hydrologic connection between the Osaca PSW located on the east side of County Road 65 and the unevaluated wetland located on the subject property. This is acknowledged in Section 2.1, under "Other Wetlands". The new Ontario Wetland Evaluation System (2022) manual notes that "there are some cases |

| Comment # | Section | NSE Comment - June 2023 |
|-----------|---|--|
| | | where very closely grouped wetlands function together as one. For example, areas comprised of very closely spaced small wetland ponds/pools (e.g., within 30 meters from each other) interspersed with small pockets of upland forest (e.g., a 'mosaic wetland' or a 'slough wetland'). It should be noted that the wetland on the subject property is not a small wetland separated by an upland forest from the Osaca PSW. Therefore, this guidance would not apply to the unevaluated wetland on the subject property which is directly hydrologically and functionally connected to the Osaca wetland. These wetlands would also have historically been one wetland unit prior to the construction of County Road 65 and the installation of the culvert under County Road 65 that maintains the hydrologic connect between the wetlands. It is therefore recommended that the wetland on the subject property be either formally evaluated on its own merits, or that it be treated as part of the PSW given the hydrologic and functional connection of the unevaluated wetland on the subject property with the Osaca PSW. This includes provision of a 30 m buffer to the wetland. |
| 25. | 3.1 - Provincial Policy Context | <p>There is acknowledgement that there is "Candidate Special Concern and Rare Wildlife Species - Eastern Wood-pewee SWH". Please note, the presence of a species of Special Concern is confirmation of SWH for this SWH type. Please change this to "Confirmed Special Concern and Rare Wildlife Species SWH for Eastern Wood-pewee".</p> <p>Please note, Wood Thrush (listed as Special Concern in Ontario) was heard calling within the woodland in the north western portion of the subject property during the June 8th, 2023 site visit. Please indicate the there is Confirmed Special Concern and Rare Wildlife Species SWH for Wood Thrush.</p> <p>The woodland is also large enough to qualify as candidate SWH for Woodland Area-Sensitive Bird Breeding Habitat. The bird surveys, which were only conducted from the edge of the woodland, recorded three of the indicator wildlife species for this SWH including Ovenbird, Black-throated Green Warbler, and Yellow-bellied Sapsucker. During the site visit on June 8, 2023 Veery, Red-breasted Nuthatch, Black-throated Green Warbler, Ovenbird and Yellow-bellied Sapsucker were heard or observed. A pair of Yellow-bellied Sapsuckers were observed entering a cavity as evidence of confirmed breeding. Where there are 3 or more pairs of the listed wildlife species the habitat is confirmed SWH. Due to the size of the woodland it is likely there are more species and higher abundances of area sensitive bird species utilizing the woodland. The woodland should be recognized as "Confirmed Area-Sensitive Bird Breeding Habitat SWH". Please revise the EIS to recognize this SWH type, including assessing impacts to this type of SWH and ensure adequate mitigation measures (e.g., buffers).</p> |
| 26. | 3.2 - Northumberland County Official Plan | <p>It should be noted that Northumberland Council adopted the amendment to the Official Plan on December 20, 2021 that updated the Natural Heritage System policies and added mapping to the County's Official Plan. Schedule B-2: Natural Heritage Features and Areas identifies the woodland as a Significant Woodland. While the 2021 OPA may not yet be approved by the Province, the identification of the Significant Woodland in the County's schedules should be acknowledged.</p> <p>Also, while the 2016 County OP does not map Significant Woodlands, the definition of "Significant" in the context of woodlands notes that Significant Woodlands are to be "identified using criteria established by the Ontario Ministry of Natural Resources". When applying the criteria/guidance from the Natural Heritage Reference Manual (OMNR 2010), the woodland does qualify as a Significant Woodlands. Please update Section 3.2. to acknowledge that the woodland qualifies as a Significant Woodland per the direction from the County OP to use criteria established by the OMNR.</p> |
| 27. | 3.2 - Northumberland County Official Plan | <p>This section states that "no fish or fish habitat was found on the Subject Property". Section 2.1, within the Fish Habitat section of the background review notes that there are two cold water streams documented within or adjacent to the subject property. The tributary of the Ganaraska River, that originates from the wetland and flows east towards the Osaca PSW was identified as one of those watercourses and is located on the subject property. Furthermore, in Section 4.1, under the evaluation of Significant Woodlands, it is noted "multiple watercourses that provide fish habitat are present within the woodland". While it was noted that during the wetland delineation exercise conducted on June 21st, 2022 the watercourse was observed to have "no flow, and minimal standing water (<5 cm)", the watercourse may provide direct habitat in the spring if flow is suitable for connection to downstream reaches and/or provides indirect fish habitat throughout the year through the downstream transport of allochthonous material and flow. Since neither fish surveys were or an aquatic habitat assessment were completed earlier in the spring to document conditions and fish presence during higher flow periods, there is not enough evidence to suggest that the watercourse does not provide fish habitat. Please revise this section to acknowledge fish habitat is present on the subject property and adjacent lands (i.e., to the south of the subject property). Please also update Section 5 to assess impacts to fish habitat and if required identify buffers and mitigation measures to protect fish habitat.</p> |
| 28. | 3.2 - Northumberland County Official Plan | <p>This section states that "no significant habitat of Endangered or Threatened species was found on the Subject Property. It should be noted that the surveys completed are not thorough enough to conclude that there is no habitat for Endangered or Threatened Species. In particular, no acoustic bat surveys were completed and the</p> |

| Comment # | Section | NSE Comment - June 2023 |
|-----------|--|--|
| | | breeding bird surveys were not completed within the woodland which may support Species at Risk birds that have been recorded in the vicinity of the subject property. Until such time that surveys are completed for bats and birds within the woodland, the EIS should acknowledge that the woodland may provide habitat for Endangered and Threatened Species. Please revise the EIS accordingly. |
| 29. | 3.3 - Municipality of Port Hope | Please update this section following revisions to Section 3.2 - Northumberland County Official Plan, as the same comments apply to Provincially Significant Wetlands, significant habitat of Endangered or Threatened Species, and Fish Habitat. Also, please note that the MPH OP also protects Significant Woodlands and Significant Wildlife Habitat in accordance with meeting the test of no negative impact. Please include a statement acknowledging the protection for these natural heritage features and areas in the MPH OP. |
| 30. | 3.3 - Municipality of Port Hope | Please note, Table 1 of the MPH OP notes that a minimum buffer of 30 m shall be applied to the high-water edge of aquatic habitat, or as defined through the EIS. The EIS needs to demonstrate that 15 m is sufficient based on the sensitivity of the feature and an analysis of potential impacts. Please provide a more thorough assessment of sensitivity of features and potential impacts that supports the recommendation for a reduced buffer of 15 m. |
| 31. | 3.4 - Endangered Species Act, 2007 | There are records of Black Ash and Butternut recorded from the subject property. Please map these locations. Furthermore, please discuss the requirements under the ESA regarding protection for these species and the process to allow development to proceed where these species may be removed. As noted in comment #22 above, please consult with the MECP regarding SAR bat habitat and requirements for field surveys and or the process to permit development to proceed where tree removal is proposed. Please provide correspondence with the MECP to the Municipality of Port Hope. |
| 32. | 3.5.2 - Wetlands | Please note, it is anticipated that the unevaluated wetland on the subject property be treated as part of the Osaca PSW or formally evaluated. Therefore, a minimum buffer of 30 m is recommended from the wetland boundary. Please update the EIS within all sections referencing the wetland buffer to indicate that a 30 m buffer will be provided. |
| 33. | 4.2 - Headwater Drainage Feature Classification | Please see comment # 17 and #18 above regarding survey timing and mapping of HDFs on the subject property. |
| 34. | Table 3 - Significant Wildlife Habitat Screening | Please note, "candidate" SWH should be identified as "yes", when the habitat exists. When the indicator species and numbers are recorded, the SWH should be identified as "confirmed". Please update the table accordingly. |
| 35. | Table 3 - Significant Wildlife Habitat Screening | In addition to those types of SWH noted as "candidate", the following types of SWH should also be identified as candidate: <ul style="list-style-type: none"> - Woodland Raptor Nesting Habitat (there are large fallow fields adjacent to the woodland over 30 ha in size, albeit not on the subject property) - Amphibian Breeding Habitat (Woodland) - the woodland on the subject property and on adjacent lands may contain larger vernal pools. - Woodland Area-sensitive Bird Breeding Habitat - the woodland on/adjacent to the subject property provides interior forest habitat. In addition to those types of SWH noted as "confirmed", please add the following: <ul style="list-style-type: none"> - Woodland Area-sensitive Bird Breeding Habitat |
| 36. | Table 3 - Significant Wildlife Habitat Screening | Please add Ovenbird, Scarlet Tanager and Winter Wren to the list of "Associated Species" to the Woodland Area-sensitive Bird Breeding Habitat row. |
| 37. | 5.0 - Impact Assessment and Mitigation | Please note, there is a lack of a thorough description of the proposed development upon which to assess potential impacts. For example, there is no description of how the lots will be serviced, the type of storm water management, where storm water will discharge, waste water management, source of drinking water, etc. Please provide a thorough description of the proposed development prior to the Impact Assessment and Mitigation section. Please consider the potential impacts resulting from the proposed development as part of the mitigation measures including rationale for ecologically appropriate buffers. |
| 38. | 5.0 - Impact Assessment and Mitigation | The impact assessment section has not considered the potential impacts resulting from the proposed development that will result in a significant change in land use from existing conditions. Potential impacts include increased human use and presence, increased noise, creation of ad-hoc trails, trampling of vegetation, urban heat island effect resulting from absorption of solar radiation on roof tops, brick, driveways and roads, introduction of invasive species, predatory pets (i.e., cats), pollution from fertilizers and pesticides, etc. Please update the impact assessment section to address the impacts resulting from the proposed subdivision development. |
| 39. | Figure 5 - Natural Heritage Constraints | It appears that all of FOD6 and FOD3, and part of FOM7 will be removed as part of the development of lots overlapping these woodlands. Please quantify the amount of woodland area proposed for removal, including the number of trees, the species and their sizes within the EIS. Please discuss more directly the impact of |

| Comment # | Section | NSE Comment - June 2023 |
|-----------|-------------------------------------|---|
| | | removing these parts of the woodland on the adjacent woodland (e.g., creating a new edge, exposing the FOM3 vegetation (probably old growth woodland) to a new edge, etc. |
| 40. | 5.2.1 - Woodlands | Please note, the reference to lot numbers and those identified on Figure 5 is not consistent with the Draft Plan dated February 21, 2023, which postdates the December 2022 figure from the EIS. Please update Figure 5 in the EIS to be consistent with the most recent Draft Plan. |
| 41. | 5.2.1 - Woodlands | The buffers recommended in the EIS have not been justified with sufficient ecological rationale, with a consideration of feature sensitivity (see comments above regarding insufficient field surveys and application of SWH criteria) and potential impacts to the features (see comment #37 above). Please update the EIS to provide a more thorough assessment an evaluation of buffers. |
| 42. | 5.2.1 - Woodlands | Figure 5, as reference in this section, does not include part of the FOM7 forest community within the Significant Woodland. Please update this figure to accurately depict the entirety of the Significant Woodland including FOM7. In addition, please update Figure 5 to illustrate all natural heritage features and areas within the study area (i.e., within 120 m of the subject property), including the Significant Woodland, the area of the Confirmed SWH, Provincially Significant Wetlands (including the unevaluated wetland), LS-ANSI, watercourses, and headwater drainage features. Figure 5 should also indicate the location of any Species at Risk including Butternut, Black Ash, Eastern Wood-pewee, Eastern Meadowlark, and Common Nighthawk. |
| 43. | 5.2.1 - Woodlands | In the section assessing impacts to 'Woodland Interior', it is suggested that planting the buffer would "offset" the reduction of the woodland resulting from the construction of houses within the lots. Please note, "offsetting" or "compensation" is not considered an acceptable approach to address removal of woodlands than cannot be replaced within an approximately 20-year timeframe (as per the Natural Heritage Reference Manual, 2010, p. 119). It will take decades (50+ years) for the buffer to resemble part of the forest. This time lag is considered too long to be considered an "offset" for the removal of woodland area. Please revise this section to remove reference to "offsetting". |
| 44. | 5.2.1 - Woodlands | In the section assessing impacts to 'Uncommon Characteristics' of woodlands, it is stated that "this area [the FOM3 ecosite] will be avoided as part of the proposed development". However, the entirety of the adjacent woodland (FOD6 and FOD3) that currently buffers the FOM3 community from adjacent land uses is proposed for removal. Please assess the impact of removal of the edge woodland and introducing a more impactful land use directly adjacent to the FOM3 vegetation community. |
| 45. | 5.2.1 - Woodlands | In the discussion on 'Impacts to Form and Function', it is recommended that the impact of removal of "some trees" be "offset by additional plantings and preservation of trees within the 5 m and 15 m buffer areas. First, tree removal should not occur within a buffer and development should not occur within a buffer, as this is counter intuitive to the purpose of a buffer. Second, a buffer should be vegetated as a form of mitigating impacts. Suggesting of planting of trees within the buffer to "offset" tree removal elsewhere does not provide an "offset" when the area is already proposed for planting. As such, the suggestion of "offsetting" by planting trees within the buffer is not considered acceptable as part of mitigating impacts resulting from removal of part of the woodland. |
| 46. | 5.2.1 - Woodlands | In the discussion on 'Impacts to Form and Function', it is suggested that "snags and woodland debris are not to be removed adjacent to the development". While I agree with this recommendation, there is no way to enforce this recommendation when the lots appear to extend into the feature. Moreover, there is no buffer proposed to this part of the woodland to reduce impacts resulting from a new edge. It is recommended an ecologically appropriate buffer be provided that considers the need to allow natural edge processes to occur (i.e., tree fall), and mitigates impacts resulting from the proposed development. |
| 47. | 5.2.1 - Woodlands | In the discussion on 'Impacts to Form and Function', it is recommended that future development should limit the amount of impermeable surfaces and use LID measures to direct water back into the ground. While I agree with this statement, these recommendations should be based on a water balance and the need to maintain surface water inputs to surrounding features, maintain water quality, and maintain ground water infiltration to ensure cold water watercourses and wetlands are not negatively impacted. It is recommended that study of the potential impacts to the hydrology of the wetland and groundwater inputs to the cold water watercourse be completed to ensure there will be no negative impacts to these features and their ecological functions. |
| 48. | 5.2.2 - Headwater Drainage Features | This section characterizes a feature based on the results of field surveys and the application of the TRCA Headwater Drainage Features Guidelines (TRCA 2014). Please relocate this section to come before the Impact Assessment section. |
| 49. | 5.2.2 - Headwater Drainage Features | The recommendation is that the HDF, which has been assessed to be managed as 'Conservation - Valued Functions', is to "ditch" the watercourse between Lot 49 and 50" and that the "water that comes from the wetland on the west side of the Subject Property can be conveyed through this ditch into a gutter system associated |

| Comment # | Section | NSE Comment - June 2023 |
|-----------|--------------------------------------|--|
| | | with the proposed cul-de-sac". This recommendation is not consistent with the management guidance which is to "use natural channel design techniques to maintain or enhance overall productivity of the reach". Also management guidance indicates that features managed as "Conservation - Valued Functions" are also to remain open and have a direct connection to downstream. Please describe how the "ditch" and "gutter system" will use a natural channel design and how the design will keep an open channel and maintain a direct connection downstream to maintain the contribution to the hydrologic function of the wetland and watercourse. |
| 50. | 5.2.3 - Wetlands | Please see comment # 24 above regarding the note to either undertake a formal evaluation of the wetland on the subject property or treat it as a PSW that is part of the Osaca PSW. Please update this section accordingly. |
| 51. | 5.2.3 - Wetlands | The EIS should reference a water balance study that demonstrates both existing surface water and ground water contributions to the adjacent wetlands and watercourses will be maintained and quality of water will either be maintained or improved as part of the design of the subdivision. |
| 52. | 5.2.4 - Significant Wildlife Habitat | Please update this section following completion of field surveys (breeding birds, amphibians, acoustic bat surveys) following acceptable protocol. |
| 53. | 5.2.4.1 - Bat Maternity Colonies | Please note, the timing window for removal of trees to avoid impacts to roosting bats is October 1 st to March 31 st (per most recent correspondence with MECP in May 2023). Please consult with the MECP to confirm tree removal windows for roosting bats, particularly SAR bats. |
| 54. | 5.2.4.1 - Bat Maternity Colonies | There is a recommendation to avoid removal of more than 20% of vegetation from within the woodland within the total developable area. First, please identify what the "total developable area" is. Second, please provide supporting documentation that suggests up to 20% of vegetation removal is acceptable from within the woodland of the total developable area. |
| 55. | 5.2.4.1 - Bat Maternity Colonies | This section recommends trees greater than 60 cm be preserved. Please provide reference to the document that suggests only trees greater than 60 cm dbh should be preserved. |
| 56. | 5.2.4.2 - Old Growth Forest | The EIS identifies the removal of the adjacent forest area up to the FOM3 vegetation community. The removal of the adjacent forest will create a new edge and bring the development up to the edge of the FOM3 vegetation community. It is recommended that an adequate buffer be provided to maintain adjacent trees to allow for natural edge processes to occur, including tree fall, without the need for management of trees in the FOM3 vegetation community and direct impacts resulting from a new edge to the FOM3 vegetation community. Please revise the site plan accordingly to provide a buffer equal to the height of the trees in the FOM3 vegetation community. |
| 57. | 5.4.2 - Birds and Bats | Please note, the timing window for removal of trees to avoid impacts to roosting bats is October 1 st to March 31 st (per most recent correspondence with MECP in May 2023). Please consult with the MECP to confirm tree removal windows for roosting bats, particularly SAR bats. |
| 58. | 5.4.2 - Birds and Bats | Please note, tree removal during the roosting period of April 1 st to September 30 th has the potential to impact SAR bats and their habitat. There is no acceptable approach to be confident bats are not roosting in trees following a roosting survey. Even trees as small as 10 cm dbh have been found to provide roosting habitat for SAR bats. Should the MECP accept removal of trees, tree removal must avoid the maternity roosting period to avoid contravention of the Endangered Species Act. Please revise this section accordingly. |
| 59. | 5.4.3 - Butternuts | Please note, two Butternut have been recorded in the Tree Inventory and Preservation Plan completed by Kuntz Forestry in March 2023. These trees are proposed for removal. A Butternut Health Assessment is required prior to removal these trees. Please also map the location of these trees on Figure 5. |
| 60. | New Section Recommended | Please include a "Legislation and Policy Review and Conformity" section in the EIS preceding the "Conclusions" that summarizes the key relevant legislation and policies in a table indicating if and how the relevant policies and legislation have been met. There should then be a concluding statement in the "Conclusions" section related to whether or not the proposed development conforms to all relevant regulations and policies. |
| 61. | General Comment | The Draft Plan shows the lot lines extending into the feature and proposed buffers. The Draft Plan should be revised to show lot lines ending at the edge of the buffers to the natural features. Lots should not extend into the features or their buffers. In addition, a chain link fence, with no gates permitted, should be erected at the rear lot line to limit encroachment within the buffer and the natural features. Please update the Draft Plan and associated figures accordingly. |