# Environmental Impact Study Clare Avenue Plan of Subdivision City of Welland, Niagara Region

Prepared For:

**Mountainview Building Group** 

Prepared By:

**Beacon Environmental Limited** 

Date:

Project:

2025-03-28

222324



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## 1. Introduction

Beacon Environmental Limited (Beacon) was retained by Mountainview Building Group (the Proponent) in March 2023 to undertake an Environmental Impact Study (EIS) for a draft plan of subdivision to be located lands east of Clare Avenue, south of Qaker Road in the City of Welland, here after referred to as the subject lands (**Figure 1**).

This EIS has been prepared following the requirements of the Environmental Impact Guidelines of the Niagara Region (2018) and the Niagara Peninsula Conservation Authority (NPCA 2022). For the subject lands and adjacent lands, a background review, detailed field investigations, and assessment of natural heritage features and functions were undertaken by Beacon in 2023.

## 1.1 Overview of Study Area

The subject lands lie within the built-up area of north-west Welland with residential development found directly to the north, west and south. The City completed the Northwest Secondary Plan Area (NWSPA), Official Plan Amendment 29 (OPA 29, 2021), which is an area that includes the subject lands. For the development of the secondary plan an assessment of the natural heritage features and functions within the plan area was undertaken by Aquafor Beech Limit (2019) and detailed in Appendix F in a report titled *Rationale for Urban Growth in Northwest Welland* (SGL 2019). The Aquafor Beech report identifies significant natural heritage features within the plan area as Environmental Protection Area (EPA), Environmental Conservation Area (ECA) and wildlife corridor (see report Figure 7.4 in **Appendix A**). The subject lands are located within Area D of the Aquafor Beech NWSPA study area. Based on the Aquafor Beech study, Schedule G Land Use Structure of OPA No 29 identifies the natural heritage features within the plan area (**Appendix A**).

No EPA was identified to be associates with the subject lands. A 3 ha woodlot located in the northern portion of the subject lands (**Photograph 1**) is identified on Schedule G as ECA. This woodlot is also identified as Significant Woodlot by the Niagara Region (2022). The remainder of the subject lands represents active agricultural field (**Photographs 2 & 3**). A narrow strip of land along the west boundary of the subject lands supports a hedgerow and paved public pathway within the east right-of-way of Clare Avenue, the Steve Bauer Trail (**Photograph 4**).





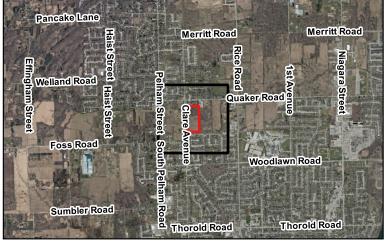
Photograph 1. ECA Woodlots and Active Farm Field in the Northern Portion of the Subjects Lands Looking North from the South Boundary



Photograph 2. Active Farm Field and Hedgerow Looking Southeast to Clare Avenue







# Site Location Figure 1

Clare Avenue Plan of Subdivision Northwest Secondary Plan Area City of Welland

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Project: 222324

Last Revised: December 2023

Client: Mountainview Building Group

Prepared by: BD Checked by: RH

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Inset Map: 1:60,000

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Photograph 3. Active Farm Field Looking South to Residential Development Along the South Boundary



Photograph 4. Hedgerow and Steve Bauer Trail Along the West Boundary of the Subject Lands; Looking South Along Clare Avenue Right-of Way



# 2. Planning Setting and Development Regulation

#### 2.1 Provincial

The subject lands are located within the Urban Boundary of the City of Welland and lie outside of the jurisdiction of the Niagara Escarpment Plan (2017), Greenbelt Plan (2022a) and the Growth Plan for the Greater Golden Horseshoe (2022b).

## 2.1.1 Provincial Policy Statement (2024)

The Provincial Planning Statement (PPS), 2024 is a streamlined province-wide land use planning policy framework that replaces both the Provincial Policy Statement, 2020 and A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019. It came into effect October 20, 2024.

Section 4.1 of the PPS provides direction to regional and local municipalities regarding planning policies specifically for the protection and management of natural heritage features and resources.

Section 4.1.4 states that development and site alteration shall not be permitted in:

- significant wetlands in Ecoregions 5E, 6E and 7E1; and
- significant coastal wetlands.

Section 4.1. 5 details that development and site alteration shall not be permitted in the following features unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions:

- significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E1;
- significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)1;
- significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)1;
- significant wildlife habitat:
- significant areas of natural and scientific interest; and
- coastal wetlands in Ecoregions 5E, 6E and 7E1 that are not subject to policy 2.1.4(b).

Section 4.1.6 states that development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

Section 4.1.7 states that development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

With respect to development on lands that lie adjacent to natural heritage features, Section 4.1.8 states that development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 4.1.4, 4.1.5, and 4.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.



## 2.2 Niagara Region Official Plan (2022)

The natural heritage polices of the Niagara Region 2022 Official Plan are detailed in Section 3 Sustainable Region. Section 3.1.30.4 Ongoing and Approved Secondary Plans details what policies apply for the submission of a draft plan of subdivision. Section 3.1.30.4.1 states that where a secondary plan has been approved after July 1, 2012, those portions that are not subject to a draft approved plan of subdivision or plan of condominium shall be approved in accordance with the approved mapping and policies of the secondary plan. The subject lands lie within the City of Welland Northwest Secondary Plan Area, Official Plan Amendment No. OPA 29, 2021. Therefore, the natural heritage polices of the Niagara Region 2022 Official Plan are not applicable.

## 2.3 City of Welland NWSPA

Environmental development polices for the NWSPA are detailed in Section 7.3.1.6 Land Use Structure of the OPA No. 29 and natural heritage features are identified on Schedule G. Section 7.3.1.6 identifies that lands designated EPA or ECA on Schedule G shall be subject to the polices of Section 6.1 Environment of City's Official Plan (OP 2019).

Section 6.1.2.3.C states that development and site alteration within an EPA is prohibited. No EPA is identified for the subject lands or adjacent lands.

Section 6.1.2.3.C states development and site alteration may be permitted without an amendment to this Plan in ECA, Natural Heritage Corridors, and on all adjacent lands if it has been demonstrated that, there will be no negative impact on the natural features or their ecological functions. The proponent shall be required to prepare an EIS in accordance with the policies of the plan. Schedule G shows that the woodlot in the northern portion of the subject lands is designated as ECA.

With respect to drainage features Section 7.3.1.6 of the OPA states that a headwater drainage feature assessment shall be required to the satisfaction of the City and the Conservation Authority prior to approval of development adjacent to those drainage features. The assessment shall evaluate and classify the drainage feature status based on criteria established by the Conservation Authority and shall determine if the drainage features are to be maintained in-situ, can be relocated or can be removed. In addition, the OPA states that where drainage features are to be maintained or moved, applications for development shall use natural channel design techniques to maintain or enhance the overall productivity of the reach.

# 2.4 NPCA Policies for Planning and Development

The NPCA 2024 Policies Document: Policies for Planning and Development in the Watersheds of the Niagara Peninsula Conservation Authority provides the principles, objectives, and policies for the administration of the NPCA's mandate under Ontario Regulation 155/06, Regulation of Development, Interference with Wetland, and Alterations to Shorelines and Watercourses. For the for the subject lands, development polices that apply are those for wetlands and watercourses and are detailed below.



## 2.4.1 Wetlands

Development policies for wetlands are detailed in Section 8 of the policy document. The policy framework within this document recognizes several classes of wetlands: Provincially Significant Wetlands (PSW); b) Non-Provincially Significant Wetlands (non-PSW); and c) Unevaluated wetlands.

Policy 8.2.2.1 states that unless otherwise stated, no development and/or interference shall be permitted within PSWs and any other wetland greater than 0.5 hectares in size. Policy 8.2.3 (1) identifies that with respect to development on adjacent lands that development or site alteration within 120 metres of a PSW or wetland greater than 2 hectares in size and 30 metres of a non-PSW between 0.5 hectares and 2 hectares in size shall not be permitted. However, Policy 8.2.3 (5) states that site alterations may be permitted within 120 metres of a PSW or wetland greater than 2 hectares in size and 30 metres of a non-PSW between 0.5 hectares and 2 hectares in size are permitted subject to the following:

- A buffer is provided in accordance with Section 8.2.3.1;
- Disturbances to natural vegetation communities contributing to the hydrologic function of the wetland are avoided;
- The overall existing drainage patterns will be maintained;
- Disturbed area and soil compaction is minimized;
- Impervious areas are minimized;
- The area between the proposed development and the wetland is or will be comprised of dense:
- Vegetation; and
- Best management practices are used to:
  - Maintain water balance;
  - Control sediment and erosion;
  - Buffer wetlands; and
  - Limit impact of development on wildlife species.

Policy 8.2.3.1 (1) states that where development is proposed adjacent to a wetland, a minimum 30 metre buffer shall be provided. However, Policy 8.2.3.1 (2) states that notwithstanding Section 8.2.3.1 (1), a reduction to a non-PSW buffer shall only be considered where:

- There is no other reasonable alternative; and
- Where supported by an EIS in accordance with NPCA Procedural Manual.

## 2.4.2 Watercourses

For NPCA policies for a regulated watercourse, the identification of a regulated watercourse is based on the definition of Regulation 41/24 as follows:

• watercourse means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs.

Development policies for watercourses are detailed in Section 9. Policy 9.2.2 Interference with a Watercourse states that interference with a watercourse shall not be permitted, except in accordance with other policies. Section 9.2.3.1 Watercourse Alterations details policies with respect to alterations to a watercourse and states that the NPCA may allow the alteration of a watercourse for the following works:



- Channel realignments;
- Vegetation alteration/spot removal of sediment accumulation;
- Full or partial diversions;
- Retaining walls;
- Revetments:
- Bridges;
- Culverts;
- Docks;
- Erosion control measures;
- Storm sewer outlets; and
- Enclosures greater than 20 metres.

With respect to buffer requirements Section 9.2.5.1 states the following buffer requirements apply to development and site alteration adjacent to a watercourse:

- A 30 metre buffer shall be provided where the watercourse contains permanent flow, cool
  water or coldwater systems or specialized aquatic or riparian habitat (such as but not limited
  to fish spawning areas, habitat of species at risk or species of concern, forested riparian
  areas or Type 1 Critical Fish. Habitat). Notwithstanding this requirement, the buffer may be
  reduced where supported by an EIS in accordance with the NPCA Procedural Manual, but
  in no case shall the buffer be reduced below 15 metres; and
- A 15 metre buffer shall be provided for watercourses containing intermittent flow, warmwater systems or general/impacts aquatic or riparian habitat, or Type 2 Important Fish Habitat or Type 3 Marginal Fish Habitat. Notwithstanding this requirement, the buffer may be reduced where supported by an EIS in accordance with the NPCA Procedural Manual.

## 2.5 Endangered Species Act (2007)

The Ontario's *Endangered Species Act* (ESA, 2007) came into effect on June 30, 2008, and replaced the former 1971 Act.

Endangered or threatened species and their habitats receive protection under the regulations of the ESA. Specifically, Section 9 of the ESA prohibits the killing, harming, harassing, possession, collection, buying and selling of extirpated, endangered, and threatened species on the Species at Risk in Ontario (SARO) List; and Section 10 prohibits the damage or destruction of protected habitat of species listed as extirpated, endangered or threatened on the SARO List.

Authorization from the Ministry of the Environment, Conservation, and Parks (MECP) is required for any activity that could harm a threatened or endangered species or negatively impact their habitat.

# 2.6 *Fisheries Act* (1985)

The Federal *Fisheries Act* protects fish and fish habitat in Canadian Waters. Section 34 details Fish and Fish Habitat Protection. Section 34.4 (1) states that no person shall carry on any work, undertaking or activity, other than fishing, that results in the death of fish. Section 35 (1) states that no person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption, or destruction of fish habitat.



Authorization from the Department of Fisheries and Oceans (DFO) is required for any activity that could harm fish or impact on fish habitat.

# 3. EIS Scope and Assessment Methodology

## 3.1 Scope of EIS

Pre-consultation meeting with the Proponent, the Niagara Region and NPCA were held in September 2022 which identified the need for an EIS and specific natural heritage features that need to be addressed (**Appendix B**). On April 26, 2023, Beacon provided the Niagara Region and NPCA with a Terms of Reference (ToR) which detailed the scope of work for undertaking the EIS and following their review the Region provided an approval in an e-mail dated May 15, 2023 (**Appendix B**). The scope as detailed in the approved ToR was completed and documented in this EIS.

## 3.2 Background Review

For this EIS a background review of the following documents was undertaken:

- Provincial Policy Statement (2020);
- City of Welland NWSPA, (2021);
- City of Welland Official Plan 2019;
- Niagara Region Official Plan 2022;
- Niagara Region Natural Environment Online Mapping. <a href="https://www.niagararegion.ca/offical">https://www.niagararegion.ca/offical</a> plan;
- Niagara Region Environmental Impact Study Guidelines, Version 2, January 2018;
- NPCA Policy Document: Policies for the Planning and Development in the Watersheds of the Niagara Peninsula (2024);
- NPCA Interim Environmental Impact Study Guideline (2022);
- NPCA Watershed Explorer <a href="https://camaps.maps.arcgis.com/">https://camaps.maps.arcgis.com/</a>;
- MNRF List of Species at Risk (SAR) for the City of Welland;
- Natural Heritage Information Centre <a href="https://www.ontario.ca/page/get-natural-heritage-information">https://www.ontario.ca/page/get-natural-heritage-information</a>; and
- Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 7E (MNRF 2015).

# 3.3 Field Surveys

Beacon ecologists undertook seasonal field investigations from March through October 2023. Seasonal surveys included headwater drainage features assessment, floral inventory, vegetation community classification, breeding bird and amphibian surveys, and bat habitat assessment. Incidental wildlife observations were also noted. A summary of the seasonal field visits and survey dates is presented in **Table 1.** More detailed survey descriptions are provided in the subsections that follow.



Table 1. 2023 Field Survey Dates for the Subject Lands

Field Investigation	Dates
Headwater Features Assessment	March 24th, April 11th, May 16th, June 13th
Amphibian Breeding Surveys	March 24th, April 11th
Breeding Bird Surveys	June 1st and June 13th
Ecological Land Classification and Flora	April 11 <sup>th</sup> , May 16 <sup>th</sup> , June 1 <sup>st</sup> June 13 <sup>th</sup> , October 7 <sup>th</sup>
Leaf Off Bat Habitat Assessment	March 24 <sup>th</sup>
Woodlots Assessment with Niagara Region Staff	May 17 <sup>th</sup>

#### 3.3.1 Headwater Drainage Features Assessment

A headwater drainage features assessment was undertaken following the assessment protocol, Evaluation, Classification and Management of Headwater Drainage Features Guidelines (HDFG) (TRCA/CVC 2014).

## 3.3.2 Vegetation

Vegetation communities associated with the subject lands were mapped and described following the protocols of the Ecological Land Classification (ELC) system for Southern Ontario (Lee *et al.* 1998). This involved delineating vegetation communities on aerial photos of the property and recording pertinent information on the community structure and composition.

A three season (spring, summer, fall) floral inventory was undertaken throughout the subject lands and a list of all species observed was complied.

#### 3.3.3 Wildlife Habitat

## 3.3.3.1 Amphibian Breeding Surveys

Amphibian surveys were undertaken and documented the presence of potential breeding sites and night call surveys during suitable weather conditions to confirm the presence or absence of breeding frogs and toads following the Bird Studies Canada protocol (BSC 2009). **Table 2** summarizes survey start times and weather conditions.

Table 2. 2022 Amphibian Breeding Field Survey Dates and Conditions

Date	Start Time (pm)	Temp °C	Wind (Beaufort Scale)	Cloud Cover
March 24th	9:15	8	Light Air (1)	4/8
April 11 <sup>th</sup>	8:50	14	Light Air (1)	8/8

For the surveys, species were identified by call, and an abundance code for each species heard calling was assessed by the following the Amphibian Monitoring protocol:



- Code 0 No calls heard:
- Code 1 Calls not overlapping or simultaneous, number of individual frogs can be counted;
- Code 2 Calls overlapping or simultaneous, number of individuals can still be distinguished, number of individual frogs cannot be counted, but a reliable estimate of numbers can be made based on location and call voices; or
- Code 3 Full chorus, calls simultaneous and overlapping, numbers of calling males cannot be reasonably counted or estimated.

Using this code method, areas that support a Code 1 for a species indicate very low population numbers in the local area, and/or low-quality breeding habitat. Code 2 indicates a moderate population and/or moderate quality breeding habitat. Code 3 for species indicates a healthy population and high-quality breeding habitat.

## 3.3.3.2 Breeding Bird Surveys

Two breeding bird surveys were conducted in June 2023. Surveys were conducted in the morning on days with low winds (0 to 1 on the Beaufort scale), with temperatures within 5°C of normal and no precipitation. For each survey a foot walk of the subject lands was conducted, and all birds seen or heard were recorded, including birds in the adjacent lands. Point count or transect survey methods were not undertaken, as these survey methods are typically only required for collecting statistically valid data sets for long term studies, or for the survey of large (>100 ha) areas of land.

Table 3. Breeding Bird Field Survey Dates and Conditions

Date	Start Time (am)	Temp °C	Wind (Beaufort Scale)	Cloud Cover
June 1st	6:32	19	Calm Air (0)	2/8
June 13 <sup>th</sup>	6:35	16	Light Air (1)	4/8

## 3.3.3.3 Bat Habitat Assessment

Several bat species are listed as endangered in Ontario: including Eastern Small-footed Myotis (*Myotis leibii*), Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), and Tri-colored Bat (*Perimyotis subflavus*). These species over-winter in caves and mines. Maternal roosts are often associated with cavity trees and sometimes buildings.

A bat habitat assessment was undertaken in accordance with the MECP updated 'Bat Survey Standards' guideline (undated). As per Step 1 of the protocol (Treed Habitats, Maternity and Day Roosts), any coniferous, deciduous or mixed wooded ecosite that include trees at least 10 cm diameter at breast height (DBH) are considered candidate maternity roost habitat.

Based on ELC mapping, the forest associated with the northern portion of the subject lands and hedgerow along the west boundary had the potential to provide bat maternity/roost habitat. A snag survey was conducted within the subject lands on March 24<sup>th</sup> during leaf off conditions (**Photograph 5**). For the survey, a foot survey was conducted within 30 m from the forest edge.





Photograph 5. March Leaf Off Bat Snag Survey Along the Forest Edge

#### 3.3.3.4 Incidental Wildlife

Incidental observations for the presence of mammals (including direct observation, tracks, scat, and other signs), reptiles and insects were recorded during all other field surveys.

## 3.3.4 White-tailed Deer Winter Yarding Area

The use of the subject lands by White-tailed Deer (*Odocoileus virginianus*) as winter deer yard habitat is not possible do to the absence of winter habitat which requires a strong presence of conifer trees. While conducting the March survey, the woodlot within northern portion of the subject lands was surveyed for evidence of deer tracks, droppings, and deer browsing on shrubs and young trees to determine if the woodlot provided winter shelter habitat.

## 3.3.5 Feature Staking

A site survey was conducted with staff of the Niagara Region on May 17<sup>th</sup> to assess the woodlot within the subject lands. During the survey the edge dripline was staked, which were then surveyed.

## 3.3.6 Assigned Beacon Staff

Project Manager Mr. Ron Huizer, B.Sc. Principal, Senior Ecologist/EA Specialist



Mr. Ron Huizer conducted all field investigations and is the author of this EIS report. Mr. Huizer is a Senior Ecologist/EA Specialist with over 25 years' experience undertaking field assessment of terrestrial and aquatic environments. His experience includes undertaking detailed bio-inventories of flora and fauna and environmental impact assessments as both project manager and as part of a multidisciplinary team. He is a recognized wetlands expert in Ontario and has been a technical advisor to the MNRF WETT Committee and been retained by the Ministry of Municipal Affairs and Housing on a number of occasions as an expert witness for wetland-development issues before the Ontario Municipal Board. Ron has completed numerous Environment Impact Studies (EIS) that address protection of Natural Heritage in support of plan of subdivision developments throughout south Ontario. He has completed Class EAs for a variety of projects following several EA processes, including: the *Canadian Environmental Assessment Act* (CEAA), both screenings and comprehensive studies; Municipal Class EA for Water and Road Projects; and Ministry of Transportation's Provincial Highways Class EAs for Provincial Transportation Facilities.

# 4. Description and Assessment of Existing Environment

The following provides a description and assessment of the natural heritage features and functions associated with the subject lands. **Figure 2** presents the features that are detailed in the following sections of the report.

## 4.1 Headwater Drainage Features

During the spring freshet the late March survey found that no visible drainage features occur within the farm field and that the field only supported scattered pockets of standing water (**Photograph 6 & 7**). These areas were dry by May (**Photograph 8**). No watercourse as defined by Regulation 41/24 occurs within the farm field.





# Legend

Subject Property

**Ecological Communities** 

Dripline

Amphibian Survey Station

Snag Tree Locations

Code	Wetland Communities
SWD1-2/SWD2-2	Bur Oak Swamp/Green Ash Swamp Complex
	Cultural Communities
CUW1	Mineral Cultural Woodland
	Other Communities
AG	AG: Agricultural
HE	HE: Hedgerow

# **Existing Conditions**

Figure 2

60 m

Clare Avenue Plan of Subdivision Northwest Secondary Plan Area City of Welland



Project: 222324 Project: 222324

ENVIRONMENTAL Last Revised: December 2023

Client: Mountainview Building Group

Prepared by: BD Checked by: RH

30

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Photograph 6. Standing Water Pools in Farm Field with No Flow - March, Looking West to Clare Avenue



Photograph 7. Pockets of Stand Water in the Farm Field – March, Looking West to Clare Avenue





Photograph 8. Dry Farm Field, Looking West to Clare Avenue - May

Surface water flows associated with Clare Avenue are collected in ditching that is directed to a culvert under the Steve Bauer Trail (**Photograph 9**). During the March spring freshet these flows are carried eastward via a shallow drainage feature in the southern edge of the woodlot (**Photograph 10**), which then discharges to a shallow ditch along the woodlot edge (**Photograph 11**). The culvert crossing and flows in the woodlot and along its edge where dry by May (**Photographs 13 & 13**). Based on the assessment the drainage feature supports an ephemeral flow regime.





Photograph 9. Roadside Ditching and Culvert Under the Steve Bauer Trail Path; Looking West to Clare Avenue – March



Photograph 10. Drainage Feature in the Woodlot Receiving Flows form the Milkweed Trail Culvert; Looking South - March





Photograph 11. Shallow Ditch Along the Woodlot Edge Carrying Flows from the Drainage Feature in the Woodlot Eastward, Looking East – March



Photograph 12. Dry Steve Bauer Trail Culvert Crossing to the West Edge of the Woodlot Looking East - May





Photograph 13. Dry Shallow Ditch Along the Woodlot Edge, Looking East - May

## 4.2 Vegetation Communities

The vegetation communities were assessed and mapped following the ELC for Southern Ontario (Lee et al 1998) and are shown on **Figure 2**. The ELC groups vegetation communities into two broad categories, naturally occurring communities, and cultural communities. Cultural communities represent vegetated areas that support a plant community that has been strongly influenced by human activities, both past and present, for example pine plantations or the naturalization of a fallow agricultural field.

## 4.2.1 Natural Vegetation Communities

# Bur Oak Mineral Deciduous Swamp (SWD1-2)/ Red Ash Mineral Deciduous Swamp (SWD2-2) Complex

This small swamp forest located in the western portion of the woodlot supports areas that are dominated by Bur Oak (*Quercus macrocarpa*) (**Photograph 14**) and areas where Red Ash (*Fraxinus pennsylvanica*) is dominant. Other trees species that are mixed throughout the canopy including Freeman's Maple (*Acer X freemanii*), American Elm (*Ulmus americana*), and Swamp White Oak (*Quercus bicolor*). The community is highly impacted by a dense shrub layer of the invasive Buckthorn (*Rhamnus cathartica, R. frangula*) that has eliminative native shrubs and ground flora (**Photographs 15 & 16**).





Photograph 14. Bur Oak Swamp Along Farm



Photograph 15. Dense Buckthorn Understory Within the Bur Oak Swamp Community





Photograph 16. Bare Ground Throughout the Bur Oak Swamp Due Dense Growth of Buckthorn

## 4.2.2 Cultural Vegetation Communities

## Mineral Cultural Woodland (CUW1)

This woodland is found in the eastern portion of the woodlot and represents a regeneration of disturbed land (**Photographs 17 & 18**). The canopy is open and supports a mix of tree species including Eastern Cottonwood (*Populus deltoides*), Large-tooth Aspen (*Populus grandidentata*), Shag-bark Hickory (*Carya ovata*), Freeman's Maple, and Ash. Interspersed though the community are pockets of open areas that support a ground cover of grasses that was once grass field. The understory is densely dominated by Buckthorn with a sparse ground cover.





Photograph 17. Open Canopy Cultural Woodland in Eastern Portion of the Woodlot



Photograph 18. Open Canopy Cultural Woodland in Eastern Portion of the Woodlot



## **Thicket Hedgerow**

A thicket hedgerow is found on adjacent lands associated with the Steve Bauer Trail Path along the western boundary of subject lands (**Photograph 19**). The hedgerow is narrow (5m) and is dominated by Buckthorn and Gray Dogwood (*Cornus foemina*), with scattered young trees of American Elm, Ash, Pear (*Pyrus communis*) and Apple (*Malus* pumila) and a dense tangle of Grape (*Vitis riparia*). This community is also found along the western edge of the Woodlot (**Photograph 20**).



Photograph 19. Thicket Hedgerow Adjacent to the Steve Bauer Trail Along Western Boundary of the Subject Lands





Photograph 20. Thicket Hedgerow Community Adjacent to the Woodlot Along the Steve Bauer Trail
Along Western Boundary of the Subject Lands

## 4.2.3 Rare Vegetation Communities

The Bur Oak swamp community SWD1-2 is identified by the MNRF as a rare wetland community for the province with a S-rank of S3 (NHIC 2023). However, the pockets within the woodlot that are dominated by Bur Oak are small (<0.5 ha) and scattered within areas dominated by Ash. The swamp community as a whole is heavily impacted by a dense growth of Buckthorn and does not support a natural shrub and ground flora community. Therefore, it is assessed to be of very low quality and a rare community designation is not supported by this EIS.

## 4.3 Flora

A total of one hundred (100) species of vascular of plants were recorded and are listed in **Appendix C**. No unique or rare plant communities such as prairie elements, savannah, alvar or fen species were found to occur. The majority of the species were associated with the hedgerow and edges of the farm field. Of the species present, thirty-eight (38) are non-native species, representing 38% of the plant community. In Niagara Region vegetation communities typically support a floristic composition that is 65% native species and 35% non-native/introduced species (Oldham 1995). No species with a Coefficient of Conservatism of 6 or greater (with a total range of low 0 to a high of 10 - Oldham 1995) were found to occur.



## 4.3.1 Rare Flora Species

No flora species that are listed as endangered, threatened, or special concern or species that are provincially rare (NHIC S1, S2, S3) were recorded. No flora species that are rare for the Niagara Region (Oldham 2010) were found to occur.

## 4.4 Birds

Thirty-five (35) bird species were recorded during the field surveys of the subject lands and are presented in **Table 4**. Four of the species that were observed are not considered to be breeding within the subject lands. The subject lands support a moderate diversity of bird species, the majority of which are common urban/rural tolerant species inhabiting small woodlots, forest edges, hedgerows, thickets, fields and agricultural landscapes. However, species that occur in the Niagara area that are associated with stands of larger mature forest, such as Hairy Woodpecker (*Picoides villosus*), Pileated Woodpecker (*Dryocopus pileatus*), Wood Thrush (*Hylocichla mustelina*) and wood warblers were absent. No area sensitive species was recorded.

Table 4. Birds Documented for the Subject Lands

Common Name	Scientific Name
Canada Goose*	Branta canadensis
Turkey Vulture*	Cathartes aura
Red-tailed Hawk*	Buteo jamaicensis
Wild Turkey	Meleagris gallopavo
Killdeer	Charadrius vociferus
American Woodcock	Scolopax minor
Ring-billed Gull	Larus delawarensis
Mourning Dove	Zenaida macroura
Red-bellied Woodpecker	Melanerpes carolinus
Downy Woodpecker	Picoides pubescens
Eastern Kingbird	Tyrannus tyrannus
Great Crested Flycatcher	Myiarchus crinitus
Horned Lark	Eremophila alpestris
Barn Swallow*	Hirundo rustica
American Crow	Corvus brachyrhynchos
Blue Jay	Cyanocitta cristata
Black-capped Chickadee	Poecile atricapillus
House Wren	Troglodytes aedon
Carolina Wren	Thryothorus Iudovicianus
American Robin	Turdus migratorius
Grey Catbird	Dumetella carolinensis
European Starling	Sturnus vulgaris
Red-eyed Vireo	Vireo olivaceus
Warbling Vireo	Vireo gilvus
Yellow Warbler	Dendroica petechia
Common Yellowthroat	Geothlyphis trichas
Northern Cardinal	Cardinalis cardinalis
Rose-breasted Grosbeak	Pheucticus Iudovicianus
Indigo Bunting	Passerina cyanea



Common Name	Scientific Name	
Song Sparrow	Melospiza melodia	
Common Grackle	Quiscalus quiscula	
Red-winged Blackbird	Agelaius phoeniceus	
Baltimore Oriole	Icterus galbula	
House Finch	Haemorhous mexicanus	
American Goldfinch	Cardeulis tristis	
* Species not breeding within Subject lands		

## 4.4.1 Rare Bird Species

No bird species that are listed as endangered, threatened, or special concern were found to occur. The Barn Swallow (*Hirundo rustica*), which is listed as special concern, was observed conducting feeding flights over the fam field of the subject lands, however, no structures that could be used as a nesting site is present. None of the species recorded are provincially rare (NHIC S1, S2, S3). No species that are rare for the Niagara Region were found to occur.

## 4.5 Amphibians and Reptiles

## 4.5.1 Amphibians

March survey of the subject lands did not find the presence of potential breeding sites for amphibians. A night survey conducted in late March and April did not record amphibian calls. Amphibian survey location with the subject lands during the 2019 Aquafor Beech study also did not record calls.

## 4.5.2 Reptiles

No species of snake were encountered, however the Common Garter Snake (*Thamnophis sirtalis*) and Dekay's Brownsnake (*Storeria dekayi*) can be expected to occur. No bedrock crevices, stone/lumber piles, or foundations that could provide hibernacula for snakes were found to occur within the subject lands.

No habitat that could support turtles is associated with the subject lands.

## 4.6 Mammals

Surveys targeting mammals were not undertaken as part of this study. However, several common mammal species were observed incidentally during field surveys, either directly or by other sign (e.g., tracks, scat, etc.), these included: Eastern Grey Squirrel (*Sciurus carolinensis*), Northern Raccoon (*Procyon lotor*), Coyote (*Canis latrans*), and White-tailed Deer. Other species that can be expected to occur include Eastern Cottontail (*Sylvilagus floridanus*), Virginia Opossum (*Didelphis virginiana*), Striped Skunk (*Mephitis mephitis*), and Red Fox (*Vulpes vulpes*). All species are common to the urban/rural areas of Niagara.



## 4.6.1 Endangered Bats

In Niagara four species of bats occur that are listed as provincially endangered and receive species and general habitat protection under the ESA, the Little Brown Myotis, Northern Myotis, Eastern Small-footed Myotis and Tri-colored Bat.

For these species summer roost and maternity sites are associated with trees that support cracks, crevices, holes and cavities, as well as loose bark and clusters of old leaves, including squirrel leaf nests that are used by Tri-colored Bat. To determine the potential for the trees to provide maternity or roosting habitat, the MECP bat habitat survey protocol was undertaken for within 30 m of the forest edge. Three snag trees were found that could potentially provide roosting or maternity habitat (**Photograph 21**). Their locations are shown in **Figure 2**.



Photograph 21. Bat Snag Tree Potential Bat Roosting/Maternity Habitat Along the Woodlot Edge



## 4.7 Provincially Significant Wetlands or ANSIs

The MNRF has not identified Provincially Significant Wetland (PSW) to occur within or adjacent to the subject lands.

No Areas of Natural Scientific Interest (ANSI) at the provincial or regional level are identified by the MNRF to occur within or adjacent to the subject lands.

## 4.8 City of Welland NWSPA

As noted, the City's NWSPA identifies the woodlot within the subject lands as ECA. No EPA is found within, or adjacent to, the subject lands.

## 4.9 Species at Risk (SAR)

No species that is listed by the ESA as endangered or threatened or special concern were observed. One species listed as special concern was observed, the Barn Swallow, however the subject lands do not provide nesting structures for the swallow, and the observations represented aerial feeding flights over the subject lands. The woodlot may provide endangered bat species roosting habitat.

## 4.10 Significant Wildlife Habitat

Under the PPS the identification of Significant Wildlife Habitat (SWH) is the responsibility of Regional and local planning authorities. The schedules of the City of Welland Official Plan do not specifically identify areas that are considered to represent SWH. However, the Region's environmental staff support the MNRF SWH criteria for Ecoregion 7E (MNRF 2015). For the subject lands a SWH screening was undertaken following the MNRF SWH habitat criteria for Ecoregion 7E and is provided in **Appendix D**.

The woodlot has the potential to be considered SWH for the City of Welland based on the following:

- Woodlot supports small pockets of Bur Oak swamp which is a provincially rare wetland type;
   and
- Potential to provide bat maternity roosting habitat.

Field survey of the woodlot in March did not identify evidence such as an abundance of deer tracks, significant accumulation of droppings, or heavy deer browsing on shrubs and young trees, which indicates that the woodlot does not provide a winter shelter area for a large number of deer.

The small size (3 ha) of the woodlot limits its function for providing nesting habitat for woodland raptors or area sensitive woodland birds.



## 4.11 Wildlife Corridor

Wildlife corridors within the City's natural heritage system provide linkages between the core natural areas designated EPA or ECA and include naturally vegetated stream corridors, valleylands, shorelines, woodlands, wetlands, and natural vegetation communities. The woodlot associated with subject lands represents an ECA, however it is currently not connected by natural vegetation to another area that is designated as either EPA or ECA. Residential development lies directly to the north and south, and a school and farmland is located directly to the east (see **Figure 1**). Within the Secondary Plan area, the nearest EPA and ECA is located north of Quaker Road, which has residential development along both sides and is a major roadway within the City and combined these conditions represent a significant barrier to the movement of wildlife, with the exception of birds (**Photograph 22 & 23**).



Photograph 22. Quaker Road a Major Traffic Corridor Located Directly to the North of the Subject lands Looking East





Photograph 23. Residential Development Along Quaker Road Located Directly to the North of the Subject lands Looking North

# 4.12 Significant Valleylands

Generally, Significant Valleylands are defined as distinctive landforms that have a degree of naturalness, importance of ecological functions, potential for restoration, or historical and cultural values. No valleylands are associated with subject lands or the adjacent lands.

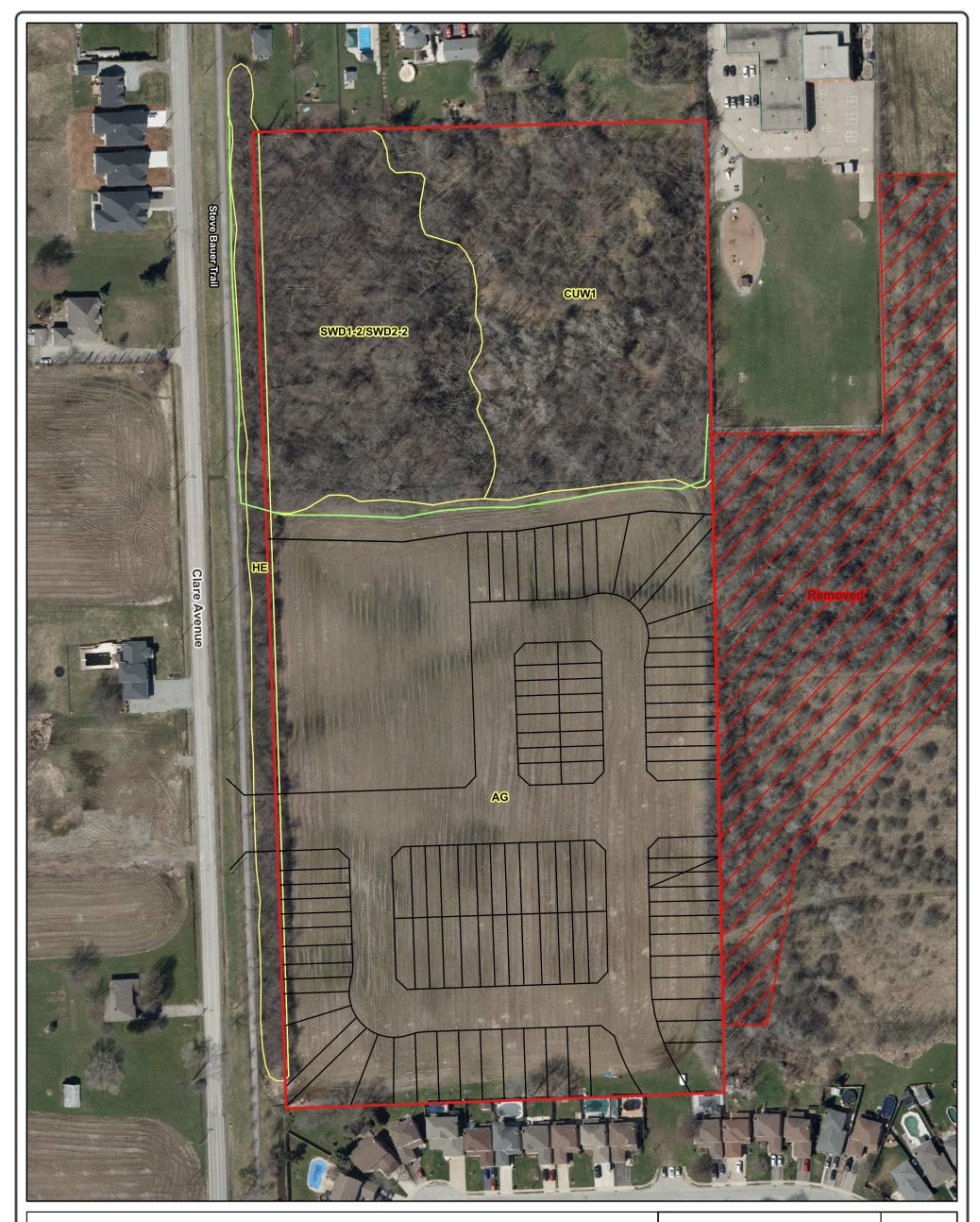
# 5. Proposed Draft Plan of Subdivision

The general elements of the proposed draft plan of subdivision are provided on **Figure 3**. A detailed plan is provided in **Appendix E** and should be reviewed in conjunction with the following text.

The Draft Plan proposes a mix of residential units including twelve (12) single family residential lots (1-12), seventy five (75) street townhouse units within Blocks 13 - 29, and sixteen (16) back-to-back townhouses in Blocks 30-31 and one hundred and twenty six (126) multiple family units in Block 32. The northern portion of the subject lands which supports the ECA woodlot is not part of the proposed draft plan of subdivision and are identified as "Additional Lands of Owner".

The development includes a street network that will be accessed via one intersection with Clare Avenue. Water and sanitary feed's will be connected to a residential development that will be developed on the lands directly to the east of the subject lands.







Subject Property

**Ecological Communities** Dripline

Proposed Development

Code	Wetland Communities
SWD1-2/SWD2-2	Bur Oak Swamp/Green Ash Swamp Complex
	Cultural Communities
CUW1	Mineral Cultural Woodland
	Other Communities
AG	AG: Agricultural
HE	HE: Hedgerow

# Proposed Plan of Subdivision

Figure 3

Clare Avenue Plan of Subdivision Northwest Secondary Plan Area City of Welland



Project: 222324 BEACON Project: 222324

ENVIRONMENTAL Last Revised: March 2025

Client: Mountainview Building Group

Prepared by: BD Checked by: RH

30 60 m 1:1,500

Contains information licensed under the Open Government License–Ontario Orthoimagery Baselayer: FBS City of Welland (2022)

Strom water will be collected by a curb and gutter system and directed to the east to a pond that will be located on lands south of Quaker Road. This storm pond will also service the residential development of the adjacent lands to the east of the subject lands.

# 6. Environmental Impact Assessment and Mitigation

The following section details the potential impacts of the proposed development to the natural heritage features and function associated with the subject lands. Mitigation measures are identified that will reduce the potential impacts.

## 6.1 Assessment of Potential Direct Impacts and Mitigation

Development within the subject lands has been limited to the area that currently supports active farm field. No naturally vegetated areas will be removed as a result of the proposed development. The ECA woodlot will be retained and is not part of the draft plan.

Based on a headwaters assessment (TRCA/CVC 2014) for the farm field no drainage features will be impacted by the development. The drainage feature associated with the woodlot will be retained.

#### 6.1.1 Buffers

The northern limit of the draft plan has a 10 m setback to the dripline of the ECA woodlot that is not part of the proposed draft plan of subdivision. The existing edge of the woodlot supports a dense growth of vegetation that is protective for the interior of the woodlot (**Photographs 18 & 24**) and therefore a 10 m setback to the dripline to protect the rooting zone of edge trees is sufficient mitigation for the protection of the woodlot and its existing functions.

Note that the forest swamp wetland in eastern portion of the woodlot and the adjacent lands are regulated by the NPCA and therefore all works along this section of the woodlot will require NPCA approval and work permit.





Photograph 24. Densely Vegetated Edge Along the Southern Boundary of the ECA Woodlot located in the North of the Subject lands; Looking East to Clare Avenue

## **6.2** Mitigation for Potential Indirect Impacts

Based on the proposed development and site conditions the following indirect impacts have the potential to occur:

- Post development removal of vegetation and composting and dumping of yard waste into the ECA woodlot that lies adjacent to the development;
- Post development surface water flows to the wetland;
- Construction impacts to the ECA woodlot;
- · Post development visual, noise and light impacts on wildlife use of the ECA woodlot; and
- Transport of sediment during construction works into the ECA woodlot.

These potential impacts can be mitigated by standard design and construction mitigation measures which are detailed below.

### 6.2.1 Mitigation

### Site Grading of Lands Adjacent to ECA Woodlot

Surface water flows along the south boundary of wetland/woodland are southward to the edge of the woodlot at, which point they are conveyed eastward in a shallow ditch (see **Photographs 10 and 11** in Section 4.1 above).



In addition, the development will not alter the surface water flows associated with Clare Avenue that are collected in ditching that is directed to a culvert under the Steve Bauer Trail and flows to the woodlot. However, as a general mitigation measure, to the extent possible, grading of rear lots along the norther limit of the development (Blocks 16, 17, 18, and 32) should not alter existing surface waterflows associated with the woodlot edge.

## Permanent Fencing

To prevent post development impacts on ECA Woodlot, a 1.5 m High Chain link fence should be constructed along the rear lot line of Blocks 16, 17, 18, and 32. The location of the fence should be detailed in final plans for subdivision. In addition, "a no gate" condition should be identified by the City.

## Construction Exclusion Filter Fabric and Paige Wire Fencing

To help ensure that site clearing and grading, or movement of heavy equipment does not impose on the ECA Woodlot, for the duration of the construction phases paige wire fencing with filter fabric for the first 1 m should be installed along their perimeter. Fencing should be installed prior to the start of construction and maintained during the entire development process. The fencing should be removed only when development work is completed, and the soils are stabilized.

## **Sediment and Erosion Control**

For the protection against erosion and sediment transport into the woodlot during construction an Erosion and Sediment Control Plan is required which is to be approved by the NPCA. The plan should be developed based on the Erosion & Sediment Control Guidelines for Urban Construction (2006) for the Greater Golden Horseshoe Area Conservation Authorities.

## **Material Storage and Fueling**

Storage of equipment and materials and the fueling of equipment should not be permitted within 30 m of the ECA woodlot. Ontario Provincial Standard Specification 180 is to be followed for the management of excess materials.

### **Timing of Site Clearing**

As the development will not require the removal of natural vegetated areas, no timing limit for grading/excavation works is identified.

### 6.2.2 Assessment of Residual Impacts to Natural Heritage

### 6.2.2.1 ECA – Significant Woodlands

The woodlot located in the northern portion of the subject lands has been designated as ECA Significant Woodland within the NWSPA. The proposed development will not result in the removal of vegetation associated with the ECA - Significant Woodland.



In addition, a 10 m setback to the dripline edge has been identified. In addition, permanent fencing along the north limit of the development along the 10 m setback to the woodland dripline has been identified to limit post development impacts. Based on the proposed design and identified construction mitigation measures, no long term significant residual impacts will occur to the ECA – Significant Woodland.

## 6.3 Cumulative Impacts

The cumulative impact of development on the natural heritage within the City of Welland is beyond the scope of this EIS. At the local level the subject lands lie within the City's urban boundary, and within the NWSPA. Protection of the natural heritage features and functions that have been identified in Secondary Plan for the lands where development is proposed have been addressed by this EIS. Existing development occurs directly to the north and south and future development to the west and east will required conformity with development polices to protect the natural heritage features that have been identified for the Secondary Plan.

# 7. Natural Heritage Policy Conformity

## 7.1 Provincial Policy Statement

The development policies of the current Official Plans of the Niagara Region and City of Welland are in conformity with Section 2.1 Natural Heritage of the Provincial Policy Statement (PPS, 2020), which is directed at a province wide protection and management of natural heritage resources. Therefore, conformity with these Official Plans ensures conformity with the PPS.

## 7.2 Niagara Region OP Natural Heritage Policies

Section 3.1.30.4.1 of the Niagara Region Official Plan states that where a secondary plan has been approved after July 1, 2012, those portions that are not subject to a draft approved plan of subdivision or plan of condominium shall be approved in accordance with the approved mapping and policies of the secondary plan. The subject lands lie within the City of Welland Northwest Secondary Plan Area, OPA 29, 2021. Therefore, conformity with the Secondary Plan is required by the Region.

## 7.3 City of Welland OP Natural Heritage Policies

## 7.3.1 EPA

No areas are designated EPA within or adjacent to the subject lands, therefore the development plan for the subject lands is in conformity with the development polices of the Secondary Plan with respect to EPA.



## 7.3.2 ECA-Significant Woodlands

The woodlot located in the northern portion of subject lands is designated ECA. Section 6.1.2.3.C of the City's Official Plan states development and site alteration may be permitted without an amendment to this Plan in ECA, and on the adjacent lands if it has been demonstrated that there will be no negative impact on the natural features or their ecological functions. No development will occur in the woodlot. In addition, a 10m setback to the dripline along the edge of the woodlot has been identified included in the draft plan. Based on existing conditions, this EIS has determined that with the identified design and construction mitigation measures the features and functions of ECA-Significant Woodland will not be negatively impacted over the long term.

In summary the development plan for the subject lands is in conformity with the development polices of the Secondary Plan with respect to ECA.

#### 7.3.3 Fish Habitat

No fish habitat occurs within the subject lands, therefore the development plan for the subject lands is in conformity with the Secondary Plan's policies for the protection of fish habitat and the regulations of the *federal Fisheries Act*.

## 7.3.4 Endangered and Threatened Species

No species of flora or fauna that are regulated under the Ontario *Endangered Species Act* (ESA 2007) have been identified to occur within or adjacent to the subject lands, therefor habitat protection regulations within the *Act* or the City's development polices for SAR do not apply.

#### 7.3.5 Natural Heritage Corridor

This EIS has established that no terrestrial or aquatic wildlife corridor is associated with the subject lands, therefore the development plan for the subject lands is in conformity with the development polices of the Secondary Plan with respect to movement corridors.

#### 7.3.6 Drainage Features

With respect to drainage features Section 7.3.1.6 of the secondary plan states that a headwater drainage feature assessment shall be required to the satisfaction of the City and the Conservation Authority prior to approval of development adjacent to those drainage features. For this EIS a headwater drainage features assessment was undertaken following the assessment protocol, *Evaluation*, *Classification and Management of Headwater Drainage Features Guidelines* (HDFG) (TRCA/CVC 2014). The assessment found that no drainage feature is located in the areas where development is proposed. A drainage feature associated with woodlot will not be altered by the development.

In summary the development plan for the subject lands is in conformity with the development polices of the Secondary Plan with respect to drainage features.



## 7.4 Niagara Peninsula Conservation Authority

#### 7.4.1 Wetlands

Development policies for wetlands are detailed in Section 8 of the policy document. Policy 8.2.2.1 states that unless otherwise stated, no development and/or interference shall be permitted within PSWs and any other wetland greater than 0.5 hectares in size. No PSW is associated with subject lands or the adjacent lands. A small non-PSW swamp wetland is located within the woodlot in the northern portion of the subject lands. No development will occur in the wetland.

Policy 8.2.3.1 (1) states that where development is proposed adjacent to a wetland, a minimum 30 metre buffer shall be provided. However, Policy 8.2.3.1 (2) states that notwithstanding Section 8.2.3.1 (1), identifies that a reduction to a non-PSW buffer can be considered where supported by an EIS. This EIS has identified a 10 m setback to the dripline of the forest swamp edge and this will provide for a 15 + m buffer to the wetland boundary. The forest swamp edge is well vegetated and already provides a protective barrier to the interior of the wetland, an in addition the erection of a chain link fence along the 10 m setback has been identified as required which will limit post construction indirect impact to the wetland.

In summary the development plan for the subject lands is in conformity with the development polices of the NPCA with respect to wetlands.

### 7.4.2 Watercourses

Development policies for watercourses are detailed in Section 9. Policy 9.2.2 Interference with a Watercourse states that interference with a watercourse shall not be permitted, except in accordance with other policies.

For this EIS a headwater drainage features assessment was undertaken following the assessment protocol, *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (HDFG) (TRCA/CVC 2014). The assessment found that no NPCA regulated watercourse as defined by Regulation 41/24 is located in the areas where development is proposed. A drainage feature associated with the woodlot will be retained and will not be altered by the development.

In summary the development plan for the subject lands is in conformity with the development polices of the NPCA with respect to watercourses.

## 8. Summary

This EIS has identified that the proposed Clare Avenue draft plan of subdivision, with the identified mitigations measures, will be protective of the Northwest South Secondary Plan Area natural heritage features and functions. This EIS has demonstrated that the proposed plan of subdivision is in conformity with the Official Plans and Natural Heritage System development policies of the City of Welland, the Niagara Region and the Niagara Peninsula Conservation Authority.



## 9. Recommendation

This EIS concludes that with the implementation of the recommended construction mitigation measures the proposed plan of subdivision is supported with respect to maintaining the natural heritage system of the City of Welland, the Niagara Region and the Province.

Prepared by:

**Beacon Environmental** 

Ron Huizer, B. Sc.

Principal, Senior Ecologist

Reviewed by:

**Beacon Environmental** 

Lindsey Waterworth, B.Sc.

altento

Senior Ecologist



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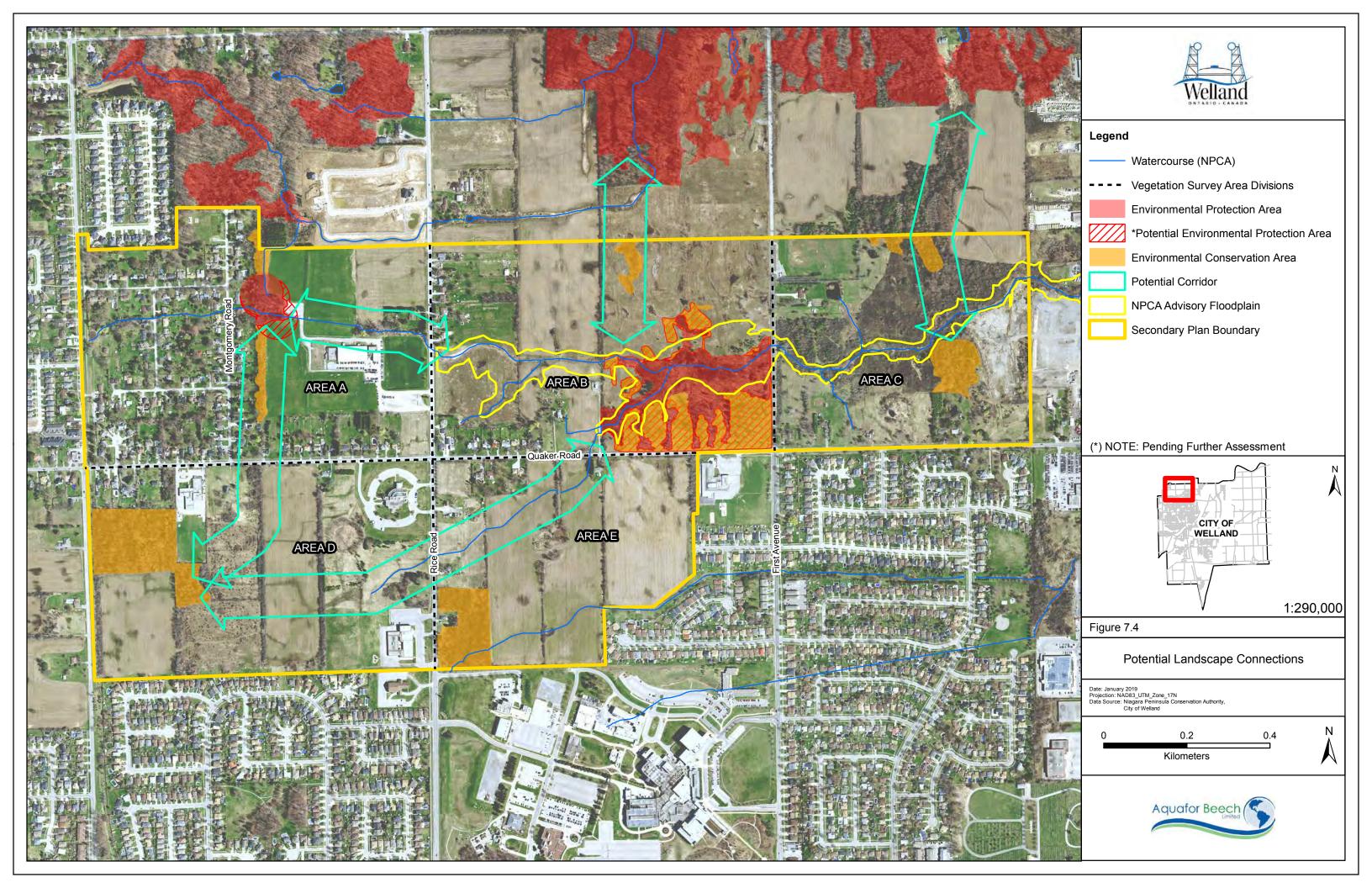
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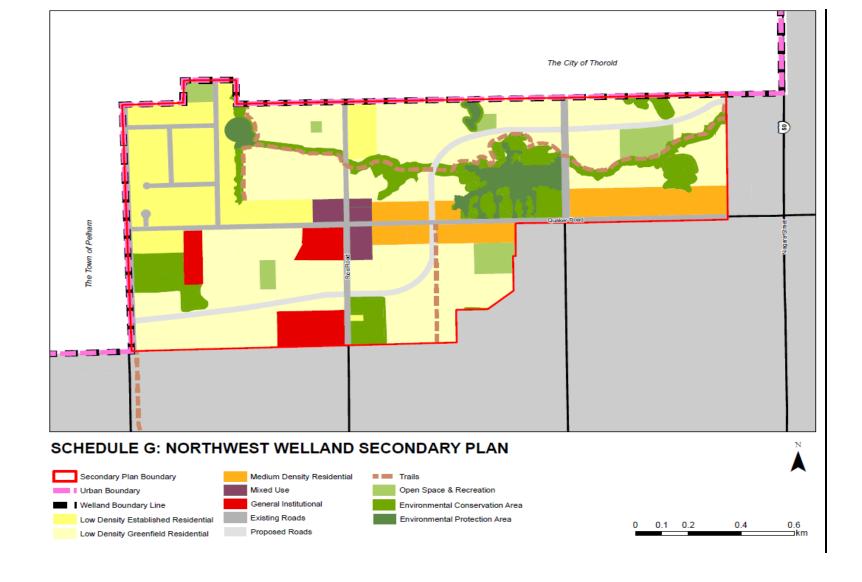




# Appendix A

Nature Heritage of the NWSPA







# **Appendix B**



### **Pre-Consultation Notes**

Claire Avenue Lands (south of Quaker Rd), Welland September 15, 2022

**Attendees:** Katie Young (Region); Adam Boudens (Region); Taylor Meadows (City); Ken Gonyou (Mountainview Homes); William Heikoop (Agent- Upper Canada); Ali Khan; Matt Vartanian; Tolga Aydin; Jennifer McRae (City); Derek Young (Town of Pelham)

**Proposal Description:** The subject lands are within the Northwest Secondary Plan Area. The lands have been recently designated Low Density Residential and Core Natural Heritage as per the Northwest Secondary Plan. The lands are currently Zoned Agricultural – A1 in Zoning By-law 2017-117. The lands are currently vacant. The applicant seeks to construct a residential development with varied building typologies such as; 17 single-detached dwellings, 67 street townhouses, 16 back-to-back townhouses, and 126 unit apartment building. A road network is proposed to connect to the surrounding neighbourhood and facilitate future connections to adjacent lands also within the Northwest Secondary Plan.

**Agent:** Upper Canada Consultants (William Heikoop and Eric Beauregard)

## **Application Type:**

- □ Draft Plan of Subdivision
- Site Plan

## Site Designation:

<u>Provincial Policy Statement (PPS)</u>- Settlement Area <u>Provincial Growth Plan</u>- Designated Greenfield Areas <u>Regional Official Plan (ROP)</u>- Urban (Greenfield) Area

## **Planning Comments**

- The PPS directs growth to Settlement Areas, and encourages the efficient use of land, resources, infrastructure and public service facilities that are planned or available. The Growth Plan contains policies that encourage the development of Designated Greenfield Areas into complete communities, with a diverse mix of land uses and range of housing types, taking into account affordable housing and densities that meet the projected needs of current and future residents. The ROP permits a full range of residential uses generally within the Urban Area, subject to the availability of adequate municipal services, infrastructure, land use compatibility, and environmental conservation.
- Designated Greenfield Areas are to be planned to achieve a minimum density target of 50 people and jobs per hectare, in alignment with the Growth Plan and ROP. Regional staff require a Planning Brief to demonstrate how this density target will be achieved.
- Staff acknowledge these lands are located within the Northwest Secondary Plan Area, which
  contains more detailed policy that should be adhered to.

## **Pre-Consultation Notes**

Claire Avenue Lands (south of Quaker Rd), Welland September 15, 2022

## **Land Use Compatibility**

 Regional staff observe lands to the west of the subject lands are currently designated for agricultural use. Staff recommend the inclusion of warning clauses in future Agreements of Purchase and Sale or Lease or Occupancy of units, warning that the lands may be subject to noise, odour, and/or dust from nearby agricultural operations.

## **Archaeological Potential**

 Based on the Province's Criteria for Evaluating Archaeological Potential, the site exhibits archaeological potential as there are 2 registered archaeological sites within 300 m of the property. As such, Regional staff require the submission of a Stage 1-2 Archaeological Assessment, at minimum and Ministry Acknowledgement Letter(s).

### **Environmental Comments**

- The subject property is located within the Welland Northwest Secondary Plan Area. A Natural Heritage and Natural Hazards Existing Conditions Report (prepared by Aquafor Beech Limited, dated April 11, 2019) prepared for the Secondary Plan Area identified Significant Woodland, other Evaluated Wetland, Significant Wildlife Habitat, and one potential Headwater Drainage Feature on the subject lands. Headwater Drainage Feature Assessments were not completed during the study, rather are to be studied as part of future applications. As such, an HDF Assessment must be conducted as part of a scoped EIS for the subject property. The scoped EIS must also address linkages and corridors as identified through the Secondary Plan. A Terms of Reference for the study should be developed consistent with Policy 7.B.2 of the Region's Official Plan. Staff are available to visit the property to confirm our requirements. Please contact Adam Boudens, Senior Environmental Planner (Adam.Boudens@niagararegion.ca) to set up a site visit and scope the EIS.
- Additionally, the Significant Woodland could be subject to the Regional Woodland Conservation By-law (By-law 20-79), and as such any proposed removals must be in conformity with the By-Law. Please contact Daniel Root, Regional Forester at <u>Daniel.Root@niagararegion.ca</u> for more information.

## **Transportation/ Roads**

Local – Clare Avenue

### Servicing

• Water: 300 D CI – Local – Clare Avenue

• Water: 750 D CPP – Regional – Clare Avenue

- No connection to Regional watermain is permitted
- If any proposed servicing will cross the regional watermain, plan and profile drawings of the servicing must be submitted to the Region for review

## **Pre-Consultation Notes**

Claire Avenue Lands (south of Quaker Rd), Welland September 15, 2022

 Any extension of a sewers requires either MECP approval or approval under the pending CLI ECA

## Stormwater Management.

- At the time of future Planning Act Application (i.e. Draft Plan and/or Site Plan), the Region will require a stormwater management report (and the associated fee) indicate in detail how the development will meet the stormwater management targets outlined in SWM plan of Northwest Secondary Plan.
- Prior to construction, detailed grading, servicing and construction erosion/sediment control
  plans be submitted to this office for review and approval.

## Waste Collection (Low Density Residential) – Single-detached and Townhouses

- Blue/grey no limit (weekly)
- Green no limit (weekly)
- Waste 2 containers per unit max (bi-weekly)
- Curbside Collection Only

## Waste Collection (Multi Residential) - Apartment Building

- Blue/grey no limit (weekly)
- Green no limit (weekly)
- Waste 2 containers per unit to max of 24 (bi-weekly)
- Future submissions should indicate the intention for waste collection including bin location, curb radii, truck route and turning templates

## **Required Studies for Regional Review**

- Planning Brief
- Stage 1-2 Archaeological Assessment (at minimum), plus Ministry Acknowledgement Letter(s)
- Environmental Impact Study with Headwater Drainage Feature Assessment
- Stormwater Management Report
- Detailed grading, servicing, and construction erosion/sediment control plans

## **Required Fees**

The Region's 2022 Fee Schedule is available at:

https://www.niagararegion.ca/business/fpr/forms\_fees.aspx

\*Staff recommend reaching out to Regional staff prior to submitting applications to confirm the fees depending on the applications required.

<b>Development Application Review Type</b>	Fee Amount
Zoning By-law Amendment	\$1,345

## **Pre-Consultation Notes**

Claire Avenue Lands (south of Quaker Rd), Welland September 15, 2022

Draft Plan Review (based on the entire area of the subdivision or condominium)	\$5,340 (base fee) + \$1,850 per hectare
Major EIS Review (a \$415 Terms of Reference Review is to be deducted from the Major EIS Review fee)	\$2,320
Site Plan	\$550
Combined Plan of Standard Condominium and Site Plan Review Fee	\$4,010
Stormwater Review less than 5 ha	\$650

## **Agent Comments:**

- Understand there is woodlot to the North.
- Draft Plan of Standard Condo proposed for the apartment complexes (would like to have two separate condos and have a shared agreement between the two of them)

## **City Comments:**

- Steve Bauer Trail crossing over the trail is identified in the NWSP.
- FSR, Stormwater Report (in alignment with the Secondary Plan)
- 20 m right-of-ways required; currently showing 18 m ROWs.
- Signalized intersection may be required.

## **Town of Pelham - Engineering**

• Clare Avenue not in good condition; require a Traffic Study (additional lands to be added in the future) to determine level of traffic.

#### Ron Huizer

Subject:

FW: EIS Term of Reference - Clare Ave Plan of Subdivision, Welland

Attachments:

2023-04-26\_EIS TOR Clare Ave\_222324.pdf

From: Boudens, Adam <Adam.Boudens@niagararegion.ca>

Sent: Monday, May 15, 2023 3:09 PM

To: Ron Huizer < rhuizer@beaconenviro.com>

Cc: Lampman, Cara <Cara.Lampman@niagararegion.ca>; Karlewicz, Lori <Lori.Karlewicz@niagararegion.ca>; Sarah

Mastroianni <smastroianni@npca.ca>; William Heikoop <WHeikoop@ucc.com>; Federici, John

<John.Federici@niagararegion.ca>

Subject: EIS Term of Reference - Clare Ave Plan of Subdivision, Welland

Hi Ron,

Regional Environmental Planning staff have reviewed the attached EIS TOR for the subject lands located at McLeod Road and Garner Road, in the City of Niagara Falls, and generally offer no objections to the scope of work. Staff note that consistent with the Region's Environmental Impact Study (EIS) Guidelines, the Study Area must include the entirety of the subject lands and extend 120 m from the subject property, not 30 m from the woodland feature as is proposed in the EIS TOR.

In addition, staff note that the adjacent lands contain a feature mapped as a Significant Woodland that was previously cleared. However, consistent with Niagara Official Plan (NOP) Policy 3.1.18, through a future development application that feature is likely to be restored. As such, the Region requests that the submitted EIS consider the potential adjacent feature.

Further, the Subwatershed Study prepared in support of the Welland Northwest Area Secondary Plan has identified a wildlife corridor/linkage extending to the subject property that the EIS should have consideration for.

I'll see you Wednesday for the woodland staking.

Let me know if you have any questions or concerns.

Thanks, Adam

## Adam Boudens, Msc

Senior Environmental Planner/Ecologist Planning and Development Services

Niagara Region

1815 Sir Isaac Brock Way, P.O. Box 1042

Thorold, ON L2V 4T7

Phone: 905-980-6000 ext. 3770 Toll-free: 1-800-263-7215

www.niagararegion.ca





# **Pre-consultation Meeting Form**

## **City of Welland**

Region of Niagara Niagara Peninsula Conservation Authority

Persons intending to make an application for a proposed development are required to consult with planning staff prior to submitting an application. A pre-consultation meeting will identify what is required to be submitted for a complete application and will provide the opportunity to discuss:

- the nature of the application;
- development and planning issues;
- fees:
- the need for information and/or reports to be submitted with the application;
- the planning approval process;
- other matters, as determined.

Pre-Consultation Meeting Date: September 15, 2022
Site Address: Clare Avenue Lands Approximate Land Area (metric): 76,744.01m <sup>2</sup>
Site Legal Description: PT TWP LOT 236 RP 59R3148 PART 1 REAR LAND LOCKED
Owner Contact Information: Name of Owner: Mountianview Niagara (Ken Gonyou)
Phone Number: 905-323-6215 Email: KenG@mountainview.com
Principal Contact: William Heikoop - Upper Canada Consultants
Phone Number: 905-688-9400 ext. 527 Email: WHeikoop@ucc.com
Application Type:  Regional Official Plan Amendment Local Official Plan Amendment Draft Plan of Condominium Ovacant Land & Common Element Ovacant Land & Com
1. Brief description of proposed development:
- The lands are currently vacant and have been used for agricultural proposes. The proposal seeks to
construct a residential development including, 17 single-detached dwellings, 67 street townhomes, 16
back-to-back townhouses and 126-unit apartment building. A road network is proposed to connect to
the surrounding neighbourhood and facilitate future connections to adjacent lands also within the Northwest Secondary Plan.
2. Check All Applicable: Brownfield Greenfield Built-up Local CIP Area
3. Development Charges: Regional ☑ Local ☑ NCDSB ☑
4. Existing Regional Policy Plan Designation: <u>Urban (Greenfield) Area</u>
Conformity with Regional Policy Plan land use designations and policies? : yes   ✓ no □ unknown □  Pre-Consultation Form (February, 2021)  Page 1

	Local Official Plan Designation: Low Density Residential and Core Natuaral Heritanity with Official Plan land use designations and policies?	<u> </u>
	what is the nature of the amendment needed?	
Existing	Zoning: Agricultural - A1	
Conforn	nity with existing zoning?: □ Yes ☑ No	
f 'No', v	hat is the proposed zoning: Site Specific Residential RL2/RM	

8. Fees Required at time of Submission of the Application

Application	Local Planning Department	Region of Niagara	Niagara Peninsula Conservation Authority	Other Fees
Regional Policy Plan Amendment				
Local Official Plan Amendment				
Zoning By-law Amendment	\$8,843.00	\$1,345.00		
	\$14,684.00 and	\$5,340.00 +		
	\$121/Lot or Block	\$1,850 per		
Plan of Subdivision	excluding 0.3 metre	hectare. See		
	reserves	Region notes for		
		additional details		
	\$15,564.00	\$4,010.00		
		(Combined Plan of		
		Standard Condo		
Plan of Condominium		and Site Plan		
		Agreement review		
		fee)		
Consent				
Site Plan Agreement	\$8,843.00	\$550.00		
		\$2,320.00 (a \$415		
		Terms of		
Major EIS Review		Reference Review		
		is to be deducted		

	from the Major EIS	
	Review fee)	
Stormwater Review (less than 5 Ha)	\$650.00	
TOTAL		

#### Notes on Fees:

- Notwithstanding the fees noted above, all fees are payable based upon the rate in the fee schedule bylaw in effect on the date the application is received.
- Further fees may be required at a later date as per the fee schedule by-law.
- Separate cheques shall be made payable to the appropriate agency.

9.	<b>Additional</b>	Agancias	to bo	contacted:
<b>9</b> .	Additional	Adendes	to be	contacted.

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#### 10. Additional Comments:

- Niagara Region comments provided separately.
- The property is located within the City's Northwest Secondary Plan Area and subject to the applicable policies related to this area.
- Consider amending the design to avoid lots fronting onto the proposed collector road and reorientate lots toward local streets.
- The City is currently undertaking an Official Plan update. Upon completion of the update, additional housekeeping amendments may be applied to Zoning By-law 2017-117.
- Development of the parcel is to consider overall development of the Northwest Secondary Plan Area.
- Right-of-Way and design to be consistent with municipal standards. The City's Engineering Division may be reached to further refine the proposed design.
- It is noted that the Steve Bauer Trail crossing is noted in the Northwest Secondary Plan as it relates to the proposed Right of Way connection.

## **Engineering Division**

- A full engineering submission is to be required.
- A Stormwater Management Report is to be prepared, demonstrating runoff is restricted to predevelopment levels and water is treated to an enhanced quality. A Stormwater Management Plan should be consistent with the overall plans for the Northwest Secondary Plan area.
- A Functional Servicing Report is required, identifying maximum day water demands, required fire flow and sanitary flows from the site, as well as the impact these will have on existing infrastructure.

- Full Subdivision drawings to be submitted, including General Servicing, General Grading, Plan and Profiles, Engineering Details, Sediment and Erosion Control, Photometrics and Landscaping Plans.
- Street(s) 'B', 'C' and 'D' are requested to be a 20-metre width Right of Way.
- Street 'A' is to be a collector road. The cross-section requirements for the collector road are to be determined in consultation with the City's Engineering Division.

## **Building Division**

- For Building Permit submission requirements, contact Building Division regarding application forms, design requirements and fees via Marcus Titone (Building Services Technician) at Marcus.Titone@welland.ca or 905-735-1700 ext. 2248.
- An Architect/Professional Engineer is to be required for the proposed Apartment Building, in accordance with Section 1.2.[C] of the Ontario Building Code (OBC). This building and related siteworks must be designed by an Architect and Professional Engineer(s).
- A Geotechnical Report prepared by a Professional Engineer is to be required. The footing and foundation design is to consider soils report and include a reference in the design.
- Planning approvals, agreements and addressing is to be completed prior to Building Permit application submission. The appeal period must lapse prior to Building Permit issuance.
- Servicing Permits (water, sanitary, storm) are to be required.
- Applications cannot be submitted until the Subdivision Agreement is registered and conditions
  are met. Normally a clause that includes servicing, roadways, street names, etc. is to be
  finalized with the Engineering Division. Submission of written approval from the Planning
  Division is required prior to Building Permit application.
- Development Charges are application and will be calculated during a Building Permit application review.
- Cash-in-Lieu of Parkland Dedication fees are to be collected at the time of Building Permit issuance to be determined by calculation during Building Permit review. Contact Nicolas Aiello Policy Planning Supervisor at <a href="mailto:nicolas.aiello@welland.ca">nicolas.aiello@welland.ca</a> for further information.
- Further comments to be provided upon Site Plan Agreement circulation for apartment building(s). Review to consider spatial separation, fire route access, site servicing (water, storm, sewer – materials, lengths, sizes), building classification (i.e. Part 3 & 9), etc. A OBC Matrix is to be included on the Site Plan.

### Fire Division

- A fire access route is required to be established for the proposed apartment buildings.

- Future submissions are to include location of fire hydrants.

## **Traffic Division**

- A Traffic Impact Study (TIS) will be required with future Planning Act submissions.
  - o A Terms of Reference may be completed with Ali Khan (Manager of Traffic/Parking/By-laws). Contact information is as follows: <u>ali.khan@welland.ca</u> or 905-735-1700 ext. 2202.
- Design must consider proposed driveway locations and proximity to intersection, maintaining an appropriate distance.
  - o Site planning design via consolidation of driveways, etc.

## Town of Pelham

- A Traffic Impact Study (TIS) is to be prepared and reviewed. Addressing traffic flow onto Clare Avenue.
- A Road Condition Survey is to be submitted.

## Welland Hydro Electric System Corporation – WHESC

- Developer to enter into a subdivider's agreement with WHESC.
- Electrical distribution design/drawings are to be to completed by Developer's consultant and reviewed/approved by WHESC. Design requirements will be dependent on development ownership structure.
- The proposed development must meet the clearance requirements of Section 3.1.19.1 "Clearance to Buildings" of the Ontario Building Code (OBC).
- Existing WHESC infrastructure located along Clare Avenue will require upgrading via an overhead line rebuild in order to provide servicing to the proposed development.
- Expansion contribution from the developer may be required for the infrastructure upgrade. This requirement will be reviewed as the project progresses.
- If easement(s) are required by WHESC to service this development or any future adjacent developments, the applicant will provide at their own expense, all necessary registered easements.
  - Contact WHESC's Engineering Department to determine further servicing details and requirements.

11. Site Visit:
-----------------

12.	Incentive Programs:		

13. Required Information and Studies to be submitted with the Application(s). Studies identified with an asterisk\* will likely require a peer review at the cost of the developer. Please ensure all digital copies are provided as an Accessible Document.

<u>-</u>	ion	;A	Reports, Studies, Plans	No. of Copies  Elect Digital Paper		Notes	
Local	Region	NPCA	( <u>See Notes for additional details</u> )				
<b>/</b>	<b>/</b>		Planning Justification Report				
			Conceptual Site Plan, Subdivision Plan				
			Draft Regional Policy Plan Amendment				
			Draft Local Official Plan Amendment				
			Land Use/Market Needs*				
<b>/</b>			Urban Design/Landscape Plans				
	<b>/</b>		Archaeology Assessment			See Region Comments	
			Cultural Heritage Impact Assessment*				
	<b>/</b>		Environmental Impact Study		w/H	eadwater Drainage Feature Asses	ssment
			Environmental Planning Study/ Sub-Watershed Study				
			Tree Inventory Preservation Plan				
			Floodplain and Hazard Lands Boundary Plan				
/			Geotechnical			At Building Permit	
_ <b>V</b>			Environmental Site Assessment				
			Air Quality/Noise & Vibration Study*				
			Agricultural Impact Assessment				
			Farm Operation and Ownership				
			Minimum Distance Separation I & II				
			Mineral Aggregate Resources				
/	<b>/</b>		Municipal Servicing Study				
•	•		Phasing Plan				
			Sensitive Land Use Report				
			Slope Stability Report				
\/	/		Stormwater Management Plan				
<b>V</b>			Transportation Impact Study/Parking Impact Analysis			City of Welland/Town of Pelha	am
•			Hydrogeological Study and Private Servicing Plans*			,	
			Soil report				
			Financial Impact Assessment*				
			Shadow Analysis				
			Risk Management Study				
			Gas Well Study/Gas Migration Study				
			Wind Study*				
			Other*				

#### Notes:

- 1. The purpose of this document is to identify the information required to commence processing and evaluating an application as set out in the Planning Act. This pre-consultation process is designed to proceed based on the mutual agreement of the parties as shown by the signatures below.
- 2. Pre-consultation does not imply or suggest any decision whatsoever on behalf of staff or the City to either support or refuse the application.
- 3. The applicant should be aware that the information provided is accurate as of the date of the preconsultation meeting. Should an application not be submitted in the near future, and should other policies, by-laws or procedures be approved by the Province, City, Region or other agencies prior to the submission of a formal application, the applicant will be subject to any new policies, by-laws or procedures that are in effect at the time of the submission of a formal application. If an application is not submitted within 1 year, it is advisable that the applicant confirm with the City the directives of the original preconsultation meeting.
- 4. Any application submitted without the information identified in this Pre-consultation Document will be deemed incomplete and not processed. Alternately, staff may recommend refusal of the application based upon insufficient information to properly evaluate the application.
- 5. The applicant acknowledges that the City and Region considers the application forms and all supporting materials including studies and drawings, filed with any application to be public information and to form part of the public record. With the filing of an application, the applicant consents and hereby confirms that the consent of the authors of all supporting reports have been obtained, to permit the City and Region to release the application and any supporting materials either for its own use in processing the application, or at the request of a third party, without further notification to, or permission from, the applicant.
- 6. It is hereby understood that during the review of the application additional studies or information may be required as a result of issues arising during the processing of the application or the review of the submitted studies.
- 7. If the City or Region does not have sufficient expertise to review and determine that a study is acceptable, the City may require a peer review. The cost of the peer review shall be paid for by the applicant. The Terms of Reference for a peer review is determined by the City or Region.
- 8. Some studies may require NPCA review and clearance/approval. In this instance, the NPCA review fee shall be paid by the applicant.
- 9. All plans and statistics must be submitted in metric.

## Signatures:

Taylor Meadows		
Planning Staff	Infrastructure & Dev. Services (sig)	Date
Planning Staff	Infrastructure & Dev. Services (sig)	Date
Tolga Aydin		
Infrastructure Svc. Staff	Infrastructure & Dev. Services (sig)	Date
16 4 4 0 0 6 6		
Infrastructure Svc. Staff	Infrastructure & Dev. Services (sig)	Date
Jennifer McRae		
Building Staff	Infrastructure & Dev. Services (sig)	Date

Zach Sherwood - Welland Hydro



# Appendix C

List of Vascular Plants for Subject Lands

# Appendix C

# **Plant List**

Code	Scientific Name	English Name	Srank	COSEWIC	COSSARO
1	Equisetum arvense	Field Horsetail	S5		
244	Agrostis gigantea	Black Bentgrass	SE5		
249	Agrostis stolonifera	Spreading Bentgrass	S5		
282	Bromus ciliatus	Fringed Brome	S5		
287	Bromus inermis	Brome Grass	SE5		
300	Calamagrostis canadensis	Blue-joint Reedgrass	S5		
315	Dactylis glomerata	Orchard Grass	SE5		
325	Digitaria ischaemum	Smooth Crabgrass	SE5		
326	Digitaria sanguinalis	Hairy Crabgrass	SE5		
351	Elymus virginicus	Virginia Wild Rye	S5		
372	Festuca pratensis	Meadow Fescue	SE5		
384	Glyceria striata	Fowl Manna-grass	S4S5		
418	Muhlenbergia mexicana	Mexican Muhly	S5		
440	Panicum dichotomiflorum	Spreading Panicgrass	SE5		
467	Phleum pratense	Meadow Timothy	SE5		
476	Poa compressa	Canada Bluegrass	S5		
483	Poa palustris	Fowl Bluegrass	S5		
485	Poa pratensis	Kentucky Bluegrass	S5		
598	Carex cristatella	Crested Sedge	S5		
628	Carex gracillima	Graceful Sedge	S5		
699	Carex pensylvanica	Pennsylvania Sedge	S5		
727	Carex scirpoidea	Spike Sedge	S5		
737	Carex stipata	Stalk-grain Sedge	S5		
765	Carex vulpinoidea	Fox Sedge	S5		
883	Arisaema triphyllum	Jack-in-the-pulpit	S5		
913	Juncus bufonius	Toad Rush	S5		
918	Juncus effusus	Soft Rush	S5		
934	Juncus tenuis	Path Rush	S5		
1057	Epipactis helleborine	Eastern Helleborine	SE5		
1111	Populus deltoides	Eastern Cottonwood	SU		
1113	Populus grandidentata	Large-tooth Aspen	S5		
1115	Populus tremuloides	Trembling Aspen	S5		
1130	Salix bebbiana	Bebb's Willow	S5		
1178	Carya ovata	Shag-bark Hickory	S5		
1209	Quercus bicolor	Swamp White Oak	S4		
1212	Quercus macrocarpa	Bur Oak	S5		
1228	Ulmus americana	American Elm	S5		
1280	Polygonum lapathifolium	Dock-leaf Smartweed	S5		
1283	Polygonum pensylvanicum	Pennsylvania Smartweed	S5		
1291	Polygonum virginianum	Virginia Knotweed	S4		
1299	Rumex crispus	Curly Dock	SE5		
1324	Chenopodium album	Lamb's Quarters	SE5		
1512	Ranunculus acris	Tall Butter-cup	SE5		
1518	Ranunculus flabellaris	Yellow Water-crowfoot	S4?		



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Code	Scientific Name	English Name	Srank	COSEWIC	COSSARO
1557	Podophyllum peltatum	May Apple	S5		
1609	Barbarea vulgaris	Yellow Rocket	SE5		
1613	Brassica nigra	Black Mustard	SE5		
1671	Lepidium campestre	Field Pepper-grass	SE5		
1808	Crataegus crus-galli	Cockspur Hawthorn	S5		
1834	Crataegus punctata	Dotted Hawthorn	S5		
1851	Fragaria virginiana	Virginia Strawberry	S5		
1852	Geum aleppicum	Yellow Avens	S5		
1854	Geum canadense	White Avens	S5		
1868	Malus pumila	Common Apple	SE5		
1881	Potentilla norvegica	Norwegian Cinquefoil	S5		
1908	Prunus serotina	Wild Black Cherry	S5		
1911	Prunus virginiana	Choke Cherry	S5		
1912	Pyrus communis	Common Pear	SE4		
1924	Rosa multiflora	Rambler Rose	SE4		
1936	Rubus allegheniensis	Common Blackberry	S5		
2048	Lotus corniculatus	Birds-foot Trefoil	SE5		
2054	Medicago lupulina	Black Medic	SE5		
2059	Melilotus alba	White Sweet Clover	SE5		
2087	Trifolium pratense	Red Clover	SE5		
2089	Trifolium repens	White Clover	SE5		
2092	Vicia cracca	Tufted Vetch	SE5		
2111	Oxalis dillenii	Dillen's Woodsorrel	S5?		
2176	Rhus radicans	Poison Ivy	S5		
2193	Acer negundo	Manitoba Maple	S5		
2197	Acer rubrum	Red Maple	S5		
2211	Rhamnus cathartica	Buckthorn	SE5		
2212	Rhamnus frangula	Glossy Buckthorn	SE5		
2215	Parthenocissus vitacea	Virginia Creeper	S5		
2218	Vitis riparia	Riverbank Grape	S5		
2252	Hypericum punctatum	Common St. John's-wort	S5		
2321	Lythrum salicaria	Purple Loosestrife	SE5		
2326	Circaea alpina	Small Enchanter's Nightshade	S5		
2340	Epilobium strictum	Downy Willow-herb	S5		
2353	Oenothera oakesiana	Evening Primrose	S4?		
2399	Daucus carota	Queen Anne's Lace	SE5		
2439	Cornus foemina	Gray Dogwood	S5		
2514	Fraxinus americana	White Ash	S5		
2517	Fraxinus pennsylvanica	Green Ash	S5		
2609	Echium vulgare	Common Viper's-bugloss	SE5		
2846	Veronica officinalis	Common Speedwell	SE5		
2884	Plantago lanceolata	English Plantain	SE5		
2885	Plantago major	Common Plantain	SE5		
2934	Lonicera tatarica	Tartarian Honeysuckle	SE5		
2953	Viburnum lentago	Nannyberry	S5		
2967	Dipsacus fullonum	Fuller's Teasel	SE5		
2999	Achillea millefolium	Yarrow	S5		
3006	Ambrosia artemisiifolia	Annual Ragweed	S5		
3027	Arctium minus ssp. minus	Common Burdock	SE5		
3090	Chrysanthemum leucanthemum	Oxeye Daisy	SE5		



# Appendix C

Code	Scientific Name	English Name	Srank	COSEWIC	COSSARO
3102	Cirsium vulgare	Bull Thistle	SE5		
3135	Erigeron strigosus	Daisy Fleabane	S5		
3288	Solidago canadensis	Canada Goldenrod	S5		
3307	Solidago rugosa	Rough-leaf Goldenrod	S5		
3348	Symphyotrichum puniceum	Swamp Aster	S5		
3363	Taraxacum officinale	Brown-seed Dandelion	SE5		





# Appendix D



# Appendix D

# **Significant Wildlife Habitat Screening – EcoRegion 7E**

Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment March 2022
	Seasonal Concentration Areas of Animals	
Waterfowl Stopover and Staging Areas (Terrestrial)	Fields with sheet water or fields utilized by Tundra Swans during Spring (mid March to May). Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl. Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless used by Tundra Swans in the Long Point, Rondeau, Lk. St. Clair, Grand Bend and Pt. Pelee areas.	No Suitable habitat was not observed.
Waterfowl Stopover and Staging Areas (Aquatic)	Ponds, marshes, lakes, bays, costal inlets and watercourses that are used as stopover areas during migration. These habitats typically have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water).	No Suitable habitat was not observed.
Shorebird Migratory Stopover Area	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as a SWH	No Suitable habitat was not observed.
Raptor Winter Area	A combination of fields and woodlands that provide roosting, foraging and resting habitat for wintering raptors. These sites need to be larger than 20 ha in size, of which at least 15 ha needs to be comprised of idle/fallow or lightly grazed field/meadow.	No Suitable habitat was not observed.
Bat Hibernacula	Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	No Suitable habitat was not observed.



Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment March 2022
Bat Maternity Colonies	Maternity colonies can be found in tree cavities, vegetation and buildings.  Deciduous and mixed forest communities with greater than 10 ha of large diameter (> 25 cm dbh) wildlife trees.	Low Potential  Suitable habitat in woodlands.
Turtle Winter Areas  Over-wintering sites for turtles are typically in the same area as their core Waterbodies have to be deep enough to not frees and have soft mud sur		No Suitable habitat was not observed.
Snake Hibernaculum	Snakes hibernate in sites located below frost lines in burrows, rock crevices and other natural locations. Rock piles, slopes, stones fences, and crumbling foundations can also be used by hibernating snakes. Areas of broken and fissures rocks can also provide access to sites below the frost line.	No Suitable habitat was not observed.
Colonially - Nesting Bird Breeding Habitat (Bank and Cliff)	Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area.	No Suitable habitat was not observed.
Colonially - Nesting Bird Breeding Habitat Breeding Habitat (Tree/Shrubs)	Nests in live or dead standing trees in wetlands, lakes, islands and peninsulas. Shrubs and occasionally emergent vegetation may also be used.	No Suitable habitat was not observed.
Colonially - Nesting Bird Breeding Habitat (Ground)	Nesting colonies of gulls and terns occur on rocky islands or peninsulas within a lake or larger river	No Suitable habitat was not observed.
Migratory Butterfly Stopover Areas	Cultural meadow, savannah and thicket communities that are within 5 km of Lake Ontario, at least 10 ha in size and contain a combination of field and forest habitat	No Suitable habitat was not observed.
Landbird Migratory Stopover Areas	Woodlots >5 ha in size and within 5 km of Lake Erie and Lake Ontario. If woodlands are rare in an area of shoreline, woodland fragments 2-5 ha can be considered for this habitat.	No Suitable habitat was not observed.
	If multiple woodlands are located along the shoreline those Woodlands <2 km from Lake Erie and Lake Ontario are more significant.	



Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment March 2022
Deer Yarding Areas	Deer yarding areas or winter concentration within a mixed or coniferous forest and swamp communities.	No Suitable habitat was not observed.
Deer Winter congregation Areas	Deer movement in winter months within eco-region 7E are not constrained by snow depth, however they still congregate in suitable woodlands. These woodlands will typically be larger than 100 ha in size, however woodlands smaller than 100 ha may be considered significant based on MNR assessments.	No Suitable habitat is not associated with the subject lands.
	Rare Vegetation Communities	
Cliffs and Talus Slops	A cliff is a vertical to near vertical bedrock that is greater than 3 m in height. A talus slope is rock rubble at the base of a cliff made up of coarse rocky debris.	No Suitable habitat is not associated with the subject lands.
Sand Barren	Sand barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. They have little to no soil and the underlying rock protrudes through the surface. Usually located within other types of natural habitat such as forest or savannah.	No Suitable habitat is not associated with the subject lands.
Alvar	Alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil.	No Alvar was not observed for the subject lands.
Old Growth Forest	Old growth forests are characterized by heavy mortality or turnover of over story trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris. Stands must be 30 ha or greater in size with a minimum of 10 ha of interior habitat (interior habitat determined with a 100 m buffer).	No Old growth forest was not observed.
Savannah	Savannah is a tallgrass prairie habitat that has tree cover between 20 - 60%.	No Savannah was not observed for the subject lands.
Tallgrass Prairie	Tallgrass Prairie has ground cover that is dominated by prairie grasses. An open tallgrass prairie has less than 25% tree cover.	No Tallgrass Prairie was not observed for the subject lands.



Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment March 2022
Other Rare Vegetation Communities	Rare vegetation communities may include beaches, fens, forests, marsh, barrens, dunes and swamps, as identified in Appendix M of the Significant Wildlife Habitat Technical Guide.	Low Potential Small pockets of Bur Oak Swamp (SWD1-2), that is listed as a S3 community are associated with the woodlot. However, these small areas are heavily impacted by dense growth of Buckthorn and are of low quality.
	Specialized Habitat for Wildlife	
Waterfowl Nesting Area	Waterfowl nesting areas are upland areas adjacent to marsh, shallow aquatic and swamp habitat. In order to be considered significant these features must extend 120 m from of a wetland in order to deter predators	No Suitable habitat is not associated with the subject lands.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Nests for these species are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands or on structures over water. Osprey nests are usually at the top of a tree, while Bald Eagle nets are typically in super canopy trees.	No Bald Eagle or Osprey nests were observed within the subject lands.
Woodland Raptor Nesting Habitat	Woodland raptor habitat can be found in all natural or conifer plantation woodland/forest stands that are greater than 30 ha in size with more than 10 ha of interior forest habitat (interior habitat determined with a 200 m buffer).	No Woodlot dose not meet size criteria and no raptor stick nests were observed.
Turtle Nesting Areas	Ideal nesting habitat for turtles are close to water and away from roads and sites that are less prone to loos of eggs by predation. These areas are often associated with exposed mineral soil (sand or gravel) areas within 100 m of a marsh, shallow aquatic, bog or fen habitat.	No Suitable habitat was not observed for the subject lands.
Seeps and Springs	Seeps/springs are areas where ground water comes to the surface. Often they are found within headwater areas within forested habitats.	No Seeps/springs were not observed within the subject lands



Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment March 2022
Amphibian Breeding Habitat (Woodland)	This type of habitat is associated with the presence of a wetland, lake or pond that is within or adjacent (within 120m) of a woodland. Woodlands with permanent ponds or those contain water until mid-July are more likely to be used as breeding habitat.	No Suitable habitat was not observed for the subject lands. No calls recorded during night surveys.
Amphibian Breeding Habitat (Wetlands)	Wetlands and pools that are greater than 500 m² and are isolated from woodlands (greater than 120 m)	No Suitable habitat is not associated with the subject lands. No calls recorded during night surveys.
Marsh Bird Breeding Habitat	This type of habitat occurs in wetlands with shallow water and emergent aquatic vegetation present	No Suitable habitat is not associated with the subject lands.
Woodland Area-Sensitive Bird Breeding Habitat	Habitats where interior forest breeding birds are breeding. These forests are typically larger mature forest stands or woodlands that are greater than 30 ha in size (interior habitat determined with a 200 m buffer).	No Woodlot does not meet size criteria and no area sensitive bird was recorded for the woodlot.
Open Country Bird Breeding Habitat	This type of habitat occurs in larger grassland areas (including natural and cultural fields and meadows) that are greater than 30 ha in size. Grasslands that are being actively used for farming (i.e. row cropping, intensive hay, livestock pasturing in the last 5 years) typically do not provide ideal habitat for open country bird species.	No Suitable habitat is not associated with the subject lands.
Shrub/Early Successional Bird Breeding Habitat	This type of habitat occurs in large field areas succeeding to shrub and thicket habitats that are greater than 10 ha in size.	No Suitable habitat is not associated with the subject lands.
Terrestrial Crayfish	This type of habitat occurs in meadows and edge of shallow marshes.	No Suitable habitat is not associated with the



# Appendix D

Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment March 2022		
		subject lands. No mud chimneys were observed.		
Special Concern and Rare Wildlife Species	This type of habitat occurs wherever special concern and provincially rare (S1, S2, S3 and SH) plant and animal species occur.	No species listed as special concern or rare for the province was recorded for the subject lands.		
Animal Movement Corridors				
Amphibian Movement Corridors	This habitat consists of movement corridors between breeding habitat and summer habitat. Corridors may be found in all ecosystems associated with water.	No Suitable habitat is not associated with the subject lands.		





# **Appendix E**

Proposed Draft Plan of Subdivision

