ENVISION
CONSULTANTS LTD

ENVIRONMENTAL IMPACT STUDY

6490 First Line, Fergus, Ontario

Project #: 24-0727
Prepared for: RBS & EJS Fergus Limited Partnership
Date: March 25, 2026

Report Version: 01

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March 25, 2026

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Attention: Catherine Pan, RPP MCIP, Senior Manager, Development

Sent via email: cpan@sorbara.com

SUBJECT: ENVIRONMENTAL IMPACT STUDY, 6490 FIRST LINE, FERGUS, ONTARIO

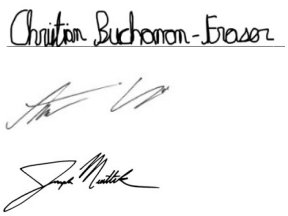
EnVision Consultants Ltd. is pleased to present the enclosed Environmental Impact Study for the site described as 6490 First Line, located in the community of Fergus, Wellington County in Ontario. Please find the document attached for your review. The study outlines the proposed development, field investigations undertaken to assess potential environmental impacts and recommends mitigation measures to help maintain the form and function of the natural heritage features found on or and within the area of influence of the development.

Thank you for the opportunity to complete this assignment. Please contact the undersigned with questions or comments.

Yours sincerely,

Alex Stettler, H.B.Sc., PMP, CAN-CISEC
Senior Project Manager - Ecology
astettler@envisionconsultants.ca

QUALITY MANAGEMENT

ISSUE	FIRST ISSUE	REVISION 1	REVISION 2
PROJECT NUMBER	24-0727		
PROJECT REFERENCE	Environmental Impact Study, 6490 First Line, Fergus, Ontario		
VERSION NO.	01		
REMARKS	Final Report		
PREPARED BY	Christian Buchanan-Fraser, Anne Ha and joseph Mentlik		
SIGNATURE			
REVIEWED BY	Alex Stettler		
SIGNATURE			
DATE	March 25, 2026		

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1. INTRODUCTION

EnVision Consultants Ltd. (EnVision) was retained by RBS & EJS Fergus Limited Partnership (the 'Client') to conduct an Environmental Impact Study (EIS) at 6490 First Line, Fergus, Ontario; herein referred to as the 'Site'. This EIS also includes a review and consideration for a larger Study Area defined as the lands beyond 120 m of the Site. Refer to Appendix B, Figure 1 for Site location details. It is our understanding that this assessment has been requested in support of the proposed Official Plan Amendment (OPA) at the Site.

The Site is rectangular in shape and occupies an area of approximately 40 hectares (99 acres). It is located just east of the Urban Centre of Fergus, bounded by First Line to the east, Highway 19 to the south, a residential subdivision known as "Summerfields" to the west and both urban and rural developments to the north. Overall, the Site is primarily comprised of a farmstead and agricultural crop fields, with naturalized areas (i.e., woodlands and wetlands) within the western half of the Site. An unnamed tributary of the Grand River transacts through the western half of the Site.

This study aims to identify the location and extent of regulated natural heritage features and functions in accordance with provincial and municipal legislation and policies in order to define constraints and opportunities for development. The study also identifies potential impacts associated with the proposed concept plan, recommends measures to mitigate those impacts, and evaluates compliance with the applicable planning framework. The information presented in this report is based on review of relevant background information sources, consultation with relevant agencies and authorities, and direct observations through field investigations.

This EIS conforms with the guidelines outlined within Section 3.4 of the County of Wellington Official Plan (OP) (2025) and Section E.1.3 of the Township of Centre Wellington OP (2024).

2. ENVIRONMENTAL POLICY REVIEW

2.1. FEDERAL FISHERIES ACT (1985)

In Ontario, Fisheries and Oceans Canada (DFO) manages fish habitat and the Ministry of Natural Resources (MNR, including all name variations) manages fisheries. Fish and fish habitat are protected under the federal Fisheries Act, last amended on August 28, 2019. The protection provisions of the Fisheries Act apply to all fish and fish habitat throughout Canada, and include two (2) key prohibitions, specifically:

- Subsection 34.4(1) – No person shall carry on any work, undertaking or activity, other than fishing, that results in the death of fish.
- Subsection 35(1) – No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.

Proponents are responsible for planning and implementing works, undertakings or activities in a manner that avoids harmful impacts, specifically the death of fish and the harmful alteration, disruption or destruction of fish habitat, also known as a "HADD". Where proponents believe that their work, undertaking or activity will result in negative impacts on fish or fish habitat (i.e., a HADD) that cannot be fully mitigated, a Fisheries Act Authorization may be required.

The assessment of fish habitat present within the Site is further discussed in Section 5.1.

2.2. MIGRATORY BIRDS CONVENTION ACT (1994)

The federal Migratory Birds Convention Act (MBCA) protects the nests, eggs and young of most bird species from harassment, harm or destruction. No permitting or authorization is required under the MBCA; however, proponents who fail to comply with the legislation may be fined if found to be in contravention of the MBCA. Migratory birds that nest within or in the vicinity of the Site are protected under MBCA. The core breeding bird window is from April 1 to August 31, and vegetation clearing outside of this period is the primary mechanism through which proponents avoid impacting breeding birds and potential contravention of the MBCA. If vegetation clearing must occur within the breeding bird window, clearing may be permissible if nesting birds are not impacted.

Natural and semi-natural vegetation communities within the Site have the potential to provide nesting habitat for migratory birds. Removal of vegetation within the Site is required for development. See Section 7 for discussion of recommended vegetation clearing timing restrictions.

2.3. ENDANGERED SPECIES ACT (2007)

The Ontario Endanger Species Act (ESA) provides for the protection and conservation of Species at Risk (SAR) while taking into account social and economic considerations including the need for sustainable economic growth in Ontario. The ESA lists species as endangered, threatened or special concern on the Species at Risk Ontario (SARO) List. Species listed as endangered or threatened, as well as their habitats (e.g., areas essential for breeding, rearing, feeding, hibernation and migration) are afforded legal protection under the ESA.

The general prohibitions set out to protect endangered and threatened species, as well as their habitats include:

- Subsection 9 (1): No person shall,
  a) kill, harm, capture or take a living member of a species that is listed on the SARO List as an extirpated, endangered or threatened species;
- Subsection 10 (1): No person shall damage or destroy the habitat of,
  a) a species that is listed on the SARO List as an endangered or threatened species; or
  b) a species that is listed on the SARO List as an extirpated species, if the species is prescribed by the regulations for the purpose of this clause (2007, c. 6, s. 10 [1]).

Activities that are anticipated to contravene subsections 9 (1) and 10 (1) may be authorized under a permit which may contain conditions as the Minister considers appropriate:

- Subsection 17 (1): After considering an application for a permit, the Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the SARO List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by section 9 or 10.

On June 5, 2025, the Province of Ontario passed Bill 5: Protecting Ontario by Unleashing our Economy Act (2025) which included amendments to the ESA that are now in force, and the creation of the Species Conservation Act (2025) which is not yet in effect.

Two (2) key amendments to the ESA are:

- Undertaking an activity that results in harassment of a species is no longer prohibited, and,
- The definition of habitat is revised to:
  1. in respect of an animal species,
     I. a dwelling-place, such as a den, nest or other similar place, that is occupied or habitually occupied by one or more members of a species for the purposes of breeding, rearing, staging, wintering or hibernating, and
     II. the area immediately around a dwelling place described in subclause (i) that is essential for the purposes set out in that subclause.
  2. in respect of a vascular plant species, the critical root zone surrounding a member of the species, and
  3. in respect of all other species, an area on which any member of a species directly depends in order to carry on its life processes.

A review of potential SAR habitat identified through background review and field investigations and their potential relevance to the Site and/or Study Area is provided in Section 3.3 and Appendix F.

2.4. PROVINCIAL PLANNING STATEMENT (2024)

The Planning Act (1990) empowers the Ministry of Municipal Affairs and Housing (MMAH) to issue the Provincial Planning Statement (PPS) (MMAH, 2024) which is a planning document that provides a framework for and governs development within, the province of Ontario. To preserve various ecological resources deemed significant in the province, development lands must be assessed for the presence of

natural heritage features prior to construction, for which the PPS (MMAH, 2024) defines and affords protections. Natural heritage features are generally specialized forms of habitat which support rare species in Ontario and are important for their environmental and social values. The PPS (MMAH, 2024) natural heritage policy of Section 4.1 which outlines types of natural heritage features and respective development restrictions as listed below:

1. Natural features and areas shall be protected for the long term.
2. The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.
3. Natural heritage systems shall be identified in Ecoregions 6E & 7E, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.
4. Development and site alteration shall not be permitted in:
    a. significant wetlands in Ecoregions 5E, 6E and 7E; and,
    b. significant coastal wetlands.
5. Development and site alteration shall not be permitted in:
    a. significant wetlands in the Canadian shield north of Ecoregions 5E, 6E and 7E;
    b. significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
    c. significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
    d. significant wildlife habitat (SWH);
    e. significant areas of natural and scientific interest (ANSI); and,
    f. coastal wetlands in Ecoregions 5E, 6E and 7E1 that are not subject to Section 4.1.4.b), unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
6. Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
7. Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.
8. Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in Section 4, 5 and 6 above, 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.

A review of natural heritage features and functions identified in the PPS (MMAH, 2024) and their relevance to the Site is presented Section 5 and summarized in *Table 5-1*.

2.5. CONSERVATION AUTHORITIES ACT (1990) AND ONTARIO REGULATION 41/24

The Conservation Authorities Act provides the legal framework for the establishment and operation of Conservation Authorities across Ontario. It's purpose is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario.

Ontario Regulation 41/24 (Prohibited Activities, Exemptions, and Permits) replaced the previous individualized Conservation Authority regulations. This regulation introduced updated definitions, reduced the regulated area around provincially significant wetlands (PSW), and removed permit tests related to pollution and conservation of land.

Conservation Authorities have jurisdiction over areas termed regulated areas, within which, development activities are prohibited under Paragraph 2 of Subsection 28 (1) of the Conservation Authorities Act. The following activities are prohibited unless a permit is issued by the respective Conservation Authority:

1. Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.
2. Development activities in areas that are within the Conservation Authority's area of jurisdiction and are,
    I. hazardous lands;
    II. wetlands;
    III. river or stream valleys the limits of which shall be determined in accordance with the regulations;
    IV. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations; and,
    V. other areas in which development should be prohibited or regulated, as may be determined by the regulations.

The Site is located within the regulated area of the Grand River Conservation Authority (GRCA) which includes the watercourse within the Site. Development or site alteration within their regulated area may be permitted provided development is conducted in accordance with existing policies. No works are proposed within or immediately adjacent to the watercourse.

As regulated features are present, discussion of the Conservation Authorities Act and implementing policies is provided in Section 5.

2.6. COUNTY OF WELLINGTON OFFICIAL PLAN (2025)

The County of Wellington (County) OP intends to give direction over the next 20 years, to the physical development of the County, its local municipalities and to the long-term protection of County's resources. The County's OP was adopted by Wellington County Council on September 24, 1998, approved by the Ministry of Municipal Affairs on April 13, 1999, and came into effect on May 6, 1999. The OP was last updated December 2025.

Section 2.3 of the County OP outlines that lands within Wellington are placed in broad categories consisting of Urban, Rural and Greenland Systems. Urban Systems will be focused on growth, Rural Systems for resource activities and the Greenland Systems focused on protection of the natural heritage system. Schedule B1: Land Use Centre Wellington illustrates the Site and lands to the north, west and south are within the Fergus Primary Urban Centre. Additionally, both Greenlands and Core Greenlands are mapped within the naturalized areas located within the western portion of the Site. Lands to the east within the Study Area are part of the Rural System as Primary Agricultural.

Part 5 of the County OP pertains to the County Greenlands System. Section 5.1 defines the County Greenlands System is intended to include features and areas which are part of the County's natural heritage or areas in which natural or human-made conditions may pose a threat to public safety. With its purpose, outlined in Section 5.2, is to generally protect the County's essential natural features and ecological functions, supporting environmental and public health, reducing natural hazard risks, and providing spiritual, recreational, and sustainable economic benefits for current and future generations.

In terms of the County's planning approach towards the Greenland System (Section 5.3), the County has generally classified natural heritage features into two (2) categories; Core Greenlands and Greenland designations as outlined in Schedule B of the County's OP which was discussed above.

Core Greenlands (Section 5.4) are areas with greater sensitivity or significance and include:

- PSW;
- All other wetlands;
- Habitat of endangered and threatened species;
- Fish habitat; and,
- Hazardous lands.

Policy 5.4.1 indicates that all wetlands within the County are included in the Core Greenlands and development/site alteration will not be permitted in wetlands considered provincially significant as shown on Appendix 3 of the County OP. No PSW were mapped within the Site or Study Area on Appendix 3. All other wetlands are protected from development that would seriously impair their future ecological function. If development is proposed in or adjacent to a wetland, the County requires the appropriate Conservation Authority (i.e., GRCA) to be contacted. No development is proposed within identified wetlands within the Site; however, development is proposed adjacent to wetland features. As such consultation with GRCA was undertaken as part of this EIS and through implantation of the mitigation measures proposed in later section of this EIS, it is anticipated that the future ecological functions of wetlands within the Site will not be impaired.

Policy 5.4.2 generally states that development/site alteration is not permitted in significant habitat of endangered or threatened species or in fish habitat except in accordance with provincial and federal requirements. No in-water works are proposed within the watercourse present within the Site. Further, development/site alteration adjacent to significant habitat of endangered and threatened species requires a satisfactory environmental impact assessment (i.e., through an EIS) that demonstrates there will be no negative impact on the significant habitat of endangered and threatened species or their ecological function. As such a review of potential SAR habitat along with an assessment of their potential relevance to the Site and/or Study Area is included within Section 3.3 and Appendix F of this EIS.

It is anticipated that through the implementation of mitigation measures, the habitat of endangered and threatened species or their ecological functions are not anticipated to be negatively impacted by the proposed development.

Policy 5.4.3 identifies that Core Greenlands include areas containing natural hazards such as floodplains, erosion hazards, and unstable soils, where development is generally directed away to protect public safety and property. Institutional uses, essential emergency services, and activities involving hazardous materials are not permitted in these areas, none of which apply to the proposed development. The policy also restricts development within floodways unless a Special Policy Area exists and only allows development in flood-fringe or other hazard-affected areas when strict criteria are met to ensure safety, avoid environmental impacts, and prevent the creation or worsening of hazards. Overall, the policy prioritizes risk avoidance and environmental protection when considering development near natural hazard features. It is anticipated that hazardous lands are addressed by others and thus, will not be discussed further.

Moreover, Greenlands (Section 5.5) are other significant natural heritage features and are often found within Core Greenlands. When Core Greenlands are located beyond the boundaries of a Core Area, they are identified as Greenlands.

Greenlands include:

- Habitat;
- ANSI;
- Streams and valleylands;
- Woodlands;
- Environmentally sensitive areas;
- Ponds, lakes and reservoirs; and,
- Natural linkages.

Policy 5.5.1 outlines that fish and wildlife habitat are included in the Greenlands System, often as part of other defined natural heritage features. Development/site alteration is not permitted in SWH unless it has been demonstrated that there will be no negative impacts on the habitat or its ecological functions. SWH is discussed in Section 5.4 of this EIS with a SWH assessment matrix provided in Appendix G. It is anticipated that any potential SWH will not be negatively impacted by the proposed development as potential impacts can be successfully mitigated as discussed in later sections.

No ANSI are present within the Site or Study Area thus, Policy 5.5.2 will not be discussed. Policy 5.5.3 generally states that streams and valleylands will be protected from development/site alterations which would negatively impact the stream or valleyland or their ecological functions. These features are assessed and discussed further in Section 5 of this EIS.

Policy 5.5.4 pertains to woodlands and outlines that within the Urban System, woodlands over 1 hectare are considered significant by the County and included in the Greenlands System and detailed studies such as EIS may be used to identify, delineate and evaluate significant of woodlands based on other criteria. Significant woodlands will be protected from development and site alterations which would negatively impact woodlands or their ecological functions. The County encourages good forestry practices and tree removals are subject to the Wellington County Forest Conservation By-law.

The significance of the woodland feature within the western portion of the Site will be assessed further in Section 5.6 and currently no tree removals are proposed within the woodland areas within the Site.

No environmentally sensitive areas, ponds, lakes or reservoirs were identified within the Site thus, Policies 5.5.5 and 5.5.6 will not be discussed.

Section 5.6 of the County OP outlines development controls towards the County Greenlands Systems. Policy 5.6.1 permits agriculture, existing uses, conservation, forestry, aggregate extraction within Mineral Aggregate Areas, open space and passive recreation within Core Greenland and Greenland areas if development impacts are properly addressed. No development is currently proposed within the County Greenland System.

Policy 5.6.2 requires that when development is proposed within or adjacent to the County Greenlands System, proponents must identify potentially impacted natural features, complete an environmental impact assessment (where required), and address additional requirements outlined in Section 4.6.3 of the County OP. The County will only approve development if all Greenland and environmental impact assessment policy requirements have been met to their satisfaction. As such, this EIS has been undertaken to satisfy these above-mentioned requirements and will be reviewed by the County for anticipated approval.

The County encourages the restoration and enhancement of the natural heritage system, particularly in areas experiencing significant development. In such locations, proponents may be required to assess opportunities to improve or establish linkages between natural features to ensure the development maintains, restores, or enhances overall connectivity within the system. Opportunities for restoration and enhancements within the Site will be discussed further in Section 7.

Policy 5.6.4 outlines that Core Greenland areas are to be assigned restrictive zoning that prohibits buildings, structures, and site alteration except where required for environmental management or maintenance. Municipalities may also apply similar restrictive zoning to other Greenland areas, while zoning by-laws can recognize existing uses within Core Greenlands and allow reasonable expansions where appropriate. Setbacks may also be established through zoning to ensure that no buildings or structures are permitted adjacent to Core Greenland areas. As such the Township of Centre Wellington's Zoning by-laws will be discussed further below.

2.7. TOWNSHIP OF CENTRE WELLINGTON OFFICIAL PLAN (2024)

The Township of Centre Wellington (Township) OP was adopted by the Council of the Township on November 24, 2003, and officially approved by the Ontario MMAH on May 31, 2005. Section A.2 of the Township OP indicates while the County OP provides planning policies for local municipalities, the Township has chosen to prepare its own local municipal plan (i.e., Township OP). However, to avoid duplication, the Township has determined that the policies and land use plans of the County OP pertaining to the Greenlands and Rural Systems are appropriate for Township and it was not necessary for the Township to maintain its own local municipal plan policies for the Rural and Greenland Areas. Therefore, the Township OP applies to the Urban Centres of Centre Wellington (i.e., Fergus, Elora-Salem and Belwood) only. The County OP will govern land use in rural areas and will set out broad policies applying to the urban areas, including the determination of the rural-urban boundaries.

Schedule A-1: Land Use Plan Fergus, Elora-Salem illustrates the Site is largely located outside of the Fergus Urban Centre boundary except for the lands north of the trailway which are also designated as Core Greenlands. However, likely due to a more recent OP consolidation, the County OP Schedule B1 depicts the Site within the Urban Centre. As such, both the County and Township OP policies are considered and reviewed herein; however, it is noted the Township generally defers to the County OP for policies related to Greenlands.

Section C of the Township OP outlines general policies, with Section C.3 pertaining to natural heritage. Policy C.3.1. indicates protection applies to natural heritage features and their functions regardless of whether lands are designated Core Greenlands on the land use schedules (i.e., Schedule A). Core Greenlands within the Township's Natural Heritage System, are areas with greater sensitivity or significance and include:

- PSW;
- Habitat of endangered and threatened species; and,
- Floodways and hazardous lands.

With specific policies for Core Greenlands land designation found in Section D.8. As Section D.8 (i.e., Policies D.9.1 to D.8.4) discuss permitted uses, zoning, adjacent lands and mapping of Core Greenland features which were identical to the Core Greenland policies previously discussed in the County OP section. Section D.8 will not be discussed further. While policies of Section C.3, are applicable to general natural heritage issues and lands/features which may not be presently designed on land use schedules are discussed further below.

Section C.3.2 pertains to wetlands and indicates all provincial and locally significant wetlands have been included in the Core Greenlands designation, while all other wetlands are protected and development is not permitted if their future ecological functions will be seriously impaired. Policy C.3.2.1 requires the preparation of an environmental impact assessment (i.e., EIS) in accordance with Section E.1.3 of the Township OP for development proposed on or adjacent to locally significant wetlands. With the interpretation and definition of the limits and adjacent lands of locally significant wetlands generally the responsibility of the Township and Conservation Authority. It is anticipated following the proposed 2026 wetland delineation exercise anticipated with GRCA and the Township, the presence/absence of locally significant wetlands will be confirmed. Remaining wetland policies (i.e., Polices C.3.2.3 to C.3.2.7) outlines the Township encourage responsible wetland management and feature protection is reinforced through restrictive zoning that limits uses to those compatible with maintaining wetland functions.

Moreover, Section C.3.3. states that development/site alteration are not permitting in significant portions of habitat of endangered or threatened species. Development is not proposed within significant portions of endangered or threatened species habitat.

It is anticipated that floodplains and hazardous lands will be addressed by others, as such floodplain policies outlined in Section C.3.4 will not be discussed.

In terms of fisheries protection outlined in Section C.3.5, Policies C.3.5.1 to C.3.5.8 generally aim on protecting fish habitat by keeping water resources clean, preserving or restoring streamside vegetation, and preventing water quality impacts from development. The Township Council may require environmental impact assessments (i.e., EIS) or hydrogeological studies, and protective measures (e.g.,

vegetative buffers along watercourses) which can be enforced through zoning. Mitigation measures towards fish habitat within the Site have been incorporated into the project and will be discussed in later sections of this EIS.

Section C.3.6 generally states development/site alteration are not permitted in significate wildlife or plant habitat unless it has been demonstrated that there will be no negative impacts on the habitat or their ecological functions. A similar requirement applies to streams and valleylands under Section C.3.8. With appropriate mitigation measures, it is anticipated these features or habitats will not be negatively impacted by the proposed development.

Section C.3.9 pertains to woodlands and outlines the Core Greenlands designation may include wooded areas, particularly where they occur alongside other natural heritage features such as wetlands, and otherwise applies to upland woodlands larger than 10 hectares. These woodlands are protected from development/site alteration that could negatively affect their ecological functions, and the Township encourages the use of good forestry practices. Woodlands on Site are evaluated further in Section 5.6.

The Township also encourages corridors (Section C.3.12) between natural heritage features to be protected through the protection and maintenance of all rivers and streams as environmental corridors by requiring minimum setbacks and vegetated riparian buffers (Policy C.3.12.1), and by integrating such corridors into the design of new development or redevelopment where feasible (Policy C.3.12.2). Recommended setbacks towards the watercourse feature within the Site are discussed further in Section 6.2.

2.8. TOWNSHIP OF CENTRE WELLINGTON COMPREHENSIVE ZONING BY-LAW NO. 2009-045 (2025)

The Township Zoning By-law establishes and regulates the land use in the Township by implementing the policies of the Township OP. Schedule A (Map 86), designates mapped wetland areas within the western portion of the Site as Environmental Protection (EP) with associated EP Overlay Areas, the Elora Cataract Trail as Conservation Area (CA) and remaining lands as Agriculture (A).

EP lands generally correspond to Core Greenland features designated by the County OP and primary purpose is to prohibit development within designated Core Greenlands. While the EP Overlay generally corresponds to the Greenlands designation as well as GRCA regulated area limits. The EP Overlay is not a separate zone but an overlay that will indicate to property owners and zoning administrators that a physical feature is present which may require further review or permissions prior to development approvals.

Section 4.12 of the Zoning By-law outlines EP Zone, Municipal Drain and watercourse setbacks. Policy 4.12.1 requires buildings, structures or private sewage treatment systems to be no closer than 30 m from the limit of EP zone without prior written approval from the GRCA. However, Policy 4.12.5 does outline, where an EP Overlay abuts an EP Zone, the setbacks may be waived or reduced if prior written approval by GRCA is obtained or if the requirements of the EP Overlay are fulfilled. Setbacks towards the watercourse feature within the Site is discussed further in Section 6.2 and it is anticipated proposed setback distances towards natural heritage features will be reviewed by the Township and GRCA.

3. STUDY APPROACH

3.1. TERMS OF REFERENCE

A pre-consultation meeting with the Township was completed by the Client on October 9, 2024. With subsequent pre-consultation meeting notes were provided by the Township which included GRCA comments (dated October 10, 2024) (Appendix A). Pre-consultation meeting notes/comments were review by EnVision and relevant comments were incorporated into the proposed Terms of Reference (TOR) (Appendix A) for this EIS.

The TOR was submitted on February 19, 2026, to the Township and GRCA. The TOR was reviewed with comment provided on February 25, 2026, by GRCA. A TOR comment-response matrix was provided to the GRCA and the Township on February 27, 2026. Additional TOR review comments were provided on March 5, 2026, by Natural Resource Solutions Inc. (NRSI) on behalf of the Township.

All TOR review comments from NRSI and GRCA were accepted by EnVision and have been addressed herein.

3.2. AGENCY CONSULTATION AND BACKGROUND INFORMATION REVIEW

The following agencies and information sources were consulted in preparation of this EIS:

- Mandatory Pre-consultation Meeting Notes package (October 9, 2024);
- Ministry of Environment, Conservation and Parks (MECP) (SAR Branch, pers. comm. July 11, 2024);
- MNR (Science Collection Permits Guelph, pers. comm., July 10, 2024);
- GRCA (pers. comm., July 10, 2024);
- Township of Centre Wellington Municipal Official Plan (Office Consolidated November 21, 2024);
- County of Wellington Official Plan (Last updated December 2025);
- DFO Aquatic SAR online mapping tool (DFO, 2024);
- iNaturalist internet site;
- Natural Heritage Information Centre (NHIC) Make a Map (MNR, 2024);
- NHIC (M. Gibson, Natural Heritage Information Officer, pers. comm. March 23, 2026);
- Ontario Breeding Bird Atlas (OBBA) internet site (Bird Studies Canada, 2006);
- Ontario Butterfly Atlas (OBA) internet site (Toronto Entomologists' Association, 2024);
- Ontario GeoHub Aquatic Resource Area (ARA) Line Segment Dataset (LIO, 2026);
- Atlas of the Mammals of Ontario (Dobbyn, 1994);
- Ontario Odonate Atlas (NHIC, 2026);
- Ontario Reptile & Amphibian Atlas internet site (Toronto Entomologists' Association, 2019); and,
- Satellite imagery.

A copy of all email correspondences from the regulatory agencies is provided in Appendix A. A complete list of references used in preparation of this EIS is provided in Section 10 of this report.

GRCA TOR comments required confirmation that the watercourse within the Site was not a municipal drain under Drainage Act. Township staff (M. Iglesias pers. comm. March 4, 2026) confirmed no municipal drains were located within the Site or Study Area. As such the watercourse within the Site is confirmed to be an Unnamed Tributary of the Grand River.

A high-level due diligence was previously completed by EnVision for the Site to identify potential ecological constraints towards development. This included a site reconnaissance visit to collect general existing conditions of the Site, the data recorded during the preliminary visit will also be incorporated into this EIS as additional background information.

3.3. SPECIES AT RISK SCREENING

As part of the background review, a comprehensive list of SAR potentially present at the Site was assembled from the following sources:

- Agency consultation as noted above;
- iNaturalist search including the Site and area 1 km beyond the Site;
- DFO Aquatic SAR online mapping tool (DFO, 2024);
- NHIC Make a Map, Grid squares 17NJ5041, 17NJ5141, 17NJ5040, 17NJ5140 (MNR, 2024);
- Atlas of the Breeding Birds of Ontario internet site, Atlas square 17NJ54 (Bird Studies Canada, 2006);
- Ontario Reptile & Amphibian Atlas internet site, Atlas square 17NJ54 (Toronto Entomologists' Association, 2019);
- Atlas of the Mammals of Ontario (Dobbyn, 1994);
- Ontario Odonate Atlas (NHIC, 2026), Atlas square 17NJ54.
- Ontario GeoHub ARA Line Segment Dataset (LIO, 2026); and,
- OBA internet site, Atlas square 17NJ54.

NRSI TOR review comments indicated additional sources including the Atlas of the Mammals of Ontario (Dobbyn, 1994) and Ontario Odonate Atlas (NHIC, 2026) be included as part of the desktop background review. As indicated above, these sources were reviewed during the preparation of this report and potential species from these atlases were included in the SAR screening.

After assembling the list of potential SAR, a screening exercise was completed to evaluate the potential of each species/feature/function to occur within the Site based on current Site conditions. This assessment identifies SAR species that may be relevant to the Site and that warrant further consideration during field investigation and/or impact assessment, and those that are not relevant to the Site and are thus excluded from further consideration. Results of the SAR screening are summarized in Section 5.3, with the complete assessment matrix included in Appendix F.

3.4. FIELD INVESTIGATION

Field investigations were undertaken in order to confirm and further characterize the natural heritage features and functions on or adjacent to the Site. Field investigations were undertaken between June 2024 and August 2025 and included botanical inventories, vegetation community mapping, fish community surveying, an aquatic habitat assessment, amphibian calling surveys and breeding bird surveys, as outlined in this section and summarized in *Table 3-1* below. Delineation of wetlands within the Site are proposed for the 2026 growing season.

Table 3-1: Field Investigation Details

DATE	TIME/ DURATION	WEATHER CONDITIONS*	SURVEYS COMPLETED
JUNE 26, 2024	7:20 AM to 10:35 AM	Clear skies, ± 22°C, light air, no trace of precipitation	Breeding bird survey (Round 1)
JULY 4, 2024	7:30 AM to 10:45 AM	Mostly clear skies, ± 25°C, slight breeze, no trace of precipitation	Breeding bird survey (Round 2)
JULY 19, 2024	9:40 AM to 1:30 PM	Clear skies, ± 18°C, light air, no trace of precipitation	Fish community survey Aquatic habitat assessment
AUGUST 16, 2024	9:03 AM to 2:30 PM	Cloudy, ± 22°C, slight breeze, no trace of precipitation	Botanical Inventory and vegetation community survey (Summer)
DECEMBER 6, 2024	10:30 AM to 3:30 PM	Cloudy, ± –6°C, moderate breeze, light snow at start of survey	Bat habitat suitability survey
APRIL 22, 2025	11:05 PM to 11:25 PM	Clear skies, ± 7°C, calm, no trace of precipitation	Amphibian calling survey (Round 1)
MAY 14, 2025	9:13 PM to 9:50 PM	Cloudy, ± 17°C, gentle breeze, no trace of precipitation	Amphibian calling survey (Round 2)
MAY 30, 2025	12:00 PM to 6:45 PM	Clear skies, ± 23°C, light air, no precipitation	Botanical Inventory and vegetation community survey (Spring)
JULY 21, 2025	8:50 PM to 10:30 PM	Clear skies, ± 17°C, light air, no trace of precipitation	Amphibian calling survey (Round 3)
AUGUST 22, 2025	12:45 PM to 6:00 PM	Clear skies, ± 19°C, light air, no precipitation	Botanical Inventory and vegetation community survey (Summer)

*Sky cover is defined as Clear (0-25 %), Mostly Clear (25-50 %), and Cloudy (75-100 %).
Precipitation is defined as None, Trace, or Rain.
Wind is defined as Calm (0-2 km/h), Light Air (3-5 km/h), Slight Breeze (6-11 km/h), Gentle Breeze (12-19 km/h), Moderate Breeze (20-28 km/h), Fresh Breeze (29-38 km/h), or Very Windy (39+ km/h).

3.4.1. Ecological Land Classification and Botanical Inventory

A two season botanical inventory of plant species located within the Site was completed by traversing natural/semi-natural vegetation communities within the Site and recording the species observed. The species inventory surveys were completed on August 16, 2024, May 30, 2025, and August 22, 2025. Identified species were evaluated for their provincial rarity (i.e., "S-Rank") and ESA status based on the NHIC species list (NHIC, 2023) and the SARO List to determine significance. A complete list of plant species observed are presented in Appendix C.

Vegetation communities were mapped (Appendix B, Figure 3) and classified according to the Ecological Land Classification (ELC) for Southern Ontario (Lee et al, 1998) and its second approximation (Lee, 2008). Community boundaries were delineated using recent digital aerial orthophotography and refined in the field. Vegetation communities were scored for dominant species cover, community structure, presence of indicator species, and other notable features.

A two-season botanical inventory with the dates specified is justified based on the ecological communities present and subsequent species anticipated to be present. As listed below in *Table 3-2,* herbaceous flora known from the general vicinity of the Site which were not captured within the completed botanical inventory are all identifiable during the August dates surveyed. All have phenology that result in the highest likelihood of observation in August when EnVision surveyed, not September or October (with exception of White Snakeroot (*Ageratina altissima*), which is easily identifiable vegetatively prior to September). All are S5 common species with exception of Cup Plant (S2; *Silphium perfoliatum*) which is most likely a garden escape, and not within its native range in Chatham-Kent County; and, Silver Wormwood (SU; *Artemisia ludoviciana*) unlikely to be native anywhere in southern Ontario. Oakes' Evening-Primrose (*Oenothera oakesiana*) is poorly observed in iNaturalist but is not known to be locally rare (Dougan and Associates, 2009). Thus, the two (2) survey dates in August were better positioned to maximally capture the diversity of herbaceous flora within the Site with full Site coverage.

Table 3-2: Species Known from the Site ±2 km Based on NHIC and iNaturalist Research Grade Herbaceous Species with Fall-based Phenologies Not Captured in Fieldwork for this EIS

SCIENTIFIC NAME	COMMON NAME	S RANK	INATURALIST OBSERVATIONS BY MONTH	LIKELIHOOD OF OBSERVATION
AGERATINA ALTISSIMA	White Snakeroot	S5	Jan: 2, Feb: 0, Mar: 0, Apr: 0, May: 6, Jun: 41, Jul: 171, Aug: 896, Sep: 1203, Oct: 190, Nov: 10, Dec: 1	Aug, Sep*
AMBROSIA ARTEMISIIFOLIA	Common Ragweed	S5	Jan: 2, Feb: 1, Mar: 0, Apr: 0, May: 28, Jun: 217, Jul: 744, Aug: 1201, Sep: 462, Oct: 119, Nov: 10, Dec: 0	Jul, Aug*, Sep
ARTEMISIA LUDOVICIANA	Silver Wormwood	SU	Jan: 0, Feb: 0, Mar: 0, Apr: 0, May: 0, Jun: 9, Jul: 19, Aug: 34, Sep: 16, Oct: 9, Nov: 2, Dec: 0	Jul, Aug*, Sep
CALYSTEGIA SEPIUM	Hedge False Bindweed	S5	Jan: 0, Feb: 0, Mar: 0, Apr: 0, May: 15, Jun: 318, Jul: 486, Aug: 315, Sep: 183, Oct: 39, Nov: 4, Dec: 0	Jun, Jul*, Aug, Sep
CHELONE GLABRA	White Turtlehead	S5	Jan: 6, Feb: 10, Mar: 12, Apr: 7, May: 20, Jun: 20, Jul: 56, Aug: 1005, Sep: 959, Oct: 67, Nov: 8, Dec: 6	Aug*, Sep*
CLINOPODIUM VULGARE	Wild Basil	S5	Jan: 13, Feb: 11, Mar: 5, Apr: 8, May: 31, Jun: 455, Jul: 838, Aug: 582, Sep: 326, Oct: 171, Nov: 47, Dec: 5	Jun, Jul*, Aug, Sep
ELODEA CANADENSIS	Canada Waterweed	S5	Jan: 4, Feb: 0, Mar: 3, Apr: 3, May: 21, Jun: 55, Jul: 105, Aug: 113, Sep: 80, Oct: 58, Nov: 19, Dec: 6	Jun, Jul*, Aug*, Sep, Oct
NABALUS ALBUS	White Rattlesnakeroot	S5	Jan: 0, Feb: 0, Mar: 0, Apr: 2, May: 22, Jun: 25, Jul: 26, Aug: 304, Sep: 293, Oct: 25, Nov: 6, Dec: 0	Aug*, Sep*

SCIENTIFIC NAME	COMMON NAME	S RANK	INATURALIST OBSERVATIONS BY MONTH	LIKELIHOOD OF OBSERVATION
OENOTHERA OAKESIANA	Oakes' Evening-Primrose	S5	Jan: 0, Feb: 0, Mar: 0, Apr: 0, May: 0, Jun: 3, Jul: 7, Aug: 10, Sep: 6, Oct: 2, Nov: 0, Dec: 0	Jul, Aug*, Sep
PANICUM CAPILLARE	Common Panicgrass	S5	Jan: 1, Feb: 0, Mar: 0, Apr: 0, May: 0, Jun: 0, Jul: 21, Aug: 136, Sep: 84, Oct: 19, Nov: 0, Dec: 0	Aug*, Sep
SAGITTARIA LATIFOLIA	Broad-Leaved Arrowhead	S5	Jan: 0, Feb: 1, Mar: 0, Apr: 1, May: 9, Jun: 123, Jul: 510, Aug: 987, Sep: 238, Oct: 17, Nov: 0, Dec: 0	Jul, Aug*, Sep
SILPHIUM PERFOLIATUM	Cup Plant	S2	Jan: 2, Feb: 3, Mar: 1, Apr: 3, May: 30, Jun: 64, Jul: 256, Aug: 380, Sep: 140, Oct: 39, Nov: 4, Dec: 3	Jul, Aug*, Sep

Listed months have the highest relative level of observations based on observation counts of public iNaturalist data which parallel plant phenological timings. The asterisked (*) months are those months with the highest probability of observation.

3.4.2. Wetland Delineation

The delineation of wetland boundaries within the Site is proposed for the 2026 growing season with GRCA and Township of Centre Wellington staff. Once completed, results of the boundary delineations will be incorporated into this EIS.

3.4.3. Breeding Bird Survey

Breeding bird surveys were conducted on June 26 and July 4, 2024, under favourable conditions and temperatures with low/no wind and no precipitation.

Each survey was completed at least six days apart and within 5 hours of sunrise, using a modified version of the Forest Bird Monitoring Protocol (FMBP) (2020). A total of seven (7) point counts were completed throughout the Site, separated by approximately 175 to 750 m (Appendix B, Figure 4). In addition to the point counts, an active search was completed which involved looking and listening for birds while moving between the different habitats in the Site.

Breeding evidence was noted for each species observed on the Site. Breeding evidence is divided into four categories: confirmed (CONF), probable (PROB), possible (POSS), and none (NONE).

- Confirmed breeding evidence includes observations involving young or eggs; observations of adult birds carrying food, nesting material, or a fecal sac; observations of adult birds involved in a distraction display; or observations of adult birds exhibiting physiological evidence of a brood patch.
- Probable breeding evidence includes observations of a bird occupying territory for at least 7 days, visiting a nest site, or exhibiting territorial behaviour; observations of a pair in appropriate habitat; or observations of a pair copulating.
- Possible breeding evidence includes observations of a singing male or observations of a bird in suitable breeding habitat.
- Migrant or vagrant birds are considered to have no breeding evidence.

Breeding bird survey results are discussed in Section 4.3.1.

3.4.4. Amphibian Calling Surveys

Amphibian breeding activity was assessed using modified protocol recommendations from the Marsh Monitoring Program Protocol (Bird Studies Canada, 2009). Using air photo interpretation and field observations, a total of two (2) stations were established along water features (i.e., wetlands/watercourse), separated by approximately 350 m (Appendix B, Figure 4).

Surveys were completed on April 22, May 14, and July 21, 2025. Surveys were completed in spring and early summer, three times, at least 15 days apart. Each survey was conducted at dusk/early evening under appropriate weather conditions (i.e., suitable air temperatures and low wind). Nighttime air temperatures were at least 5 degrees Celsius (°C) or greater for the 'first' survey, at least 10°C or greater for the 'second' survey and at least 17°C or greater for the 'third' survey.

During the surveys, all anuran species heard over the course of the three (3) minute survey period were documented, in addition to the Call Code Level.

The Call Code Level is used to describe the calling intensity and is summarized as one of three codes:

- Code 1 – Individuals can be counted;
- Code 2 – Calls distinguishable with some simultaneous calling; and,
- Code 3 – Full chorus, with continuous and overlapping calls.

Amphibian calling survey results are discussed in Section 4.3.2. A complete list of anuran observations is provided in Appendix D.

3.4.5. Bat Snag Survey

SAR Screening identified the potential for seven (7) SAR bat species currently listed as endangered on the SARO List and protected under the ESA, specifically:

- Eastern Red Bad (*Lasiurus borealis*);
- Eastern Small-footed Myotis (*Myotis leibii*);
- Northern Hoary Bat (*Lasiurus cinereus*);
- Northern Long-eared Myotis (*Myotis septentrionalis*);
- Little Brown Myotis (*Myotis lucifugus*);
- Silver-haired Bat (*Lasionycteris noctivagans*); and,
- Tri-colored Bat (*Perimyotis subflavus*).

A bat habitat suitability assessment was conducted on December 6, 2024, to define the location of potentially suitable habitat for these species using a modified version of the 2022 Maternity Roost Survey (Woodland/Forest) protocol and the 2022 Species at Risk Bats Note provided by the MECP. In addition to the Bat and Bat Habitats: Guidelines for Wind Power Projects (MNR, 2011). Specifically, steps one and two of the MECP four step survey protocol were completed as outlined below:

- Vegetation communities were mapped according to the ELC for southern Ontario (Lee et al., 1998) and its second approximation (Lee, 2008).
- Forest and swamp communities south of the Elora Cataract Trailway were surveyed to identify the location of all snags. As a comprehensive search of most of the woodland areas within the Site were possible, snag density plots were not utilized. Instead, all treed habitats were surveyed by a wandering transect, and all snag trees were inventoried. All Snag Survey Areas are shown on Appendix B, Figure 4.

Acoustic monitoring as outlined in steps three and four of the protocol were deemed not necessary at this time, as no forest habitats will be impacted by the proposed works.

Snag survey results are discussed in Section 4.3.3.

3.4.6. Aquatic Habitat Assessment and Fish Community Surveying

A watercourse feature, an Unnamed Tributary of the Grand River, is present within the Site and runs along the eastern edge of the naturalized area within the northwest portion of the Site (Appendix B, Figure 2). An aquatic habitat assessment was undertaken on July 19, 2024, and information was collected to describe habitat conditions present within the watercourse.

Additionally, as no available fish community data was available through background review, a fish community survey was also undertaken to gain an understanding of fish species present within the watercourse. The survey was completed by qualified and experienced staff, equipped with a Halltech HT-2000 electrofishing backpack unit for fish collection. Fish species collected during the survey were identified and released back into the watercourse.

Aquatic habitat and fish community survey results are discussed in Section 4.4.

3.5. SIGNIFICANT WILDLIFE HABITAT ASSESSMENT

Based on background information and field investigations, an assessment of potential SWH was performed to evaluate the potential of SWH to occur within or adjacent to the Site. Specifically, all types of SWH identified in the Significant Wildlife Habitat: Technical Guide (MNRF, 2000) and the Ecoregion 6E criteria schedules were reviewed to determine if the Site has the potential to support SWH. The results of this evaluation are summarized in Section 5.4 and the complete SWH assessment matrix is provided in Appendix G.

3.6. ASSESSMENT OF SIGNIFICANCE, CONSTRAINTS, IMPACTS AND MITIGATION

The ecological database assembled for the project through agency consultation, background information review, and field investigations was assessed in consideration of the applicable policies outlined in Section 2, to determine the significance and status of the biophysical features and functions within the Site and to identify constraints to development. Constraints were used to establish the proposed development limit and guide the design of the proposed residential development to avoid impacts wherever possible. An assessment of residual impacts was completed, and mitigation measures proposed.

4. EXISTING CONDITIONS

4.1. SITE OVERVIEW

The Site is located just east of the Urban Centre of Fergus, Ontario and is a rectangular shaped parcel approximately 40 ha in area. The Site is bounded by First Line to the east, Highway 19 to the south, a residential subdivision known as "Summerfields" to the west and both urban and rural developments to the north (Appendix B, Figure 1). The Site currently contains a single residential dwelling and associated buildings (i.e., garage), an elevated trailway which transacts through the northwest corner and a disturbed fenced-off area within the southwest corner understood as a proposed future stormwater management (SWM) facility. The Site primarily consists of a large agricultural field and natural heritage features. A 600 m long reach of a watercourse is present within the Site and runs along the eastern edge of the naturalized area within the northwest portion of the Site. The watercourse is an Unnamed Tributary of the Grand River and was identified as a warmwater system with a permanent flow regime. The watercourse appears to have a small catchment area as it appears to originate approximately 350 m upstream of the Site. Downstream of the Site, the watercourse continues underneath several roadway crossings and through residential areas for approximately 700 m prior to discharging into the Grand River. This feature is further described in Section 4.4.

The main terrestrial feature within the Site is in the northwest corner of the Site and is a large, naturalized area composed of a combination of woodland and wetland features (Appendix B, Figure 2). These features are further described in Section 4.2.

4.2. VEGETATION AND WETLANDS

4.2.1. Floral Inventory Summary

A list of vascular plant species recorded during field investigations is provided in Appendix C. Based on the data collected, a total of 150 plant species have been identified within the Site, five (5) of which were identified to the genus level only. Of the 145 species identified, 107 (or 74%) are considered native to Ontario and 38 (or 26%) are considered not native to Ontario. All species observed are considered common, with provincial rarity ranks of S4 (apparently secure) and S5 (demonstrably secure), or SNA (not a suitable target for conservation activities). No other plant species of conservation concern, including threatened or endangered species were recorded.

Units 7, 9, 10 each had high floristic quality scores, representing high-quality habitat. For the purposes of this report, floristic quality was calculated using the Native Floristic Quality Index (FQI) as described by Wilhelm and Masters (1995). FQI is calculated here as the mean native coefficient of conservatism multiplied by the square root of the number of native species. EnVision considers the following ranges of FQI scores to equate approximate habitat quality by proxy: ten or less is low, greater than ten and less than twenty is moderate, twenty to less than thirty-five is high, and thirty-five or more is exceptional.

Six (6) species listed below in *Table 4-1*: are species with moderately high Coefficients of Conservatism of 7 to 8 which generally represent taxa associated with a plant community in an advanced successional stage that has undergone minor disturbance (Oldham, 1995).

The vegetation communities these species belong to are not proposed to be directly impacted and are afforded sufficient setbacks (see Section 7) such that it is anticipated they would not be impacted by the proposed development.

Table 4-1: Species with Moderately High Coefficient of Conservatism

SCIENTIFIC NAME	COMMON NAME	COEFFICIENT OF CONSERVATISM	UNIT					
			7	8	9	10	16	17
CAREX SCABRATA	Eastern Rough Sedge	8	x			x		
EQUISETUM SYLVATICUM	Woodland Horsetail	7		x				
GYMNOCARPIUM DRYOPTERIS	Common Oak Fern	7	x		x			
HYDROCOTYLE AMERICANA	American Water Pennywort	7			x			
TAXUS CANADENSIS	Canada Yew	7						x
TSUGA CANADENSIS	Eastern Hemlock	7				x	x	x

4.2.2. Ecological Land Classification

The vegetation communities within the Site have been mapped (Appendix B, Figure 3) using the standardized ELC for southern Ontario – first approximation (Lee et al., 1998) and the Southern Ontario Ecological Land Classification – Vegetation Type List (Lee, 2008) as needed. No vegetation communities were provincially rare per the NHIC plant communities list (2021). Based on field investigations, identified communities observed are described below. In limited cases, the community numbering is non-sequential due to the merging and revision of communities during field surveys from the preliminary desktop assessment and is not representative of data gaps.

Unit 1: Annual Row Crop, OAGM1

An agricultural field of annual row crops comprised the majority of the Site. A hedgerow containing few Sugar Maples (*Acer saccharum*) was present near the residential lot. No vegetation of interest or constraint was observed.

Unit 2: Residential, CVR

A residential lot was located on the eastern area of the Site. No vegetation of interest or constraint was observed.

Unit 3: Dry-Moist Old Field Meadow, CUM1-1 with a Fresh – Moist White Cedar Coniferous Forest, FOC1 Inclusion

A small Dry-Moist Old Field Meadow was present in the southwestern corner of the Site. The meadow is beginning to succeed to cultural savannah, with sparse trees generally 10 m tall while still less than 25% canopy coverage.

Trees included White Willow (*Salix alba*), American Elm (*Ulmus americana*), Manitoba Maple (*Acer negundo*) and Balsam Poplar (*Populus balsamifera*). The meadow was dominated by Canada Goldenrod (*Solidago canadensis*), with associates of Common Tansy (*Tanacetum vulgare*), Riverbank Grape (*Vitis riparia*), and Red Raspberry (*Rubus idaeus* subsp. *strigosus*).

An approximately 0.15 ha inclusion of young Fresh-Moist White Cedar Coniferous Forest was present in the southwestern corner of the Site within the meadow. The unit was almost entirely dominated by Eastern White Cedar (*Thuja occidentalis*). The majority of Eastern White Cedar had diameter at breast height (DBH) measurements between 15 and 25 cm and was 14 m tall on average. A sparse ground layer included rare Wild Carrot (*Daucus carota*) and Red-osier Dogwood (*Cornus sericea*). Garbage dumping was observed within this woodland.

Unit 5: Deciduous Swamp, SWD

A small young Deciduous Swamp was present in the southwestern corner of the Site. On the basis of its young age and high levels of disturbance, it was not classifiable to a community vegetation type. In previous EIS reports, this area was referred to as a Willow Mineral Thicket Swamp (SWT2-2). However, the canopy appears to have filled since then and contained a mix of Balsam Poplar in the north end, White Willow, Peach-leaved Willow (*Salix amygdaloides*), and Manitoba Maple. The shrub layer was dense and included occasional Common Buckthorn (*Rhamnus cathartica*) with rare to occasional Meadow Willow (*Salix petiolaris*) and Cottony Willow (*Salix eriocephala*). The ground layer varied from upland to wetland species with proximity to the watercourse and represented disturbed conditions. Upland species included Tall Goldenrod (*Solidago altissima*), Herb-robert (*Geranium robertianum*) and Broad-leaved Enchanters Nightshade (*Circaea canadensis*), while wetlands species included Jewelweed (*Impatiens capensis*), Sensitive Fern (*Onoclea sensibilis*), Spotted Joe-Pye Weed (*Eutrochium maculatum*) and Coltsfoot (*Tussilago farfara*).

Unit 6: Norway Spruce - European Larch Coniferous Plantation, CUP3-9

A small mid-age to mature Norway Spruce - European Larch Coniferous Plantation existed on the western portion of the Site. The canopy was dominated by Norway Spruce (*Picea abies*) with occasional Eastern White Pine (*Pinus strobus*). The canopy layer was approximately 25 m tall, with abundant trees having DBH measurements greater than 50 cm and between 25 and 50 cm. The subcanopy and understory had abundant Common Buckthorn as well as a second rare invasive species February Daphne (*Daphne mezereum*) in addition to native Chokecherry (*Prunus virginiana*). The ground layer contained frequent Intermediate Wood Fern (*Dryopteris intermedia*), and occasional Common Buckthorn, Canada Mayflower (*Maianthemum canadense*) and Herb-robert.

Unit 7: Birch - Conifer Organic Mixed Swamp, SWM6-1

A large mature Birch - Conifer Organic Mixed Swamp was present in the center of the natural heritage feature. This community is ranked S4, which is not provincially rare, but quite uncommon. It also contained species with high Coefficient of Conservatism scores and overall had high levels of native diversity as measured by its FQI score. It is a relatively sensitive community not tolerant of disturbance.

The canopy and subcanopy layers were dominated by White Birch (*Betula papyrifera*), Trembling Aspen (*Populus tremuloides*) and Eastern White Cedar. Trees 25 to 50 cm DBH were abundant and greater than 50 cm DBH were occasional. The understory layer contained occasional Common Buckthorn and Chokecherry. The ground layer was dominated by Sensitive Fern with associates of Spinulose Woodfern (*Dryopteris carthusiana*), Northeastern Lady Fern (*Athyrium filix-femina* var. *angustum*), and Dwarf Raspberry (*Rubus pubescens*). A groundwater seep was observed containing an indicator species of seeps, Rough Sedge (*Carex scabrata*).

Two soil cores were collected. The first contained fibric organic substrates to a depth of 75 cm, followed by mottled silt to a depth of 85 cm, and then bedrock was reached at 85 cm. The second core was similar in composition.

Unit 8: Mixed Mineral Meadow Marsh, MAMM3-1 with Willow Mineral Thicket Swamp, SWT2-2 inclusion

A small Mixed Mineral Meadow Marsh was located on the western area of the Site adjacent to the subdivision to the south. It was dominated by Spotted Jewelweed, White Panicled Aster (*Symphyotrichum lanceolatum*) and Glossy-Leaved Aster (*Symphyotrichum lanceolatum, S. firmum*). A willow swamp thicket was present in the center of the marsh with various shrub willow species (*Salix petiolaris, S. eriocephala,* and *S. bebbiana*). The outer edges of the marsh transitioned to a narrow band of cultural meadow (unmapped) abutting existing development.

Unit 9: White Cedar Coniferous Organic Swamp, SWC3-1

White Cedar Coniferous Organic Swamp was present along the east boundary of the natural heritage feature abutting the proposed development as well as the rail corridor. The canopy was strongly dominated by Eastern White Cedar with occasional hardwood species White Birch, Trembling Aspen and Red Maple (*Acer rubrum*). Minimal understory was present. The ground layer was highly diverse comprising 49 species observed. The dominant ground layer species were Spotted Jewelweed, Spinulose Woodfern, Northeastern Lady Fern and Sensitive Fern.

Several soil cores were collected with mixed results generally showing organic substrates over shallow bedrock:

- Core 1: organic substrates to a depth of 43 cm followed by silty clay;
- Core 2 and 3: organic substrates to a depth of 15 cm followed by mottled silty clay to a depth of 28-32 cm followed by bedrock at 32 cm; and,
- Core 4: organic substrates to a depth of 30 cm followed by silty clay followed by bedrock at 40 cm.

Unit 10: Fresh - Moist White Cedar Coniferous Forest, FOC4-1

Mature Fresh - Moist White Cedar Coniferous Forest was present on the northwestern area of the Site, north of the rail tracks. It was strongly dominated by Eastern White Cedar, occasional White Birch, Trembling Aspen and American Elm. Sparse subcanopy and understory layers contained White Ash (*Fraxinus americana*), Common Buckthorn and Chokecherry. The ground layer was likewise sparse and was dominated by Canada Mayflower, Yellow Trout Lily (*Erythronium americanum*), Fern species and sedge species (*Carex* spp.)

Unit 11: Red-osier Mineral Thicket Swamp, SWT2-5 with Mixed Swamp, SWM inclusion

A Red-osier Mineral Thicket Swamp was located on the northwestern corner of the Site north of the rail tracks. The swamp was flooded to a shallow depth of 10 cm water or more at south end, and was less flooded towards the north. The shrub layer was dominated by Red-osier dogwood, Meadow Willow, Pussy Willow (*Salix discolor*), and Swamp Red Currant (*Ribes triste*). The ground layer contained Spotted Joe-Pye Weed, Reed Canary Grass (*Phalaris arundinacea*), Field Horsetail (*Equisetum arvense*), Marsh Seedbox (*Ludwigia palustris*). The east edge bordering on Unit 10 transitioned to treed wetland conditions.

Unit 12: Dry – Fresh Upland Deciduous Forest Ecosite, FOD4

A Dry – Fresh Upland Deciduous Forest Ecosite was present within the northwestern area of the Site. It was highly disturbed and contained a mix of canopy species with no clear dominance including Sugar Maple, Black Cherry (*Prunus serotina*), Trembling Aspen and Red Maple. Common Buckthorn was dominant in the understory.

Unit 14: Dry – Fresh Upland Deciduous Forest Ecosite, FOD4

Similar to Unit 12, this community was present north of the rail tracks. However, it was more representative of a Sugar Maple dominated FOD5-1 towards its north-east end, containing spring ephemerals such as Yellow Trout Lily and Yellow Violet (*Viola pubescens*).

Unit 15: White Spruce- European Larch Coniferous Plantation, CUP3-8

This community was similar to and north of Unit 6. It was dominated by planted White Spruce (*Picea glauca*) instead, but otherwise had similar conditions representative of an older mature plantation.

Unit 16: Mixed Forest, FOM

This community was surveyed only briefly and represented an upland transition from the Unit 17 wetland. The canopy was dominated by Eastern Hemlock (*Tsuga canadensis*), White Birch and Black Cherry with a sparse ground layer of Canada Mayflower, Wild Sarsaparilla (*Aralia nudicaulis*), Broad-leaved Enchanters Nightshade and ferns.

Unit 17: White Cedar Mineral Coniferous Swamp, SWC1-1

A White Cedar Mineral Coniferous Swamp was present north of the rail tracks. It was dominated by Eastern White Cedar with occasional Trembling Aspen. The ground layer was sparse containing occasional Sensitive Fern, White Avens (*Geum canadense*), Spinulosa Woodfern, Broad-leaved Enchanters Nightshade and rare patches of Fowl Mannagrass (*Glyceria striata*).

The soil core collected was of loam substrate to a depth of 26 cm followed by mottled silty sand, resulting in a moisture regime of six.

Unit 18: Graminoid Mineral Shallow Marsh, MAS2

At the south-west tip of Unit 17, was a small open marsh dominated in separate, but equal parts of Narrow-leaved Cattail (*Typha angustifolia*) and Reed Canary Grass, with abundant Bittersweet Nightshade (*Solanum dulcamara*) throughout.

4.3. WILDLIFE

4.3.1. Breeding Bird Survey

A total of 40 bird species were observed at the Site over the two survey periods. Refer to Appendix D for a list of birds observed during breeding bird surveys and through incidental observations within the Site.

Breeding was confirmed for three (3) species: Red-winged Blackbird (*Agelaius phoeniceus*), Common Grackle (*Quiscalus quiscula*), and European Starling (*Sturnus vulgaris*).

Breeding was considered probable for 18 species such as Northern Cardinal (*Cardinalis cardinalis*), Indigo Bunting (*Passerina cyanea*), American Goldfinch (*Spinus tristis*), Song Sparrow (*Melospiza melodia*) and Black-capped Chickadee (*Poecile atricapillus*).

Breeding was considered possible for 15 species such as Great Crested Flycatcher (*Myiarchus crinitus*), Killdeer (*Charadrius vociferus*), Northern Flicker (*Colaptes auratus*), Common Yellowthroat (*Geothlypis trichas*) and American Crow (*Corvus brachyrhynchos*).

Breeding evidence was not identified for three (3) species including Ring-billed Gull (*Larus delawarensis*), Turkey Vulture (*Cathartes aura*), and Great Blue Heron (*Ardea herodias*).

Overall, most bird species identified during breeding bird surveys are considered generalist species which are common within Ontario and do not require specialized habitats. However, one SAR bird species; Barn Swallow (*Hirundo rustica*) was observed within the Site during surveys.

Barn Swallow is listed as a species of special concern on the SARO List. A single Barn Swallow was observed approximately 30 m north of Breeding Bird Station 2 and two (2) Barn Swallow were observed northwest of Breeding Bird Station 5 during the July 4, 2024, survey. Potential suitable nesting habitat may be present within the garage found within the Site.

4.3.2. Amphibian Calling Surveys

Amphibian calling surveys completed as part of the present study. During survey 1 at Amphibian Calling Station AC1, a single American Toad *(Anaxyrus americanus)* was heard within 50 m of the survey station along with choruses of Spring Peepers (*Pseudacris crucifer*) heard between 50 and 100 m of the station. Additionally, nearby AC1, a single Western Chorus Frog (*Pseudacris triseriata*) was heard calling from the constructed wetland feature located to the south of AC1 (Unit 3). Moreover, during survey 2 approximately two (2) American Toads were heard between 50 and 100 m of the survey station, in addition to a chorus of Spring Peppers and another American Toad beyond 100 m. Approximately two (2) Gray Treefrogs (*Hyla versicolor*) were also heard within the agricultural field between AC2 and the constructed wetland to the south during survey 2. No anurans were heard during survey 3.

At Amphibian Calling Station AC2, no anurans were heard calling during surveys 1 and 3. Anurans were heard during survey 2 located beyond the 100 m survey station boundary consisting of a single Chorus Frog, a Gray Treefrog and a chorus of Spring Peepers. No anuran calls were heard within 100 m of AC2 during all survey rounds.

During daytime surveys, American Toads were also observed and/or heard generally within the woodland areas within the Site.

Overall, only four (4) commonly found frog species were heard during amphibian calling surveys. American Toads and Spring Peepers are generalist habitat species and can typically be found in a wide variety of terrestrial habitats in or near waterbodies. Spring Peepers will breed almost anywhere there is shallow water available and in the summer move to forested and shrubby upland habitats, spending their time in the leaf litter. Gray Treefrogs typically lives in woodlands and can be found in many types of tree and shrub communities near permanent water. Western Chorus Frogs typically inhabit forest openings around woodland ponds and can be found in or near damp meadows, marshes, bottomland swamps and temporary ponds or even urban areas (Ontario Nature, 2026). As such these species are most likely present within the general vicinity associated with the nearby SWM pond to the southwest and naturalized areas within the Site based on the calls located near AC1.

4.3.3. Bat habitat Assessment and Snag Survey

A comprehensive survey of the treed areas was undertaken within the Site on December 6, 2024. Snag survey areas are shown on Appendix B, Figure 4. The location and condition of all observed snag trees were inventoried with results of the bat habitat suitability survey are presented in *Table 4-2* below.

During survey, 15 potential habitat trees were identified within the woodland areas within the Site, with the majority of identified snags considered to have low to moderate habitat potential for bats. No potential snags were identified within survey areas located near the existing residential dwelling and trees along the northeastern boundary.

As the total area of the Site containing the snags is approximately 6.47 ha (i.e., the snag survey area depicted within the western half of the Site), the snag density within the Site was calculated at approximately 2.32 snags/ha (i.e., 15 snags divided by 6.47 ha). Based on MECP guidelines and in EnVision's experience surveying for maternity roost trees, conifer trees which comprise a majority of the surveyed woodland are less preferred as habitat (i.e. typically have fewer cavities or loose bark), as such the low snag density may be attributable to the dominance of conifer and mixed forest communities (Appendix B, Figure 3). In accordance with the Bat Survey Standard Note (MECP, 2022), this density is lower than the 10 snags/ha density required to be considered high quality potential roost habitat.

Table 4-2: Snag Survey Results Summary

SNAG ID	COMMON NAME	SCIENTIFIC NAME	DBH[1] (cm)	HEIGHT OF TREE (m)	CAVITY	LOOSE BARK	WOODPECKER HOLE	KNOT HOLE	DECAY CLASS	HEIGHT OF CAVITY (m)	OVERALL ROOST QUALITY
T1	Unknown	*Unknown*	27	4.5	Yes	No	No	No	6	0.75, 1.25	Low
T2	Uknown	*Unknown*	19	2.5	Yes	No	No	No	6	1.25	Low
T3	Unknown	*Unknown*	27	4.5	Yes	No	No	No	6	1,3	Low
T4	White Pine	*Pinus strobus*	31	15	Yes	Yes	Yes	No	2	3.5	Low-Medium
T5	White Pine	*Pinus strobus*	50	18	Yes	No	No	No	1	2	Low-Medium
T6	White Pine	*Pinus strobus*	27	14	No	Yes	No	No	2	-	Medium
T7	Eastern White Cedar	*Thuja occidentalis*	31	15	No	No	Yes	Yes	5	-	Medium
T8	White Birch	*Betula papyrifera*	29	15	Yes	No	No	Yes	4	4-5,	Medium
T9	White Birch	*Betula papyrifera*	32	10	No	Yes	No	Yes	5	-	High
T10	White Birch	*Betula papyrifera*	34	10	No	Yes	No	Yes	6	3,6	High
T11	White Pine	*Pinus strobus*	47	13.5	No	No	No	Yes	5	5,10	Medium
T12	Alder species	*Alnus sp.*	10	5	No	No	Yes	No	4	-	Medium
T13	White Birch	*Betula papyrifera*	-	9	No	No	Yes	Yes	6	-	High
T14	Sugar Maple	*Acer saccharum*	41	18	Yes	Yes	No	Yes	4	16	Medium
T15	Unknown	*Unknown*	40	6	No	No	No	Yes	6	-	High

4.3.4. Incidental Wildlife Observations

During several field investigations there were a number of incidental wildlife observations within the vicinity. Refer to Appendix D for a full list of Wildlife Species.

4.4. AQUATIC HABITAT

4.4.1. Unnamed Tributary of the Grand River

A watercourse feature which is an Unnamed Tributary of the Grand River (Appendix B, Figure 5), is present within the Site and runs along the eastern edge of the naturalized area within the northwest portion and generally flows towards in a southern direction. The watercourse appears to have a small catchment area as it appears to originate approximately 350 m upstream of the Site, as two headwater branches are located near the intersection of Dickson Drive and Glengarry Crescent. Downstream of the Site, the watercourse continues underneath several roadway crossings and through residential areas for approximately 700 m prior to discharging into the Grand River.

Within the Site, the watercourse reach is approximately 600 m in length and is considered an open water watercourse with a defined channel form. Near the upstream limit, flow enters through the woodland and continues through a small cement culvert underneath the elevated Elora Cataract Trailway. Channel banks were flat with occasional undercutting observed. Aquatic habitat generally consisted of entirely of flat morphology with water depth considered shallow as it was approximately 0.15 m or less during the time of assessment. The wetted width was approximately 0.5 m. Substrate consisted of finer and small course materials, dominated by sand over a soft silt bottom with occasional small patches of gravel observed. No aquatic vegetation was observed within the watercourse. Riparian habitat primarily consisted of woodland. However, located 100 m downstream from the upstream limit, as the channel meanders just outside of the woodland edge for a short section (approximately 150 m), the riparian habitat consisted of overhanging grassy herbaceous vegetation. Due to the upper canopy, the channel was mostly shaded.

Additionally, located approximately 200 m upstream, from the downstream limit of the Site, a side channel with presumed groundwater seepage was observed. Water temperature of the seepage was measured to be 12°C during the time of assessment (July 19, 2024). However, no other indication of groundwater such as the presence of Watercress (*Nasturtium officianale*), iron staining or precipitate were observed within this side channel or within the entire reach of the watercourse within the Study Area. In terms of in-water cover habitat, near the upstream half of the watercourse, a few woody debris piles of sticks, branches and logs were found within and/or overhanging the channel. These debris piles would not appear to restrict fish passage. After flow exits the woodland downstream of the Site, flow continues for 100 m through a meadow area with grassy, overhanging vegetation before entering a steel culvert underneath Highway 19.

4.4.2. Fish Community

Fish community sampling was undertaken and result in the capture of a single species; Brook Stickleback (*Culaea inconstans*). Based on a review of the MNR ARA (MNR, 2024) data base, it indicates that this watercourse referred to as a warmwater watercourse. Thus, the Unamed Tributary of the Grand River within the Site is determined to provide permanent direct fish habitat for tolerant warmwater species.

5. SIGNIFICANT FEATURES AND FUNCTIONS SUMMARY

A review of the natural environment features (as defined below) and functions identified within the Site and within the Study Area is presented in *Table 5-1*.

5.1. FISH HABITAT

The conservation, management, and protection of fish and fish habitat are the responsibility of DFO. DFO is given authority to achieve this under the federal Fisheries Act. In Section 35 (1) of the Fisheries Act details that no person shall carry on any work, undertaking, or activity that results in harmful alternation, disruption or destruction of fish habitat. Plans to undertake activities in or near water that have the potential to negatively affect fisheries, shall be avoided or mitigated by following best practices such as those described in the 'Measures to protect fish and fish habitat' on the DFO website. Any negative impacts to fish and fish habitat that remain following the implementation of avoidance and mitigation measures, is considered to have the potential to negatively affect a fishery. This potential for negative effects has to be reviewed by DFO under the Fisheries Act. If DFO determines that negative effects are likely as a result of the project, then a Fisheries Act Authorization may be required.

As fish habitat is present within the Site within the Unnamed Tributary of the Grand River, mitigation measures are considered necessary to avoid negative impacts and are discussed in Section 7.2.

5.2. SIGNIFICANT WETLANDS

Wetlands are defined in the PPS (MMAH, 2024) as lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. There are four (4) major wetland types, which are classified as swamps, marshes, bogs, and fens. A PSW is a wetland identified as provincially significant using evaluation criteria and procedures established by the province, as amended from time to time (i.e., the Ontario Wetland Evaluation System [OWES]). A PSW generally has a high function as evaluated through biological, social, hydrological and special features components; specifically, a wetland is significant if it has been scored as having 600 or more points, 200 or more points in the biological or the special features components of the OWES evaluation. Evaluated wetlands are mapped by the MNR.

Based on a review of the NHIC online mapping tool (MNRF, 2022) and GRCA mapping, no PSW are present on or within 120 m of the Site. However, background review and field investigations identified several unevaluated wetlands within the Site and within the Study Area (Appendix B, Figure 3). An OWES evaluation of wetlands within the Site was not proposed as part of the TOR, nor requested by the Township and is not considered within the scope of this report. Requests were limited to delineation of wetlands per OWES. As such the wetlands within the Site will be treated as unevaluated. Wetlands are a regulated feature of GRCA. As wetlands are present within the Site, impacts are anticipated and mitigation measures are considered necessary and will be discussed in Section 7.3.

5.3. ENDANGERED AND THREATENED SPECIES

Background information review, field investigations and agency consultation (GRCA, MNR, pers. comm. July 11, 2023; Appendix A) identified the potential presence of the following endangered or threatened species under the ESA in the general vicinity of the Site:

- Eastern Meadowlark (*Sturnella magna)* (threatened);
- Eastern Whip-poor-will (*Antrostomus vociferus*) (threatened);
- Silver Shiner (*Netropis photogenis*) (threatened);
- Bobolink (*Dolichonyx oryzivorus*) (threatened);
- Bank Swallow (*Riparia riparia*) (threatened);
- Chimney Swift (*Dolichonyx oryzivorus*) (threatened);
- Butternut (*Juglans cinerea*) (endangered);
- Eastern Red Bat (endangered);
- Eastern Small-footed Myotis (endangered);
- Northern Hoary Bat (endangered);
- Little Brown Myotis (endangered);
- Northern Long-eared Myotis (endangered);
- Silver-haired Bat (endangered); and,
- Tri-colored Bat (endangered).

A comprehensive review of the potential for these endangered and threatened species to occur within the Site is presented in Appendix F. Based on that assessment, the following species are confirmed or potentially present within the Site:

Endangered Bats including Eastern Small-footed Myotis, Little Brown Myotis, Northern Hoary Bat, Eastern Red Bat, Silver-haired Bat, Northern Long-eared Myotis and Tri-colored Bat.

ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. No bats were observed within the Site; however, no targeted surveys were conducted. As forested habitats and trees are present within the Site and existing buildings may contain alternative roosting areas for bats, these species may be present. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. No tree or snag removals are proposed within woodland areas within the Site. However, as the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site, impacts to bat species may occur. Impacts and mitigation measures towards bat species will be further discussed further in Section 7.

None of the other endangered or threatened species are considered likely based on the SAR screening exercise presented in Appendix F, and no other endangered or threatened species were detected during field investigations.

5.4. SIGNIFICANT WILDLIFE HABITAT

Wildlife habitat is defined as areas where plants, animals, and other organisms live and find adequate amounts of food, water, shelter, and space needed to sustain their populations. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their annual life cycle; and areas that are important to migratory or non-migratory species (MMAH, 2024).

Wildlife habitat is referred to as significant if it is ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system (MMAH, 2024).

Criteria for determining significance of wildlife habitat are provided in provincial guidance, but municipal approaches that achieve or exceed the same objective may also be used.

Provincial guidelines and criteria for the identification of SWH are detailed in the Significant Wildlife Habitat: Technical Guide (MNRF, 2000), and the Significant Wildlife Habitat Criterion Schedule for Ecoregion 6E (MNRF, 2015b). No additional municipal criteria are known for the Township of Centre Wellington.

SWH is described under the following categories:

- Seasonal concentrations of animals;
- Rare vegetation communities or specialized habitats for wildlife;
- Animal movement corridors; and,
- Habitats of species of conservation concern.

Based on the SWH assessment in Appendix G, most SWH types are not present within the Site or Study Area as required habitat sizes and/or indicator species abundance thresholds were not met. Refer to the SWH assessment matrix for full details of other SWH types (e.g., seasonal concentration of animals, rare vegetation communities, etc.) which will not be discussed below. Only two (2) SWH types have potential to occur within the Site and/or Study Area including:

5.4.1. Seeps and Springs

Two (2) potential groundwater seeps/springs were observed within the woodland feature within the Site (Appendix B, Figure 5). The potential seep/spring closer to the watercourse feature within the Site discharge into the Unnamed Tributary of the Grand River. The second potential seep/spring was noted in the SWM6-1 (Unit 7) community and was observed containing a groundwater indicator species including Rough Sedge (*Carex scabrata*). As at least two (2) potential seeps/springs were observed within the Site, seeps/springs SWH are confirmed present within the Site.

The woodland and associated watercourse features within the Site will be retained with setbacks and no development within these features are proposed. As such these potential seeps/springs will be retained and thus, are not anticipated to be impacted by the proposed development and thus, will not be discussed further.

5.4.2. Special Concern and Rare Wildlife Species

Species of Conservation Concern include species identified as special concern on the SARO List (O. Reg. 240/08), and provincially rare species with an "S-Rank" of S1-S3. Background information review and agency consultation identified the potential presence of the following special concern or provincially rare species in the general vicinity of the Site:

- Barn Swallow (special concern);
- Wood Thrush (*Hylocichla mustelina*) (special concern);
- Snapping Turtle (*Chelydra serpentina*) (special concern);
- Eastern Wood-pewee (*Contopus virens*) (special concern); and,
- Woodland Vole (*Microtus pinetorum*) (special concern).
- Painted Skimmer (*Libellula semifasciata*) (S3).

An assessment of the habitat potential for the above-mentioned species in and within 120 m of the Site is provided in Appendix G. These species were given special consideration during the field investigations.

Based on SWH review, only one Species of Conservation Concern, Barn Swallow was observed within the Site with potential habitat identified within the existing garage. Potential impacts and mitigation measures towards Barn Swallows will be discussed further in Section 7.

No other potential SWH was identified within the Site.

5.5. SIGNIFICANT AREAS OF NATURAL AND SCIENTIFIC INTEREST

An ANSI is defined as area of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education (MMAH, 2024). ANSIs can be ranked as Provincially or Regionally significant.

The NHIC database (MNRF, 2022) indicated that no Life Science Provincially Significant ANSI exists on or within 120 m of the Site. Thus, impacts and mitigation will not be discussed further as it relates to an ANSI.

5.6. SIGNIFICANT WOODLANDS

Significant woodlands are defined as treed areas that provide environmental and economic benefits such as erosion prevention, water retention, and provision of habitat, recreation and the sustainable harvest of woodland products (MMAH, 2024). Woodlands include treed areas, woodlots or forested areas and vary in their level of significance.

The identification and assessment of significant woodlands throughout a planning area is the responsibility of the respective planning authority (i.e., Wellington County and the Township of Centre Wellington). To aid planning authorities, the province has established a standard set of criteria detailed in the Natural Heritage Reference Manual (OMNR, 2015). Based on the provincial criteria, planning authorities may develop their own set of criteria to be used in their respective planning area. Due to the number of woodlands and studies required, woodlands may not necessarily be assessed as significant by a planning authority. In addition to the planning authority's mapping, refined woodland significance

assessment may be undertaken following detailed studies later in the planning stage (e.g., this development application) to confirm their status. Woodland significance is determined by evaluating key criteria related to woodland size, ecological function, uncommon woodland species, and economic/social value.

Policy 5.5.4 of the County's OP states that in the urban system, woodlands over 1 ha are considered significant by the County and are included within the Greenland System. Policy C.3.9 of the Township OP indicates that Core Greenland areas include wooded areas particularly those associated with other natural heritage features such as wetlands or upland woodlands over 10 ha in area.

A small treed area, an approximately 0.15 ha inclusion of young Fresh-Moist White Cedar Coniferous Forest was present in the southwestern corner of the Site within the Unit 3 meadow adjacent to the watercourse. It does not meet the 1 ha minimum size requirement of the urban area to be considered significant. No setbacks or protections are afforded to this unit. However, where practical, this small woodlot should be protected if possible, per Township Policy C.3.9.

Contiguous forested units (CUP3-8, CUP3-9, SWD, SWC3-1, SWM6-1, FOD4, SWC1-1, FOM, and FOC4-1) are included within the County Greenlands System. As the overall contiguous woodland area is approximately 12 ha in size, this woodland meets the described size criteria and is therefore considered a significant woodland. Impacts and mitigation measures are discussed within Section 7.3.

5.7. SIGNIFICANT VALLEYLANDS

The PPS (MMAH, 2024) refers to a significant valleyland as a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year and is ecologically important in terms of features, functions, representation or amount, and contributes to the quality or diversity of an identifiable geographic region or natural heritage system. The local planning authority is responsible for identifying and evaluating significant valleylands.

Significant valleylands were not identified within the Site and thus, will not be discussed further.

5.8. SIGNIFICANT FEATURE SUMMARY

The results of the assessment of key natural heritage features identified on or adjacent to the Site are provided in *Table 5-1* below.

Table 5-1: Significant Features Summary

FEATURE	PRESENT	COMMENT
FISH HABITAT	Yes	Based on the aquatic habitat assessment, fish community survey and the MNR's ARA (MNR, 2024), the Unnamed Tributary of the Grand River transacting through the Site was determined to provide permanent direct fish habitat for tolerant warmwater species. As fish habitat is present within the Site, impacts and mitigation measures are considered necessary with will be discussed in Section 7.2.
SIGNIFICANT ANSI	No	Based on review of background documents including the County OP, the Township OP and MNR's NHIC Make-a-Map database, there were no ANSI identified on or within 120 m of the Site.
THREATENED AND ENDANGERED SPECIES HABITAT	Yes	The SAR screening completed Appendix F suggests that the Site and adjacent lands have the potential to provide habitat for seven (7) SAR bat species. Endangered Bats: these species may be present within the Site due to the presence of potential forest and building-related roosting habitats; however, no bats were observed and the woodland snag density does not meet thresholds for high-quality maternity habitat. While no woodland tree removals are proposed, the removal of buildings and scattered trees may still potentially impact these bat species. As such potential impacts and mitigation to endangered bat species that will be addressed in Section 7. None of the other endangered or threatened species are considered likely based on the SAR screening exercise presented in Appendix F, and no other endangered or threatened species were detected during field investigations.
SIGNIFICANT WILDLIFE HABITAT	Yes	Refer to Appendix G for a full SWH evaluation matrix. The following SWH types have potential or have been confirmed to occur within the-Site: seeps/springs and habitats of species of conservation concern. Seeps and Springs: Two (2) potential groundwater seeps/springs were identified within the woodland feature within the Site including one which discharges into the watercourse feature and another associated with the SWM6-1 (Unit 7) wetland community. As at least two (2) seeps/springs are present, confirms seeps/springs as SWH within the Site. As all woodland areas (including seeps/springs) and the watercourse feature will be retained with appropriate setbacks, and no development is proposed within these features, seeps/springs within the Site are not anticipated to be impacted and will not be discussed further. Habitats of Species of Conservation Concern: One (1) Species of Conservation Concern (Barn Swallow) as observed on the Site, with potential habitat identified in the existing garage. Impacts and mitigation measures will be addressed in Section 7. No other potential SWH was identified on the Site.
SIGNIFICANT WETLAND	No	Based on background review including MNR's Make-a-Map database and GRCA mapping, there were no PSW identified on or within 120 m of the Site. However, several unevaluated wetlands were indicated within the Site and Study Area. These unevaluated wetlands were observed and verified during field investigations and shown on Appendix B, Figure 3. As the wetlands are present within the Site, impacts are anticipated and mitigation measures are considered necessary and are discussed in Section 7.3.
SIGNIFICANT WOODLAND	Yes	Contiguous forested units (CUP3-8, CUP3-9, SWD, SWC3-1, SWM6-1, FOD4, SWC1-1, FOM, and FOC4-1) are included within the County's Greenlands System approximately 12 ha in size. This woodland meets the County's described size criteria and is therefore considered a significant woodland. Impacts and mitigation measures are discussed within Section 7.3.
SIGNIFICANT VALLEYLAND	No	No significant valleylands have been identified on or within 120 m of the Site.

6. PROPOSED DEVELOPMENT

Proposed development includes several residential neighborhood areas along with internal streets for residential access to the surrounding community through First Line and Wellington Road 19. A SWM facility and recreational park are proposed near the southwestern area of the Site. Several potential trail connections are proposed throughout the Site to connect to the Elora Cataract Trailway.

To facilitate the proposed development plan, the removal of the existing residential dwelling within the Site along with nearby isolated treed features and existing trees along the northeastern and southeastern boundaries of the Site will be required. However, no tree removals associated with the large woodland feature within the northwestern portion of the Site are proposed.

Refer to Appendix B, Figure 7 and Appendix H for the proposed development land use plan.

7. IMPACTS AND MITIGATION

Potential impacts to the natural environment features and functions identified on the Site and adjacent lands, and proposed mitigation measures, are presented below, based on the proposed works outlined in Section 6 and identified on Appendix B, Figure 7. General mitigation measures applicable to the overall Site are discussed in Section 7.5. Impacts and mitigation measures proposed here should not be considered exhaustive as additional measures may be imposed by the planning authority as conditions of development permits and approvals.

Proposed setback distances (i.e., ecological constraints) are shown on Appendix B, Figure 6 which were used during concept planning to determine the overall development limit which guided the proposed development plan. Thus, the proposed development plan does not extend beyond the proposed development limit.

7.1. SPECIES AT RISK AND SPECIES OF CONSERVATION CONCERN

Endangered Bats

No removals of woodland trees or identified snags are proposed. However, the proposed development will require the removal of trees nearby the existing residential dwelling and trees along the northeastern and southeastern boundaries of the Site. Thus, localized tree removals may generally impact these species in the form of potential habitat loss. It is recommended that trees be removed outside of the Southern Ontario bat active season (i.e., April 1 to September 30). As such, tree removals should be undertaken between October 1 to March 31 to minimize potential impacts to bat species. Through avoidance mitigation, it is anticipated that these species will not be adversely affected by the proposed Site work.

Barn Swallow

A few Barn Swallows were observed within the Site. While no cup-shaped nesting structures were identified within the Site, the existing garage may provide suitable habitat for this species. However, as Barn Swallows are listed as special concern within the SARO List, they are not afforded habitat protection by the ESA. Furthermore, within the context of the broader landscape of the surrounding rural community and agricultural fields, there is an abundance of buildings to provide suitable habitat for this species and thus, the habitat provided by the existing garage is not limited within the landscape.

To mitigate potential impacts to Barn Swallows it is recommended that building removals occur outside of the regional breeding bird window Zone C2 (i.e., April 1 to August 31). To further mitigate potential impacts to breeding birds (and roosting bats), it is recommended tree and building removals should be undertaken between October 1 to March 31 to avoid sensitive bird and bat windows. If building removals are proposed within the breeding bird window, it is recommended that the buildings be inspected by a qualified biologist to inspect and confirm the absence of any active bird nests or species protected under the MBCA (1994) prior to building demolition. Through these recommended timing windows for removals, it is anticipated that Barn Swallows will not be adversely impacted by the development of the Site.

7.2. WATERCOURSE AND FISH HABITAT

The Unnamed Tributary of the Grand River transecting the Site was determined to provide permanent direct fish habitat for tolerant warmwater species. No minimum setback distances towards fish habitat were stipulated within applicable local guidance documents (e.g., County OP, Township OP, etc.). As such the proposed setback distance from fish habitat will be largely based on provincial guidance documents. Table 11-3 from the Natural Heritage Reference Manual (NHRM) for Natural Heritage Policies of the Provincial Policy Statement, 2005 (MNR, 2010) recommends a minimum natural vegetated cover of either 30 m or 15 m from warmwater streams. Given that the Unnamed Tributary of the Grand River contains a warmwater tolerant simple fish community, it is anticipated a 15 m fish habitat setback is sufficient to maintain the watercourses form and function. Further, this 15 m setback is also deemed an appropriate as this proposed setback distance is consistent with the setback placed on the opposite side of the feature adjacent to the Summerfields development (Burnside, 2017).

Currently, no in-water works are required for the proposed development and thus, no direct impacts to fish habitat are anticipated. However, indirect impacts associated with degradation of water quality may occur during construction. To mitigate these indirect water quality impacts, the implementation of erosion and sediment control (ESC) measures and standard mitigation measures as outlined in Section 7.5 are anticipated to address the potential for adverse effects to fish habitat during construction. As no in-water works are currently proposed and a 15 m fish habitat setback will be maintained from the proposed development, through the implementation of proper mitigation measures it is anticipated that the Unnamed Tributary of the Grand River and its associated fish habitat will not be negatively impacted by the proposed development.

7.3. SIGNIFICANT WOODLANDS AND WETLANDS

The woodland and wetland features of the natural heritage system generally overlap and generally share impacts and mitigation and are therefore discussed together herein. Both features are subject to future delineation exercises to determine their limits in the field with agency review.

Based on the setbacks proposed and depicted in Appendix B, Figure 6, It is anticipated that the significant woodland and wetland features will be protected. Due to adjacent agricultural use in ELC Unit 1: OAGM1, tree roots along the eastern/southern edge of forested/wetland units have been regularly disturbed and are not anticipated be further disturbed in the long term from the proposed development.

In regard to woodlands, the OP require the protection of significant woodland features through good forestry practices; however, no specific setback distances from significant woodlands are described. The majority of the significant woodland abutting the development is also wetland and is afforded a 15 m setback. However, the north edge of the woodland along the Elora Cataract Trailway is provided a lesser setback of 5 m. Despite the overall features significance, this portion is borderline hedgerow in function and even if a larger setback were applied, the feature is still fragmented by the Elora Cataract Trailway. Moreover, the Elora Cataract Trailway is highly active in use already so additional setback restrictions are not deemed merited.

Therefore, a 5 m setback which protects the dripline in situ is anticipated to preserve the limited function of the portion south of the Elora Cataract Trailway. The larger patch of woodland north of the trail is setback in excess of 15 m.

In regard to wetlands, the County OP (Policy 5.4.1) indicates all other (i.e., non-significant) wetlands will largely be protected and development impairing their future ecological functions will not be permitted. Specific setback distances are not stated within either the County or Township OP. As such, a 15 m setback will be applied from the wetland edge. This is proposed to be adequate to protect the feature's form and function when combined with general mitigation measures outlined below (e.g. ESC measures).

No direct impacts are anticipated to the significant woodland or the wetland. Potential indirect impacts are outlined below.

During construction, potential indirect impacts of the proposed development on the woodland/wetland may include:

- Changes to hydrological inputs to the woodland/wetland during construction.
- Earthworks and site grading may increase the risk of sediment-laden runoff entering the woodland/wetland, potentially altering water quality and smothering woodland/wetland vegetation.
- Construction activities may generate dust that could settle on woodland/wetland vegetation, impairing photosynthesis and respiration.
- Heavy machinery and construction operations may disrupt the behavior wildlife that use the woodland/wetland for essential parts of their life cycle, such as attracting mates, nesting or foraging.
- Chemical Contamination: Accidental spills of fuels, lubricants, or other hazardous materials may migrate toward the woodland/wetland, posing risks to flora and fauna.
- Dumping of construction material may cause inadvertent encroachment into the woodland/wetland.

Post-construction, potential indirect impacts of the proposed development on the woodland/wetland may include:

- Long term changes to water inputs from increased impervious surfaces (e.g., buildings, driveways and roads) resulting in reduced infiltration.
- Potential increased use of the trails in the area may be a pathway for new invasive species to enter; however, the risk is not considered to be higher than the existing use.
- The ability of the woodland/wetland to function as habitat for fauna may be adversely affected by increased local foot traffic via noise and/or threats to wildlife such as dogs or other pets. Educational signage to limit residential impacts is described in general mitigation below.

The majority of impacts are typical of general construction practices and applicable mitigation is provided in Section 7.5 General Mitigation Measures below.

In regard to water balance of the wetland, and as described in the Desktop Hydrogeological Review (EnVision, 2025), a future pre-to post-development site specific climate-based water balance assessment should be undertaken to quantify the potential impacts (runoff/infiltration), with consideration of the wetland. And if deemed necessary, mitigation measures that may be applied include disconnecting roof runoff for redirection to infiltration galleries, bioretention systems, grass swales, and/or other LID strategies.

In order to mitigate any long-term impacts post-construction, setbacks will be vegetated as described below in Section 7.4 to reduce any impact of increased overland surface run-off, reduce direct access to the woodland and wetland along their eastern boundary, and to provide increased physical separation to reduce light and noise impacts and local foot traffic from the proposed development.

7.4. SETBACK VEGETATION

The goal of vegetating the setbacks (i.e., vegetation protection zone [VPZ]) is to reduce indirect impacts of the proposed development, primarily edge effects of noise, light, wind and dust, by providing a barrier. Secondarily, the goal is to eliminate future potential encroachments. The goal is not to replicate the habitat adjacent to development (e.g., Unit 9 SWC3-1 or Unit 10 FOC4-1) as those soils and moisture conditions are unlikely to be easily replicable, especially the organic substrate conditions. Rather, a canopy, shrub layer and ground layer of native species which perform as a barrier from development is sufficient.

The proposed steps (and recommended seasonal timing) of the woodland VPZ enhancement plan is as follows:

1. Remove/control invasive species (spring/summer; or late summer to early fall of the year prior if using herbicide).
    a. Generally, this is limited to occasional mature Common Buckthorn in Unit 5, toward the south end of the Site. Large trees (greater than 5 cm in diameter) should be cut at the base and stump-treated with a systemic herbicide following Best Management Practices (Ontario Invasive Plant Council, 2025).
2. Amend the soil with topsoil or organic material as needed (summer).
    a. Plant vegetation (fall). Species lists of native vegetation and planting arrangements may be developed at a later stage. Common native plants known from the Site and/or from Wellington County and readily available in nurseries are recommended. In addition to Eastern White Cedar, early successional and fast-growing canopy species such as Poplar and Birch are recommended.
3. Monitor for survival.
    a. Monitoring and/or plant survival warranties of the VPZ are recommended for two growing seasons post-planting to ensure establishment and provide for adaptive remediation if needed.

7.5. GENERAL MITIGATION MEASURES

The following general recommendations are proposed to reduce impacts to local wildlife and key natural heritage features on and within 120 m of the Site. This should not be considered a comprehensive list as recommendations of other technical specialties and planning approval and/or permitting associated with these works may result in additional requirements.

7.5.1. General Erosion and Sediment Control Mitigation

- It is recommended that an ESC plan be developed for the Site during detailed design and future project stages.
- Stockpiled materials within the Site must be stabilized and contained from entering the watercourse/wetlands using appropriate ESC measures including but not limited to silt fence, hay and/or tarps.
- To mitigate and limit encroachment into naturalized areas and to guide user behaviour of the existing trails, prior to occupancy, residences will be informed of the sensitive nature of these adjacent naturalized features to limit encroachment of humans and pets into these areas. Additionally, signs and fencing, or thorny plants can be installed near these features to further inform and/or deter human/pet encroachment. Educational signage may inform users about:
  - The significance of the adjacent natural areas and the vegetated setback;
  - The impact of dumping garden waste;
  - The importance of following any potential trails and not disturbing the surrounding habitats; and,
  - The recommendation to keep pets on a leash and to not allow cats to roam freely outdoors.
- Construction activity should be carried out based on the principle that prevention of sediment laden run-off is required. This is to be accomplished by minimizing exposed soil to the extent possible to undertake the necessary works. For example, once soil disturbance (e.g., excavation) has begun in a particular area, the works is to be completed in that area including final grading and stabilization, prior to moving on and exposing additional areas of soil. Soil stabilization works will be carried out in an ongoing process, heavily influenced by weather forecasts.
- All ESC measures should be functional at all times during construction until the Site is deemed stabilized and at which time they are deemed no longer required. It is recommended, measures will be inspected daily during construction maintained during construction until they are no longer required.
- During construction, it is recommended additional ESC supplies (e.g., silt fence, etc.) be kept within the Site for the maintenance of installed ESC measures, and for the installation of additional ESC measures as required, to address erosion and sedimentation issues.
- Cover exposed surfaces with a suitable ESC measure(s) (e.g., hay, mulch, wood chips, etc.) as required. Maintain coverage until no longer required.
- Where silt fencing is required and ground is too rocky to install regular silt fence, the contractor may substitute with woodchip berm or bio-log.

- All exposed areas not finished with asphalt, concrete, gravel, rip-rap or sod, are to be hydroseeded. Unfinished slopes that cannot practically be hydroseeded due to weather shall be covered with mulch. Finished slopes that cannot practically be hydroseeded due to winter weather shall be covered with erosion control blankets.
- All reasonable precautions to prevent and minimize the spillage, misplacement or loss of fuels and other hazardous materials shall be taken. All applicable acts and regulations shall be followed and spill-kits will be kept within the Site at all times during construction.

7.5.2. General Mitigation for Wildlife and Naturalized Areas

- Temporarily store, handle, and dispose of materials used or generated (e.g., organics, soils, woody debris, temporary stockpiles) during site preparation and construction in a manner that prevents their entry into naturalized areas. It is recommended that materials temporarily stored within the Site are to be stockpiled as far away from the tree driplines, wetlands and the watercourse (i.e., Unnamed Tributary of the Grand River) to mitigate negative impacts. Areas where clearing/grubbing will result in exposed soils within 30 m of aquatic habitat features should be isolated from surrounding areas with sturdy silt fencing that is maintained until exposed soils are revegetated to prevent erosion and sedimentation which could impact fish and fish habitat.
- Work areas will be clearly delineated on construction drawings and in the field to minimize the potential for unnecessary encroachment into natural areas.
- Maintenance, cleaning, or refuelling work on machinery should be completed a minimum of 30 m from sensitive natural environment features (e.g., wetlands, woodlands, etc.).
- The contractor shall not destroy active nest, or wound or kill birds of species protected under the MBCA and/or Regulations under that MBCA. When active nests are encountered, the contractor shall contact a qualified biologist and/or the MNR for direction.
- Should vegetation or trees need to be removed, to avoid impacts to nesting birds (and roosting bats, if present) it is recommended that trees or vegetation be removed between October 1 and March 31.
- Tree removal should conform to local, municipal, or regional by-laws, and should be performed by properly trained and accredited individuals.
- Wildlife incidentally encountered during construction shall not be knowingly harmed and shall be allowed to move away from construction on its own.
- In the event wildlife encountered during construction does not move from the construction zone, the contractor shall contact MNR for direction regarding the relocation of the animal to a safe area.
- If SAR are encountered within or adjacent to the construction work area, the MECP SAR Branch is to be contacted immediately for further direction.

8. CONCLUSIONS

The Client is proposing the development of several residential neighborhoods with associated internal roads along with a park, SWM facility within the Site. As the Site contains several natural heritage features including significant woodlands, a GRCA regulated watercourse and wetlands which are components of the County Greenlands System, requires the completion of an EIS identified by the County's and Township's planning documents.

This EIS integrates findings from background information review, a previous ecological undertaken by EnVision on February 29, 2024, and field investigations completed during the 2024/2025 field season and has been prepared in accordance with the guidelines outlined within the County and Township OP in addition to the TOR approved by the GRCA and Township. The delineation of wetland boundaries within the Site are proposed for the 2026 growing season with GRCA and Township staff. Once completed, results of the boundary delineations will be incorporated into this EIS.

Throughout concept design development, proposed setback distances (i.e., ecological constraints) were applied to establish the overall development limit (Appendix B, Figure 7). As a result, to limit potential impacts towards identified natural heritage features within the Site, the proposed development plan does not extend beyond the proposed development limit.

Based on review of available background data and field investigations, results of this EIS include:

- Most of the species potentially found within the vicinity of the Site are common in Ontario.
- While no SAR species were observed during field investigations, the Site has the potential for seven (7) bat species due to the presence of potential forest and building related roosting habitats.
- It is recommended to avoid direct impacts to endangered SAR bats, removal of the trees within the Site occur outside of the active bat period and conducted between October 1 and March 31.
- Most of the SWH within Ecoregion 6E were not identified within the Site or Study Area. Only two (2) SWH types were confirmed and/or potentially present within the Site.
    - Springs and seeps were confirmed present as two (2) seeps/springs were identified within the Site. These seeps/springs will be retained within the associated woodland and watercourse areas to be retained.
    - The habitat of one (1) Species of Special Concern (i.e., Barn Swallow) was considered potentially present within the Site. Through adherence to recommended timing windows, this species is not anticipated to be negatively impacted by the proposed development.
- During the breeding bird surveys, Barn Swallow (special concern) was observed within the Site.
    - Barn Swallows were identified as possible breeders, and while no cup-shaped nests were observed the existing garage may provide suitable nesting habitat for this species. As human-made structures are not limited in the general area, it is anticipated this species will be able to find suitable habitat and foraging areas beyond the Site.

- A regulated watercourse feature identified as an Unnamed Tributary of the Grand River is present within the Site. Largely based on provincial guidelines and consideration of setbacks placed on the opposite side of the feature, a 15 m fish habitat setback is proposed. As the proposed development is considered sufficiently setback from the watercourse with no direct impacts (i.e., in-water works) to fish habitat anticipated. It is anticipated that indirect impacts will be addressed through the application of suitable mitigation measures and fish habitat will not be adversely impacted.
- The woodlands located within the Site were deemed significant woodlands based on County criteria. This feature is proposed to be retained in full with appropriate setbacks applied and thus, no direct impacts are anticipated towards this feature. Indirect impacts can be addressed through general mitigation measures.
- The wetlands located within the Site were unevaluated. They are proposed to be retained in full with appropriate setbacks applied and thus, no direct impacts are anticipated towards them. Indirect impacts can be addressed through general mitigation measures and any findings of a future water balance study.
- No significant ANSI, significant wetlands or significant valleylands were found on or within 120 m of the Site.

In conclusion, as the proposed development limit which was established based on identified ecological constraints, is intended to be fully respected, and with appropriate mitigation measures, no adverse impacts on the existing natural heritage features or their ecological functions within the Site are anticipated. Furthermore, it is anticipated that the proposed development conforms to applicable natural heritage protection legislation, policies, and regulations as outlined in Section 2. Nonetheless, the potential adverse effects towards associated natural heritage features were and will continue to be assessed throughout future project design and planning stages, and corresponding mitigation measures identified throughout the design process will be applied.

9. SIGNATURES

Prepared by

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Prepared by

Anne Ha, B.Sc.
Ecologist – ISA Certified Arborist ON-3179A
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Prepared by

Joseph Mentlik, B.Sc., M.Sc.
Ecologist
jmentlik@envisionconsultants.ca

Reviewed by

Alex Stettler, H.B.Sc., PMP, CAN-CISEC
Senior Project Manager – Ecology
astettler@envisionconsultants.ca

9.1. QUALIFIER

EnVision prepared this report solely for the use of the intended recipient in accordance with the professional services agreement. In the event a contract has not been executed, the parties agree that the EnVision General Terms and Conditions, which were provided prior to the preparation of this report, shall govern their business relationship.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment. The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the report are based on the observations and/or information available to EnVision at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by EnVision and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

EnVision disclaims any obligation to update this report if, after the date of this report, any conditions appear to differ significantly from those presented in this report; however, EnVision reserves the right to amend or supplement this report based on additional information, documentation or evidence.

EnVision makes no other representations whatsoever concerning the legal significance of its findings. The intended recipient is solely responsible for the disclosure of any information contained in this report. If a third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. EnVision does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report.

EnVision has provided services to the intended recipient in accordance with the professional services agreement between the parties and in a manner consistent with that degree of care, skill and diligence normally provided by members of the same profession performing the same or comparable services in respect of projects of a similar nature in similar circumstances. It is understood and agreed by EnVision and the recipient of this report that EnVision provides no warranty, express or implied, of any kind. Without limiting the generality of the foregoing, it is agreed and understood by EnVision and the recipient of this report that EnVision makes no representation or warranty whatsoever as to the sufficiency of its scope of work for the purpose sought by the recipient of this report.

In preparing this report, EnVision has relied in good faith on information provided by others, as noted in the report. EnVision has reasonably assumed that the information provided is correct and EnVision is not responsible for the accuracy or completeness of such information.

Unless otherwise agreed in writing by EnVision, the report shall not be used to express or imply warranty as to the suitability of the site for a particular purpose. EnVision disclaims any responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions and/or costs.

This limitations statement is considered an integral part of this report.

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APPENDIX A:

Email Correspondences

Anne Ha

From: Anne Ha
Sent: March 23, 2026 2:05 PM
To: 'NHIC-Requests (MNR)'
Cc: Alex Stettler
Subject: RE: Ontario Mammal and Odonate Atlas Data Search Results Request - 6409 First Line, Fergus, Ontario

Hi Matthew,

Thank you for providing the Odonata records, this was greatly appreciated!

I will reach out if I have any further questions regarding the data.

Kind regards,

Anne Ha ISA Certified Arborist

Ecologist

Cell: 647-997-5650

envisionconsultants.ca

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From: NHIC-Requests (MNR) <nhicrequests@ontario.ca>
Sent: March 23, 2026 1:49 PM
To: Anne Ha <aha@envisionconsultants.ca>
Subject: Re: Ontario Mammal and Odonate Atlas Data Search Results Request - 6409 First Line, Fergus, Ontario

Hi Anne,

We do have some Odonata records you can view here…

We made it available for self screening, but just note it hasn't been updated in a little while… you will be able to filter by map square if there are any data at this location from the Odonata Atlas.

Best,

Matthew Gibson, M.Sc.
Natural Heritage Information Officer | Science and Research Branch
Ministry of Natural Resources | Ontario Public Service
matthew.t.gibson@ontario.ca

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Please note: As part of providing accessible customer service, if you have any accommodation needs, require communication supports, or alternate formats please let me know.

From: Anne Ha <aha@envisionconsultants.ca>
Sent: March 23, 2026 5:41 PM
To: NHIC-Requests (MNR) <nhicrequests@ontario.ca>
Cc: Alex Stettler <astettler@envisionconsultants.ca>
Subject: RE: Ontario Mammal and Odonate Atlas Data Search Results Request - 6409 First Line, Fergus, Ontario

Hi Matthew,

Yes, we have already included MNR's NHIC Make-a-Map 1 km grid squares for the general vicinity, self-screening tool for SAR at this location in addition to other sources including:

- Ontario Breeding Bird Atlas (OBBA) 10 km grid square results;
- Ontario GeoHub Aquatic Resource Area (ARA) datasets;
- Ontario Reptile & Amphibian Atlas (ORRA) 10 km grid square results;
- Ontario Butterfly Atlas (OBA) 10 km grid square results;
- iNaturalist; and,
- DFO Aquatic SAR online mapping tool.

As such, to add to our screening, I reached out to NHIC to request any available Ontario Mammal Atlas (Dobbyn 1994) records as well as Ontario Odonata Atlas as these datasets are not as accessible as the sources listed above.

If available, we kindly request that NHIC provide any licensed-access detailed information relevant to the project area.

We greatly appreciate your help with facilitating this request.

Thank you,

Anne Ha ISA Certified Arborist

Ecologist

Cell: 647-997-5650

envisionconsultants.ca

From: NHIC-Requests (MNR) <nhicrequests@ontario.ca>
Sent: March 23, 2026 1:26 PM
To: Anne Ha <aha@envisionconsultants.ca>
Cc: Alex Stettler <astettler@envisionconsultants.ca>
Subject: Re: Ontario Mammal and Odonate Atlas Data Search Results Request - 6409 First Line, Fergus, Ontario

> You don't often get email from nhicrequests@ontario.ca. Learn why this is important

Hi Anne,

Thank you for your email. Have you already used our online self-screening tool for SAR at this location? If you have already done so, we would be happy to provide licensed access to detailed information for your project.

If not, here are some instructions:

Instructions for clients on how to use:

The NHIC map layer on Make-a-Map Natural Heritage Areas contains location data for species of conservation concern (including species at risk), plant communities, wildlife concentration areas, and some natural heritage areas. Locations are displayed as 1 X 1 kilometre squares.

Visit "Make A Map Natural Heritage Areas", click on the blue button "Make a natural heritage map now", read/accept the disclaimer, and then:

- Looking at the toolbar in the top left of the screen, click on the "Select Map Layers" button.
- Turn on the "NHIC 1 Km Grid" layer.
- Zoom in to your area of interest in one of three ways: using the wheel on your mouse; or select the "Navigation" tab above the toolbar and click on the "Zoom In" button; or select the "Find Data" tab above the toolbar and click on the "Search By Location" button.
- Select the "Find Information" tab above the toolbar and click on the "NHIC Report" button, then hold down your mouse button and drag your mouse over the 1km square or squares you would like to generate a species list for.
- A new window will open with a list of species of conservation concern, plant communities, wildlife concentration areas, and natural heritage areas known from the square(s) you selected.
- To work with the list offline, copy and paste it into Excel.
- To select different 1km squares of interest, click on the "Clear Selection" button, and then once again click on the "NHIC Report" button.

To protect some species, their names aren't displayed on Make-a-Map. Instead, they are identified as "restricted species". If you encounter a record for a restricted species and need to know the name of the species, contact the Natural Heritage Information Centre at 705-755-2159 or NHICrequests@ontairo.ca.

Please note that an absence of information does not necessarily mean that a location has no natural heritage features (including species at risk). These data are not a substitute for site visits.

Matthew Gibson, M.Sc.
Natural Heritage Information Officer | Science and Research Branch
Ministry of Natural Resources | Ontario Public Service
matthew.t.gibson@ontario.ca

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Taking pride in strengthening Ontario, its places and its people

Please note: As part of providing accessible customer service, if you have any accommodation needs, require communication supports, or alternate formats please let me know.

From: Anne Ha <aha@envisionconsultants.ca>
Sent: March 20, 2026 4:49 PM
To: NHIC-Requests (MNR) <nhicrequests@ontario.ca>
Cc: Alex Stettler <astettler@envisionconsultants.ca>
Subject: Ontario Mammal and Odonate Atlas Data Search Results Request - 6409 First Line, Fergus, Ontario

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environmental Impact Study (EIS) for the property located at 6409 First Line, Fergus, Ontario (Site). Refer to **Figure 1** attached for Site location details.

The purpose of this email is to request any available Ontario Mammal Atlas (Dobbyn 1994) records as well as Ontario Odonata Atlas occurrence data for the Site.

If possible, can NHIC please provide any species records associated with the Site or the surrounding 1 km grid, along with available observation dates, atlas squares, and source information. Any other details or information that you can provide to help our species inventory would be greatly appreciated.

Please let me know if any additional information is required to proceed with this data request.

Thank you,

Anne Ha ISA Certified Arborist
Ecologist
Cell: 647-997-5650

Anne Ha

From: Alex Stettler
Sent: March 5, 2026 2:57 PM
To: Mariana Iglesias; Herthana Siva
Cc: Catherine Pan; Lee Wheildon; Caitlyn Turton; Chantalle Pellizzari; Anne Ha; Jessica Conroy; Brett Salmon
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission

Hi Mariana,

Thanks for sending over the ToR comments from your peer reviewer. We had reviewed them and will address them in the EIS EnVision is drafting to support the required Planning Act approvals.

Regards,
alex

Alex Stettler
Senior Project Manager - Ecology
Cell: 647-222-1420

envisionconsultants.ca

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From: Mariana Iglesias <MIglesias@centrewellington.ca>
Sent: March 5, 2026 1:11 PM
To: Herthana Siva <hsiva@sorbara.com>
Cc: Catherine Pan <cpan@sorbara.com>; Lee Wheildon <LWheildon@centrewellington.ca>; Caitlyn Turton <cturton@centrewellington.ca>; Chantalle Pellizzari <CPellizzari@centrewellington.ca>; Anne Ha <aha@envisionconsultants.ca>; Alex Stettler <astettler@envisionconsultants.ca>; Jessica Conroy <jconroy@grandriver.ca>; Brett Salmon <BSalmon@centrewellington.ca>
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission

Hi Herthana,

Please find attached comments on the EIS TOR from the Township's peer review consultant.

Regards,
Mariana

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

March 5, 2026 Project No. 3699

Mariana Iglesias
Township of Centre Wellington
1 Macdonald Square
Elora, ON N0B 1S0

Dear Mariana Iglesias,

RE: 6490 First Line, Fergus – Terms of Reference Peer Review

Natural Resource Solutions Inc. (NRSI) was retained by the Township of Centre Wellington in February 2026 to provide peer review services relating to the property located at 6490 First Line, Fergus, Ontario, in the Township of Centre Wellington (the "Site"). This peer review includes a review of the following Terms of Reference:

- *Terms of Reference, 6490 First Line, Fergus, Ontario* prepared by Envision Consultants Ltd. (February 19, 2026).

We have also reviewed comments provided by the Grand River Conservation Authority (GRCA) on February 25, 2026, and responses provided by Envision Consultants Ltd. on February 26, 2026. The TOR largely follows suitable field methodologies and appropriately considers impacts to natural features. NRSI's primary comments are summarized here, and provided in additional detail in the table below:

- Complete a more fulsome review of available background data;
- Conduct a desktop screening to evaluate potential for significant late-season vegetation habitat on the Site;
- Ensure the bat habitat assessment is conducted in accordance with latest guidance from the Ministry of Environment, Conservation and Parks;
- Evaluate significant wildlife habitat in accordance with the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (OMNRF 2015);
- Conduct an assessment of significance of woodland and wetland features on the Site; and
- Complete a woodland delineation with Township staff.

Table 1 below includes NRSI's peer review comments. Should you have any questions or comments regarding these comments, please do not hesitate to contact us.

Sincerely,
Natural Resource Solutions Inc.

Hashveenah Manoharan, M.F.C.
Terrestrial and Wetland Biologist, Certified Arborist

Jack Richard, R.P.F.,
Registered Professional Forester

Table 1. Peer Review Comments

Comment Number	Section	NRSI Comments
1	Review of Background Information	The TOR lists background sources that will be consulted to identify natural heritage features on the Site. These documents include the Natural Heritage Information Centre (NHIC) database, the Department of Fisheries and Oceans Canada aquatic SAR mapping, the Ontario Breeding Bird Atlas (Bird Studies Canada 2006), and applicable natural heritage policies. NRSI recommends that further review of available natural heritage information sources be completed to determine the presence of potential suitable habitat for wildlife species in the study area. Additional background information sources that should be consulted include the Ontario Reptile and Amphibian Atlas (Ontario Nature 2019), Ontario Mammal Atlas (Dobbyn 1994), Ontario Butterfly Atlas (MacNaughton et al. 2023), and Ontario Odonate Atlas (NHIC 2026). The results of these reviews should be presented in the EIS, and a discussion of suitable habitat for any Species at Risk (SAR) or Species of Conservation Concern (SCC) identified in the review should be incorporated into the report.
2	Vegetation Inventory	It is noted that three vegetation inventory surveys have already been completed on the Site, and two of these surveys were conducted six days apart within the summer growing season. As a fall vegetation survey was not conducted, it is recommended that a desktop screening exercise be completed to determine the potential for rare or significant vegetation species to occur within the study area. This screening should be focused on the identification of vegetation species not readily observable during the spring and summer survey periods. The desktop screening should consider background information sources including citizen science databases (such as iNaturalist) and available natural heritage studies. Locally rare and significant species identified through the background review should be screened to determine which have the potential to occur within the Site, and whether the identified species would be observable during spring and summer vegetation surveys. These findings should be presented in the EIS.
3	Bat Habitat Assessment	The bat habitat suitability assessment should be conducted in accordance with the Ministry of Environment, Conservation and Parks (MECP) *Species at Risk Bats Survey Note* (2022a), *Maternity Roost Surveys (Forests/Woodlands)* (2022b) and *Bat and Bat Habitats: Guidelines for Wind Power Projects* (MNR 2011).
4	Significant Habitat Assessment and Wildlife Documentation	Significant Wildlife Habitat should be surveyed based on the requirements outlined in the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (OMNRF 2015).
5		Schedule B1 of the County of Wellington Official Plan identifies Core Greenlands and Greenlands on the Site, associated with the wetland and woodland features. Woodland and wetland features should be evaluated for significance in the EIS, in accordance with policies outlined in the County of Wellington Official Plan and the Township of Centre Wellington Official Plan. The boundary of the woodland feature should be delineated and confirmed by Township staff.

Mariana Iglesias, MCIP, RPP, CAHP
Manager of Planning Services | Planning & Development Department
1 MacDonald Square. Elora ON, N0B 1S0
T: 519.846.9691 X289
www.centrewellington.ca

From: Jessica Conroy <jconroy@grandriver.ca>
Sent: February 25, 2026 3:40 PM
To: Mariana Iglesias <MIglesias@centrewellington.ca>; Herthana Siva <hsiva@sorbara.com>
Cc: Catherine Pan <cpan@sorbara.com>; Lee Wheildon <LWheildon@centrewellington.ca>; Caitlyn Turton <cturton@centrewellington.ca>; Chantalle Pellizzari <CPellizzari@centrewellington.ca>; aha@envisionconsultants.ca; astettler@envisionconsultants.ca
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission

Good afternoon,

Please find attached GRCA comments on the EIS Terms of Reference for 6490 First Line, Centre Wellington.

Sincerely,
Jessica

Jessica Conroy, MES PI.
Resource Planner
Grand River Conservation Authority

400 Clyde Road, PO Box 729
Cambridge, ON N1R 5W6
Office: 519-621-2763 ext. 2230
Toll-free: 1-866-900-4722
Email: jconroy@grandriver.ca
www.grandriver.ca | Connect with us on social media

From: Jessica Conroy
Sent: February 20, 2026 3:41 PM
To: 'Mariana Iglesias' <MIglesias@centrewellington.ca>; Herthana Siva <hsiva@sorbara.com>
Cc: Catherine Pan <cpan@sorbara.com>; Lee Wheildon <LWheildon@centrewellington.ca>; Caitlyn Turton <cturton@centrewellington.ca>; cpellizzari@centrewellington.ca
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission

Good afternoon,

GRCA will also review the EIS TOR and respond with any comments.

Thank you,
Jessica

Jessica Conroy, MES PI.

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From: Mariana Iglesias <MIglesias@centrewellington.ca>
Sent: February 20, 2026 3:16 PM
To: Herthana Siva <hsiva@sorbara.com>
Cc: Catherine Pan <cpan@sorbara.com>; Lee Wheildon <LWheildon@centrewellington.ca>; Jessica Conroy <jconroy@grandriver.ca>; Caitlyn Turton <cturton@centrewellington.ca>; cpellizzari@centrewellington.ca
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission

Hi Herthana,

We will review the TOR and respond with any comments.

Regards,
Mariana

Mariana Iglesias, MCIP, RPP, CAHP
Manager of Planning Services | Planning & Development Department
1 MacDonald Square. Elora ON, N0B 1S0
T: 519.846.9691 X289
www.centrewellington.ca

Centre Wellington

From: Herthana Siva <HSiva@sorbara.com>
Sent: February 19, 2026 2:54 PM
To: jconroy@grandriver.ca; Lee Wheildon <LWheildon@centrewellington.ca>
Cc: Catherine Pan <cpan@sorbara.com>; Alex Stettler <astettler@envisionconsultants.ca>; Anne Ha <aha@envisionconsultants.ca>
Subject: GRCA File No: 6490 First Line, Fergus - TOR submission

Jessica and Lee,

As per the comments received by our office from GRCA, dated October 10, 2024, please find attached the TOR prepared by our consultants Envision consultants, for your review. We look forward to your comments at your earliest convenience.

Thank you,

Herthana Siva
Manager, Development
Sorbara Development Group
Office: 905 850 6154 x 234
Cell: 416 677 3436
3700 Steeles Avenue West, Suite 800
Vaughan, Ontario L4L 8M9
hsiva@sorbara.com

Anne Ha

From: Mariana Iglesias <MIglesias@centrewellington.ca>
Sent: March 4, 2026 9:11 AM
To: Anne Ha
Cc: Lee Wheildon; Caitlyn Turton; Chantalle Pellizzari; Catherine Pan; Alex Stettler; Colin Baker
Subject: RE: 6490 First Line, Fergus - Watercourse Status Confirmation

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Anne,

According to our mapping and information (shown below), there are no municipal drains on this property or immediately adjacent. The "Moffit/Van Driel Drain" is classified as a municipal drain that is located east of this property. It also appears that the reference to "Innisfil Creek" is likely an error. The Burnside EIS from 2007 (2nd image copied below) correctly classifies the watercourse as an "unnamed tributary" that flows into the Grand River. I can't locate a copy of the later (2017) Scoped EIS that makes those references.

Let us know if you have any further questions.

Regards,
Mariana


Map Centre
6490 First Line, West Garafr...
Search result
6546
6560
Sideroad 10
Dickson Dr - Dog Park Multi-Use Path
Dickson Dr Multi-Use Path
6511
6506
6502
Fergus Dog Park Trail
Hammond Pl
Gregson Crt
Dickson Dr
The Elora Cataract Trailway
Glengarry Cres
965
981
Harper Cres
Gordon St
Gartshore St
Fergus
43
McFarlane Cres
Ready Rd
Kay Cres
Middleton Ave
Robinson Rd
Gibbs Way
Findlay Way
Garafraxa St E
Peglar Cres
Gzowski St
Kelsowood Lane
Stornoway Dr
Strathallan St


DISTURBED
AG
CUM1-1

From: Anne Ha <aha@envisionconsultants.ca>
Sent: March 3, 2026 4:01 PM
To: Mariana Iglesias <MIglesias@centrewellington.ca>
Cc: Lee Wheildon <LWheildon@centrewellington.ca>; Caitlyn Turton <cturton@centrewellington.ca>; Chantalle Pellizzari <CPellizzari@centrewellington.ca>; Catherine Pan <cpan@sorbara.com>; Alex Stettler <astettler@envisionconsultants.ca>
Subject: 6490 First Line, Fergus - Watercourse Status Confirmation

Hi Mariana,

As per Grand River Conservation Authority (GRCA) comments (Jessica Conroy, MES PI., GRCA Resource Planner) received on February 25, 2026, EnVision requests that the Township confirm whether the watercourse referred to as the "Moffitt Drain," a tributary of the Grand River, is considered a municipal drain or a natural watercourse.

A previous Scoped EIS for the park block and stormwater management facility associated with the existing Summerfields subdivision to the southwest identified this feature as the Moffitt Drain (R.J. Burnside & Associates Limited, 2017) and noted evidence of historical cleanouts, including spoil piles along the channel. However, the Scoped EIS also stated that the feature does not appear to be a municipal drain under the Drainage Act. EnVision has been unable to independently verify the current status of the feature.

Background resources, including the Ministry of Natural Resources (MNR) Ontario GeoHub Aquatic Resource Area (ARA) mapping, classify the feature as a warmwater watercourse, while the Constructed Drain dataset does not identify it as a constructed drain. In addition, EnVision's 2025 field investigations describe the reach within the Site as an open watercourse with a defined channel form and no evidence of recent cleanouts (i.e., spoil piles).

Policy 4.12.3 of the Township of Centre Wellington Zoning By-law (2025) requires a 30 m setback from the edge of an open municipal drain and a 15 m setback from an enclosed municipal drain. To maintain consistency with buffers applied on the opposite side of the feature adjacent to the Summerfields development, a 15 m setback is proposed for the reach of the watercourse within the Site. This setback is also anticipated to be sufficient to protect warmwater fish habitat in accordance with provincial guidelines.

Given the above and pending the Township's determination of whether the Moffitt Drain is a municipal drain, EnVision seeks confirmation on whether a reduced 15 m setback would be acceptable should the feature be classified as a municipal drain.

Thank you,

Anne Ha ISA Certified Arborist
Ecologist

Anne Ha

From: Catherine Pan <cpan@sorbara.com>
Sent: February 27, 2026 3:45 PM
To: Jessica Conroy; Mariana Iglesias
Cc: Lee Wheildon; Caitlyn Turton; cpellizzari@centrewellington.ca; Anne Ha; Alex Stettler
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission
Attachments: EnVision 24-0727 6490 First Line Fergus GRCA TOR Response Matrix_Feb 26, 2026.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good Afternoon Jessica and Mariana,

Attached please find our responses to the comments GRCA provided on February 25, 2026.

Regards,

Catherine Pan, RPP MCIP
Sr. Manager, Development
Sorbara Development Group
Office: 905 850 6154 x298
Mobile: 416 587 1684
3700 Steeles Avenue West, Suite 800
Vaughan, Ontario L4L 8M9
cpan@sorbara.com

SORBA

COMMENT	GRCA COMMENT (JESSICA CONROY, MES PL, RESOURCE PLANNER, FEBRUARY 25, 2026)	ENVISION RESPONSE (FEBRUARY 26, 2026)
Comments on the Environmental Impact Study Terms of Reference		
1	The boundary for the regulated wetland feature will need to be reviewed and confirmed. The wetland boundary must be flagged by qualified personnel following the wetland delineation protocol identified in the 4th Edition of the Ontario Wetland Evaluation System manual. Once the wetland has been flagged, a site visit with GRCA staff should be arranged to confirm the pre-flagged wetland boundary.	During the 2026 growing season, a wetland staking visit with GRCA staff will be arranged to confirm the flagged wetland delineation boundary by EnVision. Prior to the staking visit, the wetland boundary will be flagged by qualified EnVision personnel following the Ontario Wetland Evaluation System (4th Edition) manual.
2	The confirmed and surveyed wetland boundary GPS shape file must be provided to the GRCA as part of the completed Environmental Impact Study (EIS) and as part of a future complete Planning Act application.	Following the staking visit and boundary confirmation, the surveyed wetland boundary GPS shape file will be provided to the GRCA as part of the EIS and subsequent future Planning Act application.
3	The Terms of Reference refers to the watercourse as the "Moffitt Drain" part of Innisfil Creek. Please provide documentation that the watercourse referred to as the Moffitt Drain has status as a recognized Municipal Drain under the Drainage Act if applicable. This will help inform relevant development setbacks, such as allowances for future Drain maintenance and to avoid any future planned development infrastructure.	Consultation with the Township of Centre Wellington will be undertaken to confirm if the status of the watercourse (referred to as the Moffit Drain) is recognized as a Municipal Drain.
4	The Terms of Reference identifies that the site contains a "disturbed delineated area within the southwest corner understood to be intended as a proposed future stormwater management (SWM) facility". The EIS will need to identify if the existing structure has recognized status as a SWM facility. This will assist with aligning the proposed works with GRCA policy.	The EIS will identify if the existing structure has recognized status as a SWM facility.

COMMENT	GRCA COMMENT (JESSICA CONROY, MES PL, RESOURCE PLANNER, FEBRUARY 25, 2026)	ENVISION RESPONSE (FEBRUARY 26, 2026)
Advisory Comments		
5	The proposed development land use plan shows two linkages with the GRCA owned Elora Cataract Trailway lands. Further details regarding the proposed linkages will be needed as part of the Official Plan Amendment application. Review and discussion with GRCA's Conservation Lands department will be required, to determine any applicable requirements from the GRCA from a landowner perspective.	*Sorbara to respond.*

From: Jessica Conroy
Sent: February 20, 2026 3:41 PM
To: 'Mariana Iglesias' <MIglesias@centrewellington.ca>; Herthana Siva <hsiva@sorbara.com>
Cc: Catherine Pan <cpan@sorbara.com>; Lee Wheildon <LWheildon@centrewellington.ca>; Caitlyn Turton <cturton@centrewellington.ca>; cpellizzari@centrewellington.ca
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission

Good afternoon,

GRCA will also review the EIS TOR and respond with any comments.

Thank you,
Jessica

Jessica Conroy, MES PI.
Resource Planner
Grand River Conservation Authority

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Mariana

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Thank you,

Herthana Siva
Manager, Development
Sorbara Development Group
Office: 905 850 6154 x 234
Cell: 416 677 3436
3700 Steeles Avenue West, Suite 800
Vaughan, Ontario L4L 8M9
hsiva@sorbara.com

ENVISION CONSULTANTS LTD

6415 NORTHWEST DRIVE
UNITS 37-40
MISSISSAUGA, ON L4V 1X1

ENVISIONCONSULTANTS.CA

February 19, 2026

Project #: 24-0727

Township of Centre Wellington
1 MacDonald Square
Elora, ON N0B 1S0

Grand River Conservation Authority
400 Clyde Road, P.O. Box 729
Cambridge, ON N1R 5W6

Attention: Township of Centre Wellington (Lee Wheildon, C.E.T. RCCA, Supervisor of Development Engineering) and Grand River Conservation Authority (Jessica Conroy, MES PI, Resource Planner)

Sent via email: LWheildon@centrewellington.ca and jconroy@grandriver.ca

SUBJECT: TERMS OF REFERENCE, 6490 FIRST LINE, FERGUS, ONTARIO

EnVision Consultants Ltd. (EnVision) was retained by RBS & EJS Fergus Limited Partnership (the 'Client') to conduct an Environmental Impact Study (EIS) to support the proposed Official Plan Amendment (OPA) at the property located in 6490 First Line, Fergus, Ontario (the 'Site'). It is our understanding that a pre-consultation meeting with the Township of Centre Wellington was completed by the Client on October 9, 2024. With subsequent pre-consultation meeting notes provided by the Township of Centre Wellington which included Grand River Conservation Authority (GRCA) comments (dated October 10, 2024). These pre-consultation meeting notes/comments were review by EnVision and relevant comments have been incorporated into this proposed Terms of Reference (TOR) for the EIS. As required, this TOR is being submitted to both the Township of Centre Wellington and GRCA for review and anticipated acceptance.

The Site is rectangular in shape and occupies an area of approximately 40 hectares (99 acres). It is located just east of the Urban Centre of Fergus, bounded by First Line to the east, Highway 19 to the south, a residential subdivision known as "Summerfields" to the west and both urban and rural developments to the north. Refer to Appendix A for Site location details.

Currently, the Site contains a single dwelling and associated buildings (i.e., shed and garage), an elevated trailway which transacts through the northwest corner and a disturbed delineated area within the southwest corner understood to be intended as a proposed future stormwater management (SWM) facility. Largely, the Site consists of agricultural fields with naturalized areas (i.e., woodlands and wetlands) within the western half of the Site. Associated with the edge of the naturalized area is the Moffitt Drain which is part of the Innisfil Creek watershed, which transacts through the Site. Associated with unevaluated wetland areas, these features are regulated by the GRCA. No other natural heritage features were indicated within the Site during background review and field investigations.

Among other policy guidance documents, we will use the County of Wellington Official Plan (2024) and the Township of Centre Wellington Official Plan (2024) to evaluate these features and complete the required EIS.

REVIEW OF BACKGROUND INFORMATION

Relevant information resources will be reviewed in order to identify regulated natural heritage features and their functions present within the Site, and provide information related to Significant Wildlife Habitat (SWH) and Species at Risk (SAR) that have potential to occur within the Site or within the surrounding area (within 120 m of the Site). The resources to be reviewed are listed below:

- Aerial Photographs and Satellite Imagery;
- Atlas of the Breeding Birds of Ontario internet site (Bird Studies Canada, 2006);
- County of Wellington Official Plan (Last updated December 2025);
- Conservation Authorities Act, Ontario Regulation 41/24;
- Correspondence with the GRCA, the Ministry of Natural Resources (MNR), the Ministry of Environment, Conservation and Parks (MECP) and Fisheries and Oceans Canada (DFO) staff;
- DFO Aquatic Species at Risk Mapping Tool;
- Local Watershed Reports, if available;
- Natural Heritage Areas Mapping, including Natural Heritage Information Centre (NHIC) data (MNRF, 2022);
- Township of Centre Wellington Municipal Official Plan (Office Consolidated November 21, 2024);
- Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015b);
- Significant Wildlife Habitat: Technical Guide (MNRF, 2000);
- Species at Risk in Ontario (SARO) List, Ontario Regulation 230/08 (Government of Ontario, 2018); and,
- Species at Risk Public Registry (Government of Canada, 2015).

FIELD PROGRAM

VEGETATION COMMUNITY DESCRIPTION AND MAPPING

The vegetation within the Site was inspected and details pertaining to the species and frequency of occurrence within the Site were recorded. Additionally, details including the presence of any SAR plants, surficial soil types, and indication of human disturbance were noted. Vegetation communities within the Site were recorded, mapped, and classified based on the Ecological Land Classification (ELC) for Southern Ontario (Lee et al., 1998).

VEGETATION INVENTORY

The Site was visited on three (3) occasions, once during spring (May 30, 2025) and twice during summer (August 16, 2024, and August 22, 2025), to conduct vegetation inventories. All species observed within the Site were recorded, and if encountered, the location of any SAR plants were documented with a handheld GPS unit. This information was used in the classification of ELC polygons within the Site.

BAT HABITAT ASSESSMENT

A bat habitat suitability assessment (i.e., tree snag survey) during leaf-off conditions was completed on December 6, 2024; to assess the Site for any bat habitat and determine whether the trees within the Site have the potential to be utilized by bats.

AMPHIBIAN CALLING SURVEYS

The Site was visited on three (3) occasions, during the 2025 amphibian breeding season, April 22, May 14 and July 21, 2025. Amphibian breeding activity was assessed using the Marsh Monitoring Program (MPP) Amphibian Calling Survey Protocol (Bird Studies Canada, 2008). Surveys were completed by qualified, experienced staff under appropriate conditions and include:

- Surveys were completed at dusk/early evening;
- Nighttime air temperatures were be at least 5°C for the 'first' survey, at least 10°C for the 'second' survey and at least 17°C for the 'third' survey;
- Surveys were at least fifteen (15) days apart; and,
- During the surveys, the species heard over the course of the 3-minute survey period were documented, in addition to the call level code.

BREEDING BIRD SURVEYS

The Site was visited on two (2) occasions on June 26 and July 4, 2024, to conduct breeding bird surveys. The surveys were conducted in accordance with the protocols detailed in the Ontario Breeding Bird Atlas (OBBA) (Bird Studies Canada, 2001) and the Forest Bird Monitoring Protocol (FBMP), including:

- Surveys were completed within five (5) hours after sunrise;
- Surveys occurred a minimum of ten (10) days apart;
- Standardized point counts were used to survey for breeding birds;
- In addition to the point counts, an active search was completed which included looking; and, listening for birds while moving between the different habitats within the Site; and,
- Standard breeding evidence codes were recorded in accordance with OBBA.

AQUATIC HABITAT CHARACTERIZATION AND FISH COMMUNITY SURVEYING

The watercourse that transacts through the western half of the Site (i.e., Moffitt Drain) was surveyed on July 19, 2024, and details were recorded to describe existing aquatic habitat conditions. Fish community surveying was also undertaken during the assessment. The survey documented the following parameters:

- Fish habitat mapping;
- Water temperature;
- Substrate type;
- Cover type and quality (e.g., debris, bank undercuts, etc.); and,
- General conditions.

WETLAND DELINEATION

As required by GRCA pre-consultation comments, wetland delineations will be conducted during the 2026 growing season by a certified Ontario Wetland Evaluation System (OWES) evaluator. Boundaries will be delineated with numbered flags and mapped using a handheld GPS unit. Following the delineation, EnVision staff will meet with GRCA and Town staff to confirm the boundaries. An Ontario Land Surveyor will survey the confirmed boundary.

SIGNIFICANT HABITAT ASSESSMENT AND WILDLIFE DOCUMENTATION

The Site was assessed for SWH and presence of/or habitat for SAR, and all pertinent findings were documented, photographed, and the location georeferenced using a handheld GPS unit. All incidental wildlife observations or evidence of wildlife were recorded during each visit to the Site.

REPORTING

The findings from the field program will be included in an EIS report, along with relevant figures and regulatory communications. An assessment of the potential impacts of the proposed development to the natural heritage features and other communities within the Site will be conducted and included in the report. The report will also include recommendations for mitigation of impacts and the monitoring of these mitigations measures as required, as well as a list of potential enhancement opportunities for the Site as required. Further, once information from a feature-based water balance study anticipated to be completed as part of a Stormwater Management Report or preliminary hydrogeological report for the project becomes available, information pertaining to potential hydrological impacts towards the wetland within the Site will be incorporated into the EIS. The report will be submitted to the Township of Centre Wellington and GRCA for review.

CLOSING

This Terms of Reference, was prepared for the account of RBS & EJS Fergus Limited Partnership. EnVision has completed this proposed assessment in accordance with generally accepted professional practises and procedures applicable at the time of preparation. These services are not subject to any express or implied warranties, and none should be inferred. The material in this letter reflects EnVision's judgement in light of the information available at the time of preparation. Any use, which a Third Party not noted above makes of this letter, or any reliance on decisions to be made based on it, are the responsibility of such Third Parties. EnVision accepts no responsibility for damages, if any, suffered by a Third Party as a result of decisions made or actions based on this letter.

We thank you for allowing us to take part in your project. Should you have any questions or wish to review the contents of this letter in more detail, please do not hesitate to contact the undersigned.

Yours sincerely,

EnVision Consultants Ltd.

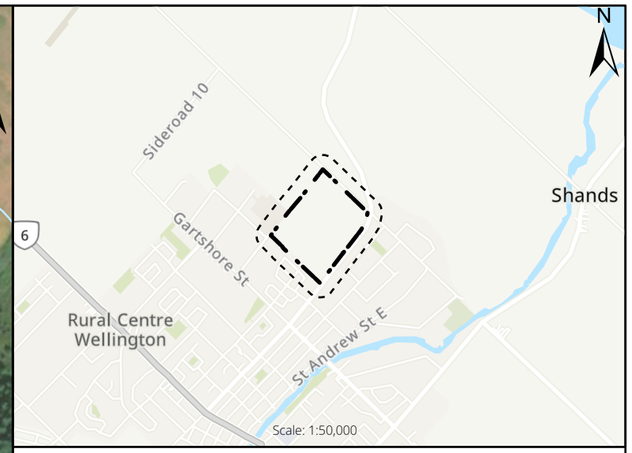
Anne Ha, B.Sc.
Ecologist
ISA Certified Arborist (ON-3179A)
aha@envisionconsultants.ca

Alex Stettler, H.B.Sc., PMP, CAN-CISEC
Senior Project Manager – Ecology
astettler@envisionconsultants.ca

APPENDIX A:

Site Location Map

Prepared By: TanyaPeterson



LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- WATERCOURSE

TITLE

SITE LOCATION

PROJECT

ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	1

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\APRX\EIS\24-0727 Figure 1 Site Location.aprx

Anne Ha

From: Jessica Conroy <jconroy@grandriver.ca>
Sent: February 25, 2026 3:40 PM
To: Mariana Iglesias; Herthana Siva
Cc: Catherine Pan; Lee Wheildon; Caitlyn Turton; cpellizzari@centrewellington.ca; Anne Ha; Alex Stettler
Subject: RE: GRCA File No: 6490 First Line, Fergus - TOR submission
Attachments: GRCA Comments - EIS ToR - 6490 First Line, Centre Wellington.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon,

Please find attached GRCA comments on the EIS Terms of Reference for 6490 First Line, Centre Wellington.

Sincerely,
Jessica

Jessica Conroy, MES PI.
Resource Planner
Grand River Conservation Authority

400 Clyde Road, PO Box 729
Cambridge, ON N1R 5W6
Office: 519-621-2763 ext. 2230
Toll-free: 1-866-900-4722
Email: jconroy@grandriver.ca
www.grandriver.ca | Connect with us on social media

MANDATORY PRE-CONSULTATION
Meeting Notes

Centre Wellington

DATE OF MEETING: October 9, 2024

STAFF PRESENT:

	DEPARTMENT	NAME(S)
	Planning	Mariana, Deanna, Clarck
	Building	n/a
	Development Engineering	n/a
	Infrastructure	Brandon
	Economic Development	n/a
	Source Water Protection	Danielle
	Consulting Engineer	Ray, Dustin
	County of Wellington	n/a
	GRCA	n/a
	School Board(s)	n/a
	MTO	n/a
	Other	

SITE INFORMATION

Municipal Address: 6490 First Line, West Garafraxa

Current Zoning: A, EP Current uses: _____

Current Official Plan Designation: Prime Agricultural, Core Greenlands

Proposed Land Use: Extension of Summerfields subdivision, Residential, Park, SWM Pond, Multi-Residential

TYPE OF APPLICATION

- ☐ Zoning By-law Amendment
- ☒ Official Plan Amendment
- ☐ Draft Plan of Subdivision
- ☐ Draft Plan of Condominium
- ☐ Site Plan
- ☐ Other - Please describe: _____

Brief description of proposed development:

_____

MANDATORY PRE-CONSULTATION
Meeting Notes

Centre Wellington

Required information:

To ensure the appropriate information for each application is captured, Township staff may require the following plans, reports, and studies. Failure to provide the required information may result in an application being deemed incomplete.

	Application Types				
Plans, Reports, Studies *	Official Plan Amendment	Zoning by-law Amendment	Draft Plan of Subdivision	Draft Plan of Condo.	Site Plan Approval
Agricultural Impact Assessment	☐	☐	☐	☐	☐
Arborist Report	☐	☐	☐	☐	☐
Archeological Impact Assessment	☒	☐	☐	☐	☐
Architectural Plans	☐	☐	☐	☐	☐
Dust Study	☐	☐	☐	☐	☐
Environmental Impact Assessment	☒	☐	☐	☐	☐
Fiscal Impact Assessment	☐	☐	☐	☐	☐
Functional Servicing Report (Water, Wastewater and Stormwater)	☒	☐	☐	☐	☐
Geotechnical Report	☒	☐	☐	☐	☐
Grading Plans	☐	☐	☐	☐	☐
Heritage Impact Assessment	☒	☐	☐	☐	☐
Hydrogeological Impact Assessment	☒	☐	☐	☐	☐
Landscape Plans	☐	☐	☐	☐	☐
Lighting/Photometric Plans	☐	☐	☐	☐	☐
Noise Study	☐	☐	☐	☐	☐
Planning Justification Report	☒	☐	☐	☐	☐
Record of Site Condition	☐	☐	☐	☐	☐
Sediment & Erosion Control Plans	☐	☐	☐	☐	☐
Site Plan – Including a Zoning Matrix	☐	☐	☐	☐	☐
Traffic Impact Study	☒	☐	☐	☐	☐

Vibration Study	☐	☐	☐	☐	☐
Water Balance Assessment	☒	☐	☐	☐	☐
Other: Additional requirements captured in the attached and listed below.					

*Terms of Reference available through Appendix A

Additional Staff Comments:

Planning	- Planning Justification Report - Archeological assessment through the subdivision application process - Cultural Heritage Evaluation Report for the listed property at 8076 WR 19, and a Heritage Impact Assessment if determined to be required through the CHER.
Building	
Development Engineering	Please refer to Development Engineering's email attached for submission requirements.
Infrastructure	
Source Water Protection	Please refer to the Source Water Protection Memo attached for submission requirements.
Consulting Engineer	Please refer to Triton Engineering's Memo attached for submission requirements.
County of Wellington	- Traffic Impact Study (Please contact Pasquale Costanzo at the County for the Terms of Reference at pasqualec@wellington.ca) - County Planning staff have not provided comments for this pre-consultation and any questions regarding application requirements should be directed to them

GRCA	Please refer to the GRCA Memo attached for submission requirements.
School Board(s)	
MTO	
Other	

Appendix "A" – Requirements for Reports/Studies and Plans

**Note: The Township of Centre Wellington may hire an outside consultant to peer review certain technical reports submitted as part of a development application.*

Agricultural Impact Assessment: Required in accordance with Part 1, Section 4.6.5, Subsection A-F, of the County of Wellington Official Plan.

Arborist Report: A certified arborist professional is required to prepare the report. The report must provide detailed information, including the location, species, size and condition, of individual trees and associated significant vegetation that may be affected by a proposed development.

Archeological Impact Assessment: Required for all applications in or near areas of archeological potential. Reports must be completed in accordance with Provincial requirements.

Architectural Plans: Architectural plans illustrate the layout of structures, entrances, rooms, windows, and servicing elements on each floor of the proposed development.

Drinking Water Threats Disclosure Report: Required under Section 4.9.5.4 of the County of Wellington. A Drinking Water Threat Disclosure Report will be required as part of a complete application under the Planning Act for development, redevelopment or site alteration of nonresidential uses within a Wellhead Protection Area, Intake Protection Zone or Issue Contributing Area. The report shall disclose whether any of the prescribed drinking water threats identified in subsection 4.9.5.2 are expected to occur on the property, as well as the handling and storage of any other chemicals, fuel and wastes, and related volumes, types, storage, handling, disposal, etc. The report shall also disclose the proposed management programs associated with the use of chemicals at the site, including risk management/reduction measures, emergency response plans, spill response/prevention plans, employee awareness training, best management practices and monitoring programs.

Dust Study: A dust study must describe the measures that will be undertaken to control dust produced by the development, including any dust produced by bulk material handling, storage activities, earth-moving, construction, demolition, or vehicular movements. The study shall also outline action triggers that will be used to determine when and what levels of control measure will be required.

Environmental Impact Assessment: Required in accordance with Part 1, Section 4.6.3, Subsection A-O of the County of Wellington Official Plan.

Fiscal Impact Assessment: Required in accordance with Part 1, Section 4.6.6, Subsection A -B, of the County of Wellington Official Plan.

Functional Servicing Report: A functional servicing report provides the framework for waste distribution, sanitary and storm drainage for the development of the site.

Geotechnical Report: A geotechnical study must be prepared by a licensed professional geotechnical engineer. The report analyses soil and bedrock composition to determine its structural stability and its ability to accommodate development.

Heritage Impact Assessment: Required in accordance with Part 1, Section 4.6.7, Subsection A-G, of the County of Wellington Official Plan.

Hydrogeological Impact: A hydrogeological assessment assesses the impacts of proposed development on existing water supply wells, areas of natural or scientific interest, including, wetlands, streams, and other sensitive receptors that may be affected.

Landscape Plans: Landscape plans must provide information and details for the hard and soft landscaping on site an on adjacent streets/boulevards. This includes tree preservation plans, details and materials for paving, location, types, size and planting details for proposed trees, shrubs and other plants. The plan will also show the materials, dimensions and construction details for hard and soft landscape elements including paving, furniture, seating, fences, rails, pergolas, retaining walls and other features and planting details.

Lighting/Photometric Plans: Lighting plans must provide details about lighting on the site and accessible roof areas, including the location and type of lighting fixtures proposed on the exterior of the building. It should also include the location and type of lighting fixtures, specifications of the lighting fixtures.

Noise Study: A noise study must be prepared by an accredited acoustic expert or a qualified professional engineer. The report shall describe the impact of noise generated by a proposed development on the surrounding environment, the impact of noise from the surrounding environment on the proposed development and the impact of noise from the proposed development on itself as well as mitigation measures to reduce any negative impacts.

Planning Justification Report: Provides an overview of the purpose and effect of an application and establishes a professional planning rationale for the application by demonstrating how a proposal conforms to applicable planning policy documents. The report must include the following general sections: Introduction, site context, proposal, policy and planning analysis, summary/conclusion, maps, figures, plans.

Record of Site Condition Report: A Record of Site Condition (RSC) must be prepared by a qualified engineer or a professional geoscientist. The RSC is prepared in two phases. Phase one is prepared in accordance with Ontario Regulation (O.Reg.) 153/04 and is as type of study to determine the likelihood that one or more contaminants may be present in the land or water on, in, or under the subject property that may cause an adverse effect, as defined in the Environmental Protection Act.

Phase two is required to confirm whether one or more contaminants may be present on the subject property that exceed any of the applicable standards for the intended use. An ESA is required to develop a preliminary determination of whether the environmental condition of the property use changes in certain ways.

Risk Management Plan: Required under the Clean Water Act. The Risk Management Plan (RMP) is to be provided by the Risk Management Office. The plan is site specific negotiated agreement between the risk management official and the person engaged in a prescribed drinking water activity. The RMP is a plan to manage the risk activity as it identifies the best management practices to use to protect the water supply from the activities occurring on the property.

Salt and Chemical/ Waste Management Plans: Required under Section 4.9.5.5 of the County of Wellington Official Plan. For threats not managed though a Risk Management Plan and/ or Provincial Approval. Management Plans disclose, assess, and provide guidance and mitigation measures for the specific threat.

Section 59 Notice: Required under the Clean Water Act and to be provided by the Risk Management Office. Section 59 Notice is a document signed and provided by an appointed Risk Management Official that identifies whether a proposed land development application complies with the Source Protection plan policies. Notice to Proceed (s.592(a) or s.59 2 (b).

Erosion/Sediment Control Plan: An erosion and sediment control plan must be prepared by a qualified professional. The plan ensures that activities such as placing or dumping of fill, the removal of topsoil and alteration of grade do not have a negative impact on the receiving storm drainage and natural heritage systems. Additionally, the ESC plan ensures compliance under the Environmental Protection Act for activities related to the management of excess soils outlines in O.Reg 406/19.

Servicing Report: A servicing report must be prepared by a Registered Professional Engineer and must include sufficient details for staff to determine the financial and infrastructure implications of servicing the proposed development. The submission must include reports, plans, computer modelling results and design calculations relating to the designs and upgrades of municipal services. A servicing report must address water consumption, sanitary sewage, storm drainage, and potential infrastructure expansion/upgrades.

Storm Water Management Report/Brief: A stormwater management report must be prepared by a Registered Professional Engineer qualified in municipal engineering/stormwater management, and must include all appropriate reports, plans, computer modeling results and design calculations relating to how storm run-off is to be managed.

Traffic Impact Study: Required in accordance with Part 1, Section 4.6.4, Subsection A-K, of the County of Wellington Official Plan.

Vibration Study: A vibration study must be prepared by an accredited acoustic expert or a qualified professional engineer. The report shall describe the impact of vibrations generated by a proposed development on the surrounding environment, the impact of vibration of the surrounding environment on the proposed development and the impact of vibration of the proposed development on itself as well as mitigation measures to reduce any negative impacts.

Water Balance Assessment Report: Required under the Grand River Source Protection Plan. A water balance assessment report evaluates the pre and post-development hydrogeological conditions of the site. The results identified can be used to design appropriate Low Impact Development measures to compensate for any anticipated changes in site hydrology.

TRITON ENGINEERING SERVICES LIMITED
Consulting Engineers

Memorandum

DATE:	November 5, 2024
TO:	Chantalle Pellizzari
FROM:	Dustin Lyttle
RE:	6490 First Line, West Garafraxa. Pre-consultant Engineering Comments
FILE:	A6786A

Introduction:

The following comments are based on the documents submitted in advance of the Pre-consultation meeting held on October 9, 2024, and the additional information discussed and provided at that time.

Submitted Items List:

- Cover letter from Sorbara development Group dated July 29, 2024
- Drawing LUP, Proposed Land use Plan dated May 17, 2024 prepared by Weston Consulting

Pre-Consultation Comments:

General:

PC.1 All aspects of the subdivision civil design must comply with the standards set forth in the Township Development Manual (June 2024). This includes:

- Design and submission requirements for roads, including walkways, sidewalks, and trails.
- Infrastructure installation, covering water mains, sanitary and storm sewers, and Groundwater Management Systems (GWMS), if required.
- Stormwater management and streetlighting/composite utility design.
- Parks and multi-use pathway design, which encompasses park layout, fencing, and other related features.
- Urban forestry, grading, and landscaping requirements.

Please ensure all designs and submissions meet these standards to align with Township regulations.

PC.2 The following reports and drawings are required for submission:

- Functional Servicing Report / Stormwater Management Report
- Water Balance Assessment
- Geotechnical Report
- Hydrogeological Study
- Traffic Impact Study (TIS)
- Grading / Servicing Plan, Sediment & Erosion Control Plan
- Lighting / Photometric Plans, Electrical Plans, Composite Utility Plan (CUP)
- Landscaping Plans, including Fencing
- On-street Parking / Street Signage Plans

For a full list of submission requirements, refer to Section A - Engineering Submissions in the Township's Development Manual.

Sanitary System:

PC.3 The nearest existing gravity sanitary sewers are at the intersection of Wellington Road (WR) 19 (Garafraxa St) and Tom St. This sewer will need to be extended east on WR19 to the development frontage.

PC.4 Flows from the site are conveyed downstream to the St. Andrews St. Sewage Pumping Station (SPS), where it is then pumped across the Grand River to the gravity sanitary sewers on Allan St ROW and is ultimately conveyed to the Fergus Wastewater Treatment Plant (WWTP).

- An assessment of the St. Andrews SPS will be required to confirm capacity. The SPS was originally sized to accommodate the flows from this area, however it was not equipped (i.e. pumping capacity) to accommodate the sanitary flows from this site at the time of construction.
- The impact on the downstream sewers of the increase in discharge from the St. Andrews SPS will need to be reviewed.

PC.5 The developer will need to request sanitary treatment allocation from the Township to support this development. The granting of such a request will be in accordance with the Township's Allocation Policy.

Water System:

PC.6 The nearest existing watermain is a 300 mm diameter PVC watermain on Garafraxa St near the western edge of the site. This watermain will need to be extended east on WR19 to the development frontage and the desired connection points.

PC.7 The development will also be required to connect to the existing watermain in the Dickson Dr extension on the north side of the Rail Trail. The water system north of the rail trail is in a higher-pressure zone therefore a Pressure Reducing/Sustaining Valve (PRSV) will be required to isolate the two zones. The PRSV is expected to be at/near the Garafraxa connection to allow the development to be in the higher-pressure zone however a further review of the system will be required to confirm the preferred location for the PRSV.

PC.8 The need to extend watermains along Garafraxa and First Line frontages will be considered as part of the formal submission.

PC.9 A complete assessment of the expected available fire flow will be provided once additional details on the layout and the site are provided. The results of this are expected to form part of the FSR required to support the development.

PC.10 The developer will need to request water supply allocation from the Township to support this development. The granting of such a request will be in accordance with the Township's Allocation Policy.

Storm Water Management:

PC.11 This site is tributary to an unnamed watercourse that is situated along the west side of the site which outlets to the Grand River. This watercourse does not have official status (i.e. not a municipal drain or located on an easement. This watercourse has been the subject of hydraulic/geomorphic studies to support pervious developments. It is expected that these studies would need to be updated in support of this development.

PC.12 The following criteria/approach for Stormwater management is expected.

- Quality Treatment: Enhanced Treatment Level (80% TSS Removal)
- Water Balance: Recharge to the extent feasible recognizing well protection zone restrictions as applicable.
- Quantity Control: Post-to-Pre-Control is expected as a minimum. However, restrictions on the receiving watercourse may require specific controls (i.e. erosion/flood mitigation) to be applied. These will be confirmed as part of the supporting watercourse studies to ensure no impacts to existing properties/lands/infrastructure along the flow route.
- Consultation with GRCA is required to confirm criteria and proposed strategy.

Administration Centre: 400 Clyde Road, P.O. Box 729 Cambridge, ON N1R 5W6

Phone: 519-621-2761 Toll free: 1-866-900-4722 Fax: 519-621-4844 www.grandriver.ca

October 10, 2024 via email

GRCA File: Pre-consultation - 6490 First Line

Chantalle Pellizzari
Township of Centre Wellington
1 Macdonald Square
Elora, ON N0B 1S0

Dear Chantalle Pellizzari,

Re: Pre-Consultation for Official Plan Amendment
Part of Lot 8, Concession 1, West Garafraxa
6490 First Line, Township of Centre Wellington, County of Wellington
Owner: RBS & EJS Fergus G.P. Inc.
Applicant: Sorbara Development Group

Grand River Conservation Authority (GRCA) staff has reviewed the above-noted pre-consultation application for an official plan amendment.

Documents Reviewed by Staff

GRCA staff have reviewed the following documents submitted with this pre-consultation request, received on September 25, 2024 from the Township of Centre Wellington:

- Cover Letter (Prepared by Sorbara Development Group, dated July 29, 2024);
- Pre-consultation Request Form (dated July 29, 2024); and
- Proposed Land Use Plan (Weston Consulting, dated May 17, 2024).

GRCA Comments

GRCA has reviewed this application under the Mandatory Programs and Services Regulation (Ontario Regulation 686/21), including acting on behalf of the Province regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS, 2020), as a regulatory authority under Ontario Regulation 41/24 and as a public body under the *Planning Act* as per our CA Board approved policies.

Information currently available at this office indicates that the property contains a watercourse, wetlands, and the associated regulated allowances to these features. A copy of our resource mapping is attached.

Due to the presence of these features, the subject lands are partially regulated by the GRCA under Ontario Regulation 41/24. Any development or site alteration within the regulated area on the subject property requires a GRCA permit.

We understand that the proposed development includes a variety of single detached dwellings and street townhouses, a park, and stormwater pond.

Requirements for a Complete Planning Act Application:

GRCA requests the following in support of a complete Official Plan Amendment application and GRCA permit application:

- Site Plan illustrating the extent of the proposed development.
- Grading and Drainage Plan.
- Environmental Impact Study (EIS)
    - A proposed Terms of Reference for the EIS needs to be submitted to the GRCA for review and acceptance.
    - The wetlands must be flagged by a certified wetland evaluator and subsequently verified by the GRCA in the field during the growing season.
    - Incorporate feature-based water balance completed as part of the Stormwater Management Report and interpret hydrological impacts of the wetland. We recommend that a preliminary hydrogeological report is completed to help inform the EIS.
- Preliminary Stormwater Management Report.
- Erosion and Sediment Control Plan.

Elora Cataract Trail:

Please note that a portion of the Elora Cataract Trail bisects the subject property on the western side. Please contact Joel Doherty, Manager of Conservation Lands, at jdoherty@grandriver.ca or (519) 621-2761, extension 2207 regarding the proposed development to determine if there are any requirements from the GRCA from a landowner perspective.

Fees

Consistent with GRCA's current approved fee schedule, this application would be considered a major official plan amendment application, and the applicant will be invoiced in the amount of $2,500 for GRCA's review upon our receipt of a formal planning application. A separate fee will also apply for a GRCA permit application for any development activity in the regulated areas.

Should you have any questions, please contact me at 519-621-2763 extension 2230 or jconroy@grandriver.ca.

Sincerely,

Jessica Conroy

Jessica Conroy, MES PI.
Resource Planner
Grand River Conservation Authority

Enclosed: GRCA Map of Subject Property

Copy (via email): Herthana Siva, Sorbara Development Group (Applicant)

Map Centre (X,Y): 550778.06, 4841134.74 | Map Link

This map is not to be used for navigation | 2020 Ortho (ON)

Grand River Conservation Authority

Date: Oct 01, 2024
Author: JC

6490 First Line, Centre Wellington

Legend

- Regulation Limit (GRCA)
- Floodplain (GRCA)
  - Engineered
  - Estimated
  - Approximate
- Floodplain - Special Policy Area (GRCA)
- Slope Erosion (GRCA)
  - Steep
  - Oversteep
  - Toe
- Slope Valley (GRCA)
  - Steep
  - Oversteep
- Regulated Watercourse (GRCA)
- Regulated Waterbody (GRCA)
- Wetland (GRCA)
- Lake Erie Flood (GRCA)
- Lake Erie Shoreline Reach (GRCA)
- Lake Erie Dynamic Beach (GRCA)
- Lake Erie Erosion (GRCA)
- Parcel (Wellington)
- Conservation Area Boundary (GRCA)

Scale 1:6,949

NAD83 UTM zone 17 (EPSG:26917)

Transportation:

PC.13 Urbanization of Garafraxa (WR19) and First Line including cross section configuration, proposed entrance location/configuration, upgrades to First Line intersection, extension of sidewalk and/or MUP to be determined in consultation with Township and County of Wellington Staff.

PC.14 TIS will be required, TOR for this to be determined in consultation with Township and County of Wellington Staff. Consideration for Active Transportation Master Plan and internal circulation to be considered.

These comments are advisory for the applicant and do not need to be responded to. If you have any questions, please do not hesitate to contact us.

From:	Lee Wheildon
To:	Mariana Iglesias
Cc:	Chantalle Pellizzari; Dustin C. Lyttle - Triton Engineering Services Limited (dlyttle@tritoneng.on.ca)
Subject:	PC008-2024 6490 First Line West Garafraxa (Sorbara)
Date:	October 8, 2024 9:19:04 PM
Attachments:	image001.png 5 - Proposed Land Use Plan.pdf

Mariana,

Just in case I am unable to make the pre-consultation meeting tomorrow meeting, I have noted a few high-level comments/thoughts that I am sure Dustin will be able to speak to, or may have already considered.

- Extension of proposed servicing to service proposed subdivision will require a CLI-ECA (confirmation of sizing to be determined through design) – 300mm dia. watermain stops short of development site.
- Discussion of urbanization (cross-section) of County Road 19 including proposed entrance, extension of sidewalk to be discussed directly with County of Wellington Staff.
- How will pond be situation for stormwater management outlet? As this is routed through a number of private properties, does this require over restricting of quantity controls (more than post-pre-development?) As Dustin and Ray looked at Summerfields previously, they likely have a good handle on this already.
- TIS (TOR has already been submitted to me, not reviewed to date), will provide feedback in the next couple of weeks. Consideration for Active Transportation Master Plan and internal circulation to be considered.
- Subdivision Civil Design (including submission requirements, roads (including walkways, sidewalks, trails, etc.) infrastructure installation (watermain, sanitary, storm sewer, GWMS (if required), stormwater management, streetlighting/composite utility design, parks and multi-use pathways design (incl. park design, fencing, etc.), urban forestry requirements, grading, etc.) to be completed in accordance with the Township's Development Manual (June 2024)
  township-of-centre-wellington-development-manual-march-2018.pdf (centrewellington.ca)

Further, should discussion of reporting required come up, the following reporting/drawings are to be included but not limited to the following;

- Functional Servicing Report/Stormwater Management Report, Water Balance Assessment
- Geotechnical reporting
- Hydrogeological Study
- Traffic Impact Study (TIS)
- Grading/Servicing Plan/Sediment & Erosion Control Plan
- Lighting/Photometrics Plan(s), Electrical Plans, CUP
- Landscaping Plans/Fencing

- On-street parking/street signage plans
- Additional civil drawings may be required (this will be further determined by the resulting reporting/studies and may include but are not limited to (e.g. SWM – pond drawings/cross sections, details plans, existing conditions drawings, proposed roadway drawings/plan and profile drawings, etc.). For a full list of submission requirements, please see the Township's Development Manual, Section A Engineering Submissions.

Should you have any questions or concerns, please do not hesitate to contact me.

Regards,

Lee Wheildon C.E.T.,rcca | Supervisor of Development Engineering

Township of Centre Wellington | 1 MacDonald Square, Elora, ON N0B 1S0
519.846.9691 x253 CentreWellington.ca

Source Water Protection – Planning Application Requirements

As part of the *Clean Water Act* and Source Protection Plan requirements, all proposed development that is subject to a *Planning Act* application on lands located within a vulnerable area shall ensure that proposed development work does not result in a threat to municipal drinking water quality and/or quantity.

Section 1: Property and Application Information

Property Address: 6490 First Line, Fergus

Application Type:

☒ Official Plan Amendment
☐ Zoning By-law Amendment
☐ Site Plan
☐ Plan of Subdivision
☐ Plan of Condominium
Type:_____

Section 2: Documentation to be provided by the Risk Management Office

	Current Application	Future Application	Not Required
Section 59 Notice	☒	☒	☐
Risk Management Plan	☐	☒	☐

Section 3: Documentation required to be provided by the owner or their agents

	Current Application	Future Application	Not Required
Appendix A: Contact & Proposal Information	☒	☐	☐
Drinking Water Threats Disclosure Report	☐	☐	☒
Liquid Fuel Handling/Storage Spill Response Plan (>250L)	☐	☒	☐
Winter Maintenance Plan	☐	☒	☐
Chemical/ Waste Management Storage Spill Response Plan	☐	☐	☒
Hydrogeological Assessment Report	☐	☒	☐
Water Balance Assessment Report	☐	☒	☐
Recharge Infiltration Measures	☐	☐	☒
Functional Service Report – Source Protection Design	☐	☐	☒
Stormwater Management Report – Source Protection Design	☐	☐	☒
Record of Site Condition	☐	☐	☒
Phase 1 and/or Phase 2 Environmental Assessments	☐	☐	☒

Please see Appendix B for required documentation descriptions.

Section 4: Site specific information

Wellhead Protection Area (WHPA) and Vulnerability Scores:

WHPA ☐ A ☒ B ☒ C ☐ D ☒ Q Score ☐ 2 ☐ 4 ☒ 6 ☒ 8 ☒ 10

Issue Contributing Area (ICA): ☐ None ☒ Chloride ☒ Trichloroethylene ☐ Nitrate ☐ Sodium

Significant Groundwater Recharge Area: ☒ Yes ☐ No

Highly Vulnerable Aquifer: ☐ Yes ☒ No

For more information, please contact sourcewater@centrewellington.ca.

Sincerely,

Danielle Fisher, Source Protection Coordinator
519-846-9691 ext. 236
dfisher@centrewellington.ca

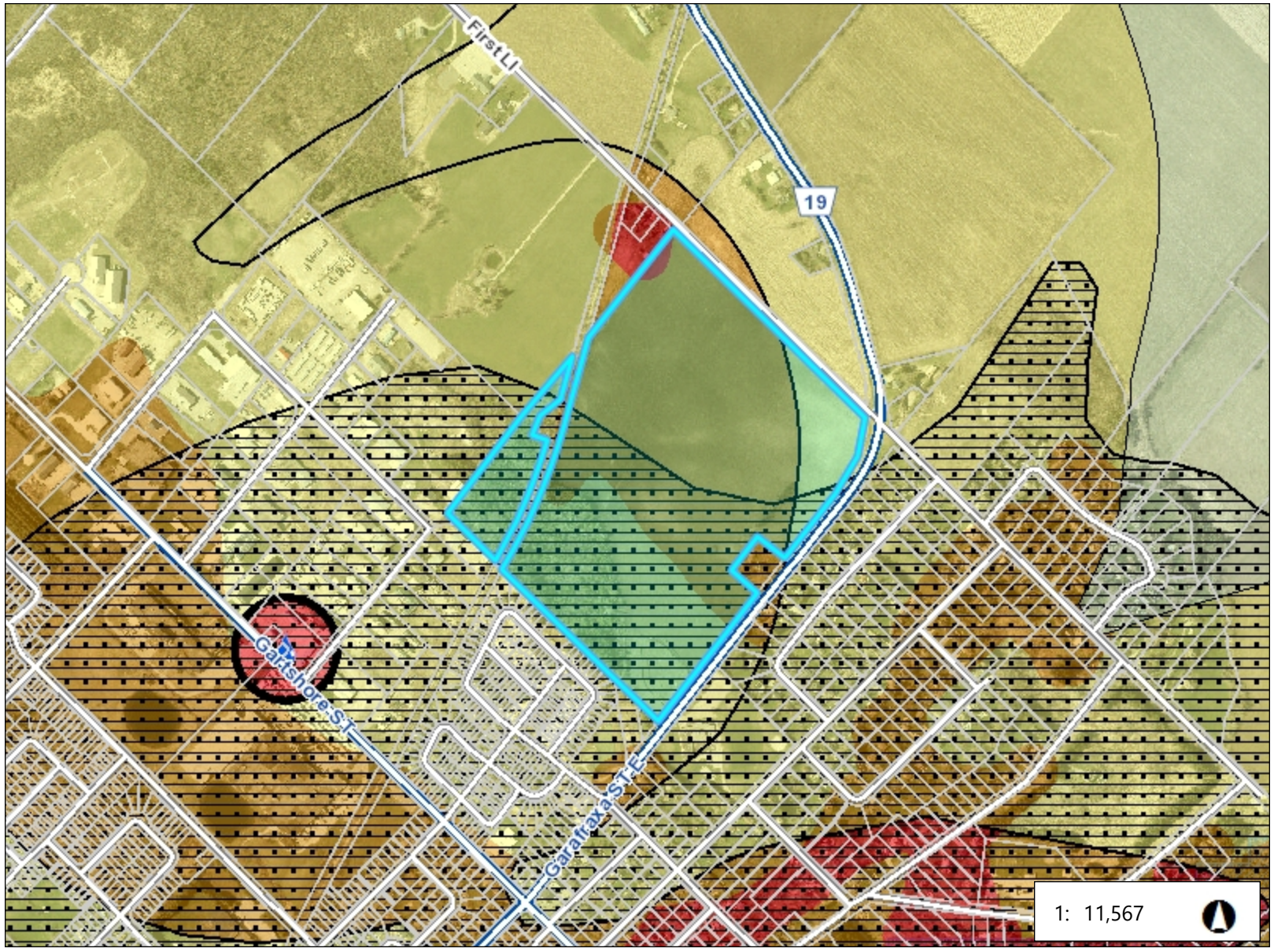
Attachment: WHPA Map(s)

Resources:
Appendix A: Contact & Proposal Information
Appendix B: Source Water Protection required document descriptions
Appendix C: Guidance documents
Appendix D: Water Balance Terms of Reference

Please note that the requested documentation is applicable as per the information available as of the date signed above. If the proposed application type and/or proposed use changes, there may be additional requirements. Future planning and/or building applications may have additional requirements beyond those listed above or may require reports listed as "not required", based on the information provided at the time of application.

Explore Wellington

6490 First Line, Fergus



Legend

- Parcels
- Roads
  - Local Road
  - County Road
  - Highway
- Well Locations
  - Existing
  - Proposed
- Issue Contributing Area
  - Chloride
  - Nitrate
  - Sodium
  - TCE
- Wellhead Protection Area
  - A
  - B
  - C
  - D
- Vulnerability Score
  - 10
  - 8, D; 8; 8, C
  - 2, 4, 6 (A, B or C)
  - 2,4,6, D; 2,4, D; 2, 4, 6 (D); 4, D; 6,
- HVA
- RoadsLookup
- Halton_MeanderBeltHazard

0.6 0 0.29 0.6 Kilometers

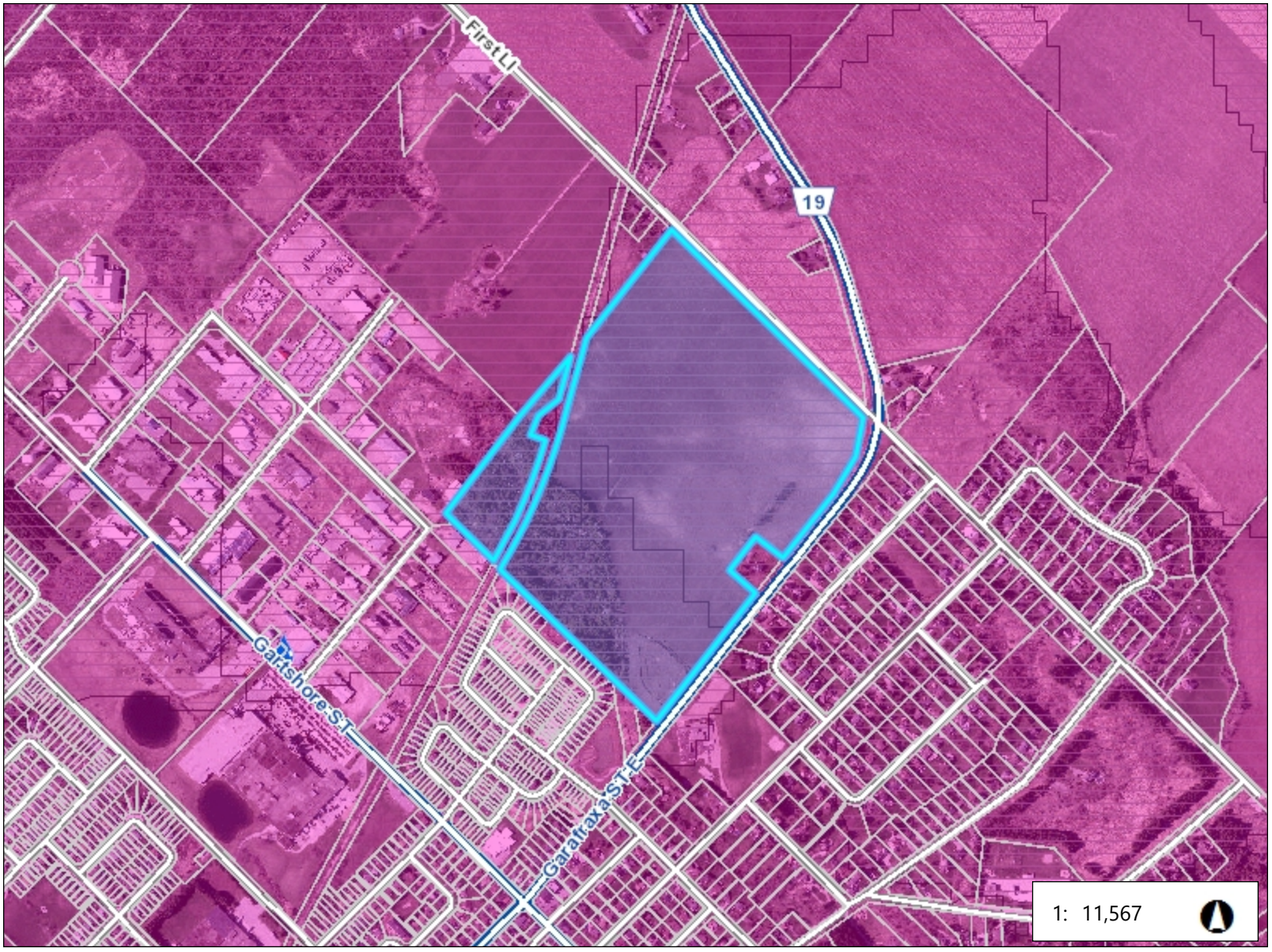
WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS IS NOT SURVEY DATA. Parcels - Teranet 2002, Wellington County 2022

Notes

6490 First Line, Fergus - Quantity



Legend

- Parcels
- Roads
  - Local Road
  - County Road
  - Highway
- Well Locations
  - Existing
  - Proposed
- WHPA Q1_Q2_Boundary
- WHPA Q1_Q2
  - Approved
  - Draft
- SGRA
- RoadsLookup
- Halton_MeanderBeltHazard
- Halton_HeadwaterFloodplainsl
- Prime Agriculture

0.6 0 0.29 0.6 Kilometers

WGS_1984_Web_Mercator_Auxiliary_Sphere

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THIS IS NOT SURVEY DATA. Parcels - Teranet 2002, Wellington County 2022

Notes

Anne Ha

From: Anne Ha
Sent: July 10, 2024 5:32 PM
To: 'grca@grandriver.ca'
Subject: Request for Information: 6409 First Line, Fergus, ON
Attachments: Fergus - Study Area.PNG

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environmental Impact Study (EIS) report for a property located 6409 First Line, Fergus, Ontario 550806 E 4841117 N (see attached .png). The purpose of this email is to request any available Natural Heritage information regarding the subject property and the general area.

A preliminary review of background information including the Natural Heritage Information Center (NHIC) data available through the MNRF's Make a Map: Natural Heritage Areas application and Geohub database, County of Wellington Official Plan (2024), the Township of Centre Wellington Official Plan (2024), and available watershed studies indicate the following natural heritage features are present within the vicinity of the Site:

- A large, naturalized area (i.e., woodlands and unevaluated wetlands) within the western half of the property;
- Along the edge of the naturalized area is an unnamed tributary transacts through the property which is part of the Innisfil Creek watershed; and
- Potential Wildlife Concentration Area – Colonial Waterbird Nesting Area.

The unnamed tributary and indicated wetland areas are regulated features of the GRCA. If possible, can the GRCA please provide any additional natural heritage information available.

Any other details or information that you can provide to help our natural heritage inventory would be greatly appreciated.

Thank you,

Anne Ha, B.Sc.
Ecologist
ISA Certified Arborist (ON-3179A)

ENVISION
CONSULTANTS LTD

6415 Northwest Drive U37-40,
Mississauga, ON, L4V1X1
Cell / 647-997-5650
Office/ 905-677-0202
Email / aha@envisionconsultants.ca
Website / www.envisionconsultants.ca

Anne Ha

From: Anne Ha
Sent: July 10, 2024 5:27 PM
To: 'Scientific Collection Permits Guelph (MNRF)'
Subject: Request for Information: 6409 First Line, Fergus, ON
Attachments: Fergus - Study Area.PNG

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environmental Impact Study (EIS) report for a property located 6409 First Line, Fergus, Ontario 550806 E 4841117 N (see attached .png). The purpose of this email is to request any available Natural Heritage information regarding the subject property and the general area.

A preliminary review of background information including the Natural Heritage Information Center (NHIC) data available through the MNRF's Make a Map: Natural Heritage Areas application and Geohub database, County of Wellington Official Plan (2024), the Township of Centre Wellington Official Plan (2024), and available watershed studies indicate the following natural heritage features are present within the vicinity of the Site:

- A large, naturalized area (i.e., woodlands and unevaluated wetlands) within the western half of the property;
- Along the edge of the naturalized area is an unnamed tributary transacts through the property which is part of the Innisfil Creek watershed; and
- Potential Wildlife Concentration Area – Colonial Waterbird Nesting Area

Due to the presence of an unnamed tributary which transacts through the western portion of the Site, from MNRF's Aquatic Resource Area (ARA) database indicated the thermal regime of the tributary as warmwater. However, a fish species summary was not available from the ARA database.

If possible, can you please confirm the above information and for the unnamed tributary provide:

- Confirmation of the thermal regime;
- Fish community data; and,
- The in-water works construction timing window.

Any other details or information that you can provide to help our natural heritage inventory would be greatly appreciated.

Thank you,

Anne Ha, B.Sc.
Ecologist
ISA Certified Arborist (ON-3179A)

ENVISION
CONSULTANTS LTD

6415 Northwest Drive U37-40,
Mississauga, ON, L4V1X1
Cell / 647-997-5650

Anne Ha

From: Species at Risk (MECP) <SAROntario@ontario.ca>
Sent: July 11, 2024 11:04 AM
To: Anne Ha
Cc: NHIC-Requests (MNRF)
Subject: RE: Request for Information: 6409 First Line, Fergus, ON

Hi Anne,

Thank you for your submission.

If you wish to request information about the locations of reported sightings of Species at Risk you can contact the Natural Heritage Information Centre at nhicrequests@ontario.ca.

Thank you,
Species at Risk Branch

From: Anne Ha <aha@envisionconsultants.ca>
Sent: Wednesday, July 10, 2024 3:42 PM
To: Species at Risk (MECP) <SAROntario@ontario.ca>
Subject: Request for Information: 6409 First Line, Fergus, ON

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an EIS report for the property at 6409 First Line, Fergus, Ontario 550806 E 4841117 N (see attached .png). The purpose of this email is to request any available information regarding Species at Risk (SAR).

A review of background information following the MECP's *Client's Guide to Screening for SAR* (DRAFT – May 2019) document included a search of the following databases/resources:

- Natural Heritage Information Center (NHIC) data available through the Ministry of Natural Resources and Forestry Make a Map: Natural Heritage Areas application;
- DFO Aquatic SAR mapping;
- Ontario Breeding Bird Atlas (OBBA);
- Ontario Reptile & Amphibian Atlas (ORAA);
- Ontario Butterfly Atlas; and,
- iNaturalist.

These resources indicated the following SAR have been documented within the vicinity of the Site:

- Barn Swallow (*Hirundo rustica*);
- Bank Swallow (*Riparia riparia*);
- Bobolink (*Dolichonyx oryzivorus*);
- Eastern Meadowlark (*Sturnella magna*);
- Eastern Whip-poor-will (*Antrostomus vociferus*);
- Silver Shiner (*Netropis photogenis*);

- Snapping Turtle (*Chelyedra serpentina*); and,
- Wood Thrush (*Hylocichla mustelina*).

Based on aerials potential habitat for:

- Eastern Small-footed Myotis (*Myotis leibii*);
- Little Brown Myotis (*Myotis lucifugus*);
- Northern Myotis (*Myotis septentrionalis*); and
- Tri-colored Bat (*Perimyotis subflavus*).

If possible, please confirm:

- That there are no other records of SAR or species of conservation concern on or within the vicinity of the Site.

Any other details or information that you can provide to help our natural heritage inventory would be greatly appreciated.

Thank you,

Anne Ha, B.Sc.
Ecologist
ISA Certified Arborist (ON-3179A)

ENVISION
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6415 Northwest Drive U37-40,
Mississauga, ON, L4V1X1
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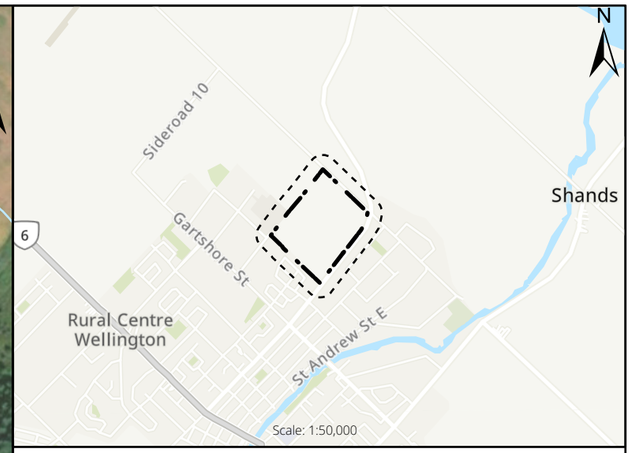
APPENDIX B:

Figures

Prepared By: TanyaPeterson



LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- WATERCOURSE

TITLE

SITE LOCATION

PROJECT

ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

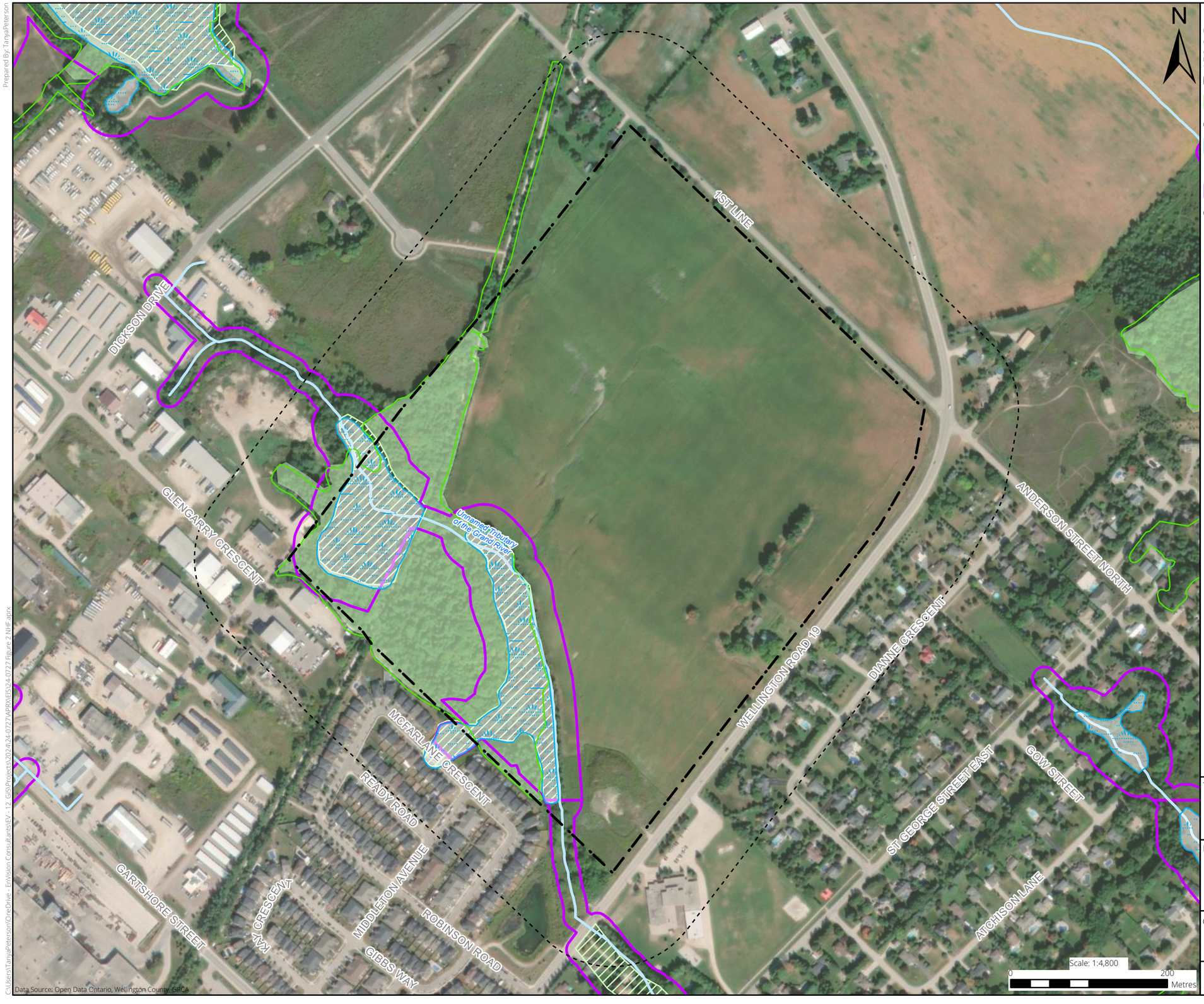
CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	1

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\APRX\EIS\24-0727 Figure 1 Site Location.aprx

Prepared By: TanyaPeterson



LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA

MINISTRY OF NATURAL RESOURCES AND FORESTRY (MNRF)

- WOODLAND

GRAND RIVER CONSERVATION AUTHORITY (GRCA)

- REGULATED WETLAND
- REGULATED WATERCOURSE
- REGULATION LIMIT

COUNTY OF WELLINGTON OFFICIAL PLAN SCHEDULE B1

- GREENLAND
- CORE GREENLAND

TITLE

NATURAL HERITAGE FEATURES

PROJECT

ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	2

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12 - GIS\Projects\2024\24-0727\APRX\ES\24-0727 Figure 2 NHF.aprx

Prepared By: TanyaPeterson

LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- GROUNDWATER SEEPAGE
- VEGETATION COMMUNITIES

CUM1-1	Dry-Moist Old field Meadow Type
CUP3-9	Norway Spruce - European Larch Coniferous Plantation Type
CUP3-8	White Spruce - European Larch Coniferous Plantation Type
CVR	Residential
FOC4	Fresh – Moist White Cedar Coniferous Forest Ecosite
FOC4-1	Fresh – Moist White Cedar Coniferous Forest Type
FOD4	Dry – Fresh Upland Deciduous Forest Ecosite
FOM	Mixed Forest
HR	Hedgerow
MAMM3-1	Mixed Mineral Meadow Marsh Type
MAS2	Graminoid Mineral Shallow Marsh Ecosite
OAGM1	Annual Row Crops
SWC1-1	White Cedar Mineral Coniferous Swamp Type
SWC3-1	White Cedar Organic Coniferous Swamp Type
SWD	Deciduous Swamp
SWD4-1	Willow Mineral Deciduous Swamp Type
SWM	Mixed Swamp
SWM6-1	Birch – Conifer Organic Mixed Swamp Type
SWT2-2	Missouri Willow Mineral Deciduous Thicket Swamp Type
SWT2-5	Red-osier Dogwood Mineral Deciduous Thicket Swamp Type

Note:
In limited cases, the community numbering is non-sequential due to the merging and revision of communities during field surveys from the preliminary desktop assessment, and is not representative of data gaps.

TITLE
ECOLOGICAL LAND CLASSIFICATION

PROJECT
ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT
RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	3

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\APRX\EIS\24-0727 Figure 3 ELC.aprx

Prepared By: TanyaPeterson

N

1ST LINE

BBS2

BBS3

BBS1

DICKSON DRIVE

Unnamed Tributary of the Grand River

AC2

T15

BBS4

BBS5

T10

T11

T13

T9

T8

BBS7

WELLINGTON ROAD 19

ANDERSON STREET NORTH

DIANNE CRESCENT

GLENCARRY CRESCENT

MCFARLANE CRESCENT

T12

AC1

T6

T4

T5

T3

READY ROAD

T2

BBS6

T1

ST GEORGE STREET EAST

COW STREET

GARTSHORE STREET

CRESCENT

MIDDLETON AVENUE

ROBINSON ROAD

ATCHISON LANE

GIBBS WAY

Scale: 1:4,800

0 200 Metres

Data Source: Open Data Ontario

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\APRX\EIS\24-0727 Figure 4 Wildlife Surveys.aprx

LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- WATERCOURSE
- BREEDING BIRD SURVEY LOCATIONS
- AMPHIBIAN CALLING SURVEY LOCATIONS
- 100 M AMPHIBIAN CALLING SURVEY BOUNDARY
- BAT TREE SNAG LOCATION
- SNAG SURVEY AREA

TITLE

WILDLIFE SURVEYS

PROJECT

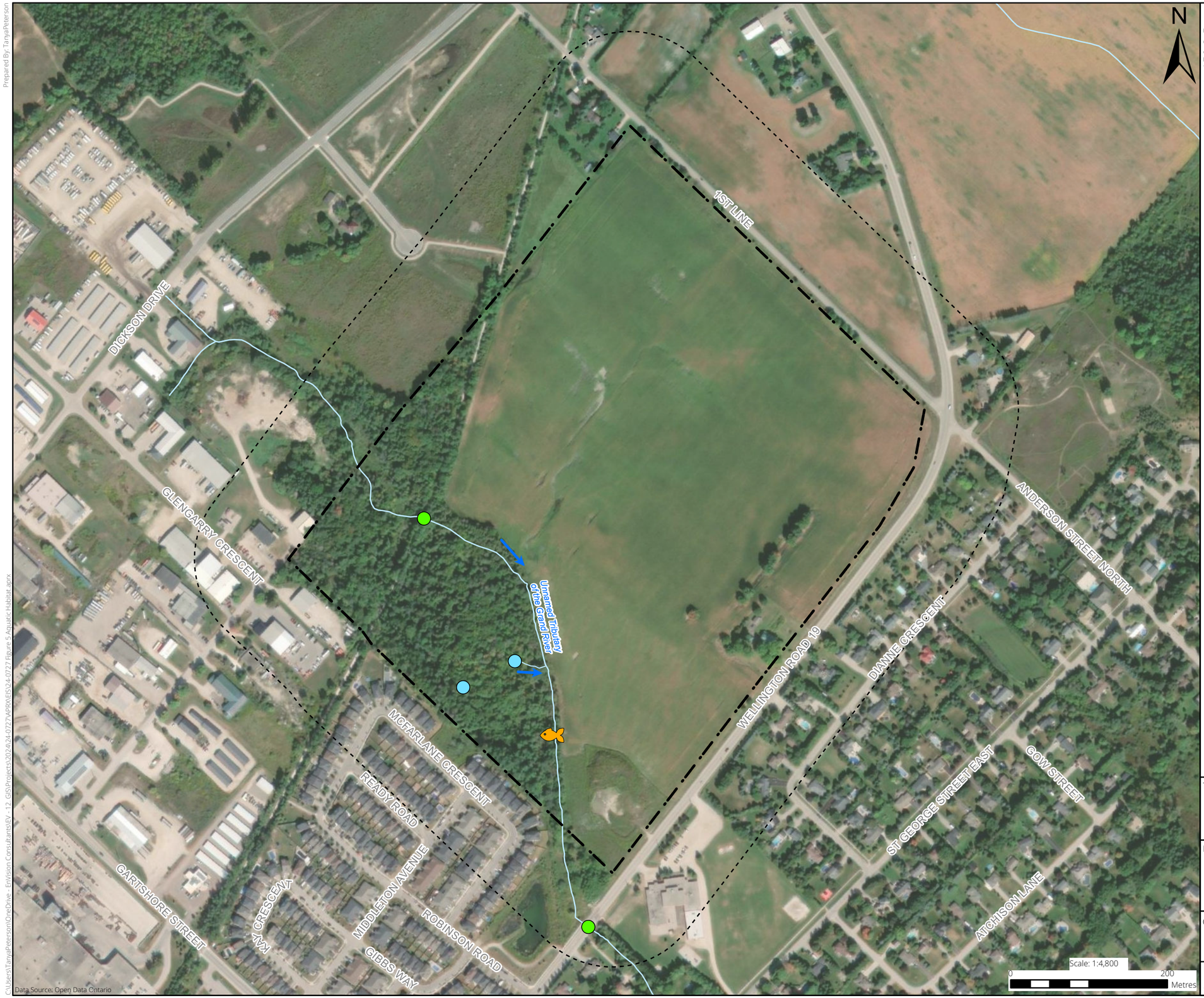
ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	4

Prepared By: TanyaPeterson



LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- WATERCOURSE
- FLOW DIRECTION
- CULVERT
- GROUNDWATER SEEPAGE
- DIRECT FISH HABITAT

TITLE

AQUATIC HABITAT

PROJECT

ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	5

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\APRX\EIS\24-0727 Figure 5 Aquatic Habitat.aprx

Prepared By: TanyaPeterson

N

LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- WATERCOURSE
- WATERCOURSE 15 M SETBACK
- WOODLAND
- WOODLAND 5 M SETBACK
- WETLAND
- 15 M WETLAND SETBACK
- DEVELOPMENT LIMIT

1ST LINE
DICKSON DRIVE
GLENGARRY CRESCENT
Unnamed Tributary of the Grand River
MCFARLANE CRESCENT
READY ROAD
CARTSHORE STREET
CRESCENT
MIDDLETON AVENUE
GIBBS WAY
ROBINSON ROAD
WELLINGTON ROAD 19
DIANNE CRESCENT
ANDERSON STREET NORTH
ST GEORGE STREET EAST
GOW STREET
ATCHISON LANE

Scale: 1:4,800
0 200 Metres

Data Source: Open Data Ontario

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\ARRXIES\24-0727 Figure 6 Constraints.aprx

TITLE

PROPOSED DEVELOPMENT LIMIT AND CONSTRAINTS

PROJECT

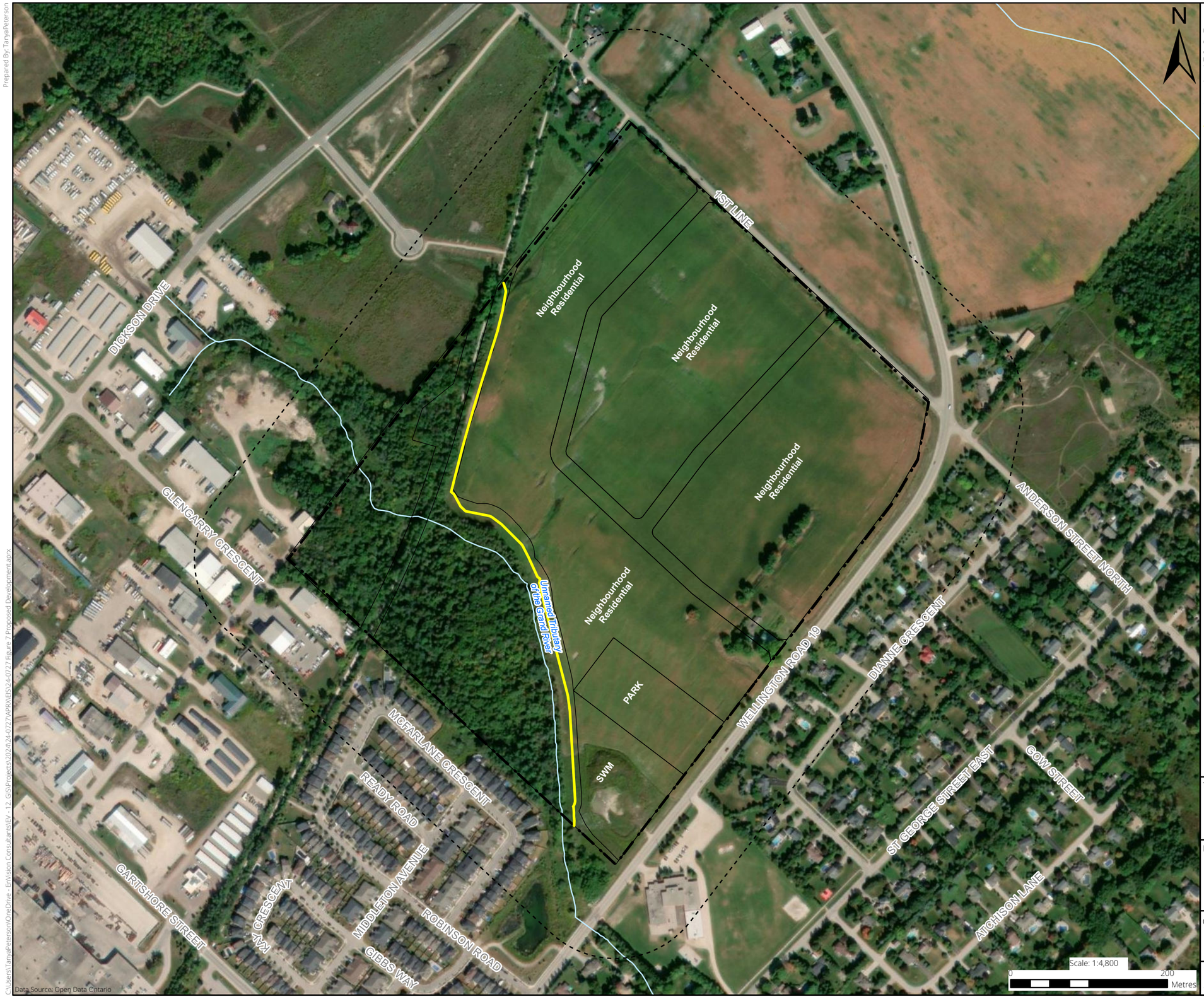
ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	6

Prepared By: TanyaPeterson



LEGEND

- SITE BOUNDARY
- 120 M STUDY AREA
- PROPOSED DEVELOPMENT
- WATERCOURSE
- DEVELOPMENT LIMIT

TITLE

PROPOSED DEVELOPMENT PLAN AND DEVELOPMENT LIMIT

PROJECT

ENVIRONMENTAL IMPACT ASSESSMENT
6490 FIRST LINE
FERGUS, ONTARIO

CLIENT

RBS & EJS FERGUS LIMITED PARTNERSHIP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
24-0727	MARCH 2026	TP	AS	7

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\EV - 12. GIS\Projects\2024\24-0727\APRX\ES\24-0727 Figure 7 Proposed Development.aprx

APPENDIX C:

Vegetation Species List

SCIENTIFIC NAME	COMMON NAME	CC	CW	OWES WETLAND PLANT LIST	G RANK	N RANK	S RANK	SARO STATUS	COSSARO STATUS	SARA STATUS	COSEWIC STATUS	Native Status	Unit 3 CUM1-1 with FOC4 inc	Unit 5 SWD	Unit 6 CUP3-9	Unit 7 SWM6-1	Unit 8 MAMM3-1 with SWT2-2 inc	Unit 9 SWC3-1 with SWD4-1 inc	Unit 10 FOC4-1	Unit 11 SWT2-5 with SWM inc	Unit 12 FOD4	Unit 14 FOD4	Unit 15 CUP3-8	Unit 16 FOM	Unit 17 SWC1-1	Unit 18 MAS2
Acer negundo	Manitoba Maple	0	0	X	G5	N5	S5					N		x												
Acer rubrum	Red Maple	4	0	X	G5	N5	S5					N				x		x			x					
Acer saccharum	Sugar Maple	4	3		G5	N5	S5					N				x					x	x	x			
Acer x freemanii	Freeman's Maple	6	-5	Indicator	GNA	NNA	SNA					N			x											
Actaea rubra	Red Baneberry	6	3		G5	N5	S5					N				x		x	x					x		
Agrimonia gryposepala	Hooked Agrimony	2	3		G5	N5	S5					N				x										
Aralia nudicaulis	Wild Sarsaparilla	4	3		G5	N5	S5					N				x			x						x	
Arctium lappa	Great Burdock		3		GNR	NNA	SNA					I	x													
Arctium minus	Common Burdock		3		GNR	NNA	SNA					I			x	x		x						x		
Arisaema triphyllum	Jack-In-The-Pulpit	5	-3	X	G5	N5	S5					N				x		x	x					x		
Asclepias syriaca	Common Milkweed	0	5		G5	N5	S5					N	x													
Athyrium filix-femina va	Northeastern Lady Fe	4	0	X*	G5T5	N5	S5					N				x		x	x					x	x	x
Betula papyrifera	Paper Birch	2	3	X	G5	N5	S5					N				x		x	x	x					x	x
Bidens frondosa	Devil's Beggarticks	3	-3	Indicator	G5	N5	S5					N						x								
Cardamine pratensis	Meadow Bittercress		-3	Indicator	G5TU	NNA	SNA					I								x						
Carex arctata	Drooping Woodland S	5	5		G5	N5	S5					N							x							
Carex communis	Fibrous-Root Sedge	6	5		G5	N5	S5					N													x	
Carex deweyana	Dewey's Sedge	6	3		G5	N5	S5					N						x								
Carex gracillima	Graceful Sedge	4	3	X	G5	N5	S5					N				x										
Carex hystericina	Porcupine Sedge	5	-5	Indicator	G5	N5	S5					N					x									
Carex pedunculata	Long-Stalked Sedge	5	3		G5	N5	S5					N							x							
Carex pseudocyperus	Cyperus-Like Sedge	6	-5	Indicator	G5	N5	S5					N	x													
Carex scabrata	Eastern Rough Sedge	8	-5	Indicator	G5	N5	S5					N				x			x							
Carex sp.	Sedge sp.											N							x	x						
Carex vulpinoidea	Fox Sedge	3	-5	Indicator	G5	N5	S5					N					x									
Circaea canadensis	Broad-Leaved Enchai	2	3		G5	N5	S5					N		x		x								x	x	x
Cirsium arvense	Canada Thistle		3		G5	NNA	SNA					I	x				x									
Cirsium vulgare	Bull Thistle		3		GNR	NNA	SNA					I						x								
Cornus alternifolia	Alternate-Leaved Dog	6	3		G5	N5	S5					N			x			x	x					x		
Cornus racemosa	Grey Dogwood	2	0	X	G5	N5	S5					N									x					
Cornus sericea	Red-Osier Dogwood	2	-3	Indicator (South)	G5	N5	S5					N	x				x			x						
Daphne mezereum	February Daphne		3		GNR	NNA	SNA					I			x									x		
Daucus carota	Wild Carrot		5		GNR	NNA	SNA					I	x													
Dryopteris carthusiana	Spinulose Wood Fern	5	-3	X	G5	N5	S5					N				x		x	x							x
Dryopteris intermedia	Evergreen Wood Fern	5	0		G5	N5	S5					N			x			x							x	
Dryopteris sp.	Wood Fern sp.											N									x					
Echinocystis lobata	Wild Cucumber	3	-3	X	G5	N5	S5					N		x		x										
Epilobium coloratum	Purple-Veined Willow	3	-5	Indicator	G5	N5	S5					N	x													
Epilobium hirsutum	Hairy Willowherb		-3	Indicator	GNR	NNA	SNA					I	x													
Epilobium parviflorum	Small-Flowered Hairy Willowherl		3	X	GNR	NNA	SNA					I					x									
Epipactis helleborine	Broad-Leaved Helleborine		3		GNR	NNA	SNA					I			x	x										x
Equisetum arvense	Field Horsetail	0	0	X	G5	N5	S5					N				x				x						
Equisetum sylvaticum	Woodland Horsetail	7	-3	X	G5	N5	S5					N					x									
Erigeron canadensis	Canada Horseweed	0	3		G5	N5	S5					N	x					x								
Erigeron philadelphicus	Philadelphia Fleaban	1	-3	X	G5	N5	S5					N	x					x								
Erythronium americanu	Yellow Trout-Lily	5	5		G5	N5	S5					N							x			x	x			
Eupatorium perfoliatum	Common Boneset	2	-3	Indicator	G5	N5	S5					N						x								
Euthamia graminifolia	Grass-Leaved Golden	2	0		G5	N5	S5					N					x									
Eutrochium maculatum	Spotted Joe Pye Wee	3	-5	Indicator	G5T5	N5	S5					N		x						x						
Fragaria virginiana	Wild Strawberry	2	3		G5	N5	S5					N		x		x		x			x		x			
Fraxinus americana	White Ash	4	3		G4	N4	S4					N							x							
Fraxinus pennsylvanica	Red Ash	3	-3	X	G4	N5	S4					N													x	
Galium mollugo	Smooth Bedstraw		5		GNR	NNA	SNA					I					x									
Galium palustre	Common Marsh Beds	5	-5	Indicator	G5	N5	S5					N						x		x						
Geranium robertianum	Herb-Robert	2	3		G5	N5	S5					N		x	x	x		x						x		x
Geum canadense	Canada Avens	3	0	X	G5	N5	S5					N				x		x								x
Geum laciniatum	Rough Avens	4	-3	X	G5	N5	S4					N								x						
Geum sp.	Avens sp.											N												x		
Geum urbanum	Wood Avens		5		G5	NNA	SNA					I		x							x					
Glechoma hederacea	Ground-Ivy		3		GNR	NNA	SNA					I						x								
Glyceria striata	Fowl Mannagrass	3	-5	Indicator	G5	N5	S5					N				x	x	x								x
Gymnocarpium dryopte	Common Oak Fern	7	3	X	G5	N5	S5					N				x		x								
Hydrocotyle americana	American Water Penn	7	-5	Indicator	G5	N5	S4S5					N						x								
Hypericum perforatum	Common St. John's-Wort		5		GNR	NNA	SNA					I	x													

SCIENTIFIC NAME	COMMON NAME	CC	CW	OWES WETLAND PLANT LIST	G RANK	N RANK	S RANK	SARO STATUS	COSSARO STATUS	SARA STATUS	COSEWIC STATUS	Native Status	Unit 3 CUM1-1 with FOC4 inc	Unit 5 SWD	Unit 6 CUP3-9	Unit 7 SWM6-1	Unit 8 MAMM3-1 with SWT2-2 inc	Unit 9 SWC3-1 with SWD4-1 inc	Unit 10 FOC4-1	Unit 11 SWT2-5 with SWM inc	Unit 12 FOD4	Unit 14 FOD4	Unit 15 CUP3-8	Unit 16 FOM	Unit 17 SWC1-1	Unit 18 MAS2
Impatiens capensis	Spotted Jewelweed	4	-3	Indicator	G5	N5	S5					N		x			x	x		x						
Juncus effusus	Soft Rush	4	-5	Indicator	G5	NNR	S5					N					x									
Lapsana communis	Common Nipplewort		3		GNR	NNA	SNA					I						x								
Leucanthemum vulgare	Oxeye Daisy		5		GNR	NNA	SNA					I	x													
Ludwigia palustris	Marsh Seedbox	5	-5	Indicator	G5	N5	S5					N								x						
Lythrum salicaria	Purple Loosestrife		-5	Indicator	G5	NNA	SNA					I	x				x									
Maianthemum canade	Wild Lily-Of-The-Valle	5	3		G5	N5	S5					N			x			x	x					x	x	
Maianthemum racemo	Large False Solomon	4	3		G5T5	N5	S5					N							x							
Malus pumila	Common Apple		5		G5	NNA	SNA					I	x													
Matteuccia struthiopte	Ostrich Fern	5	0	X	G5	N5	S5					N						x					x			
Melilotus albus	White Sweet-Clover		3		G5	NNA	SNA					I	x													
Mentha canadensis	Canada Mint	3	-3	Indicator	G5	N5	S5					N				x		x								
Nasturtium sp.	Watercress sp.											I								x						
Oenothera parviflora	Small-Flowered Even	1	3		G5	N5	S5					N	x													
Onoclea sensibilis	Sensitive Fern	4	-3	Indicator	G5	N5	S5					N		x		x	x	x		x	x				x	
Parthenocissus vitacea	Thicket Creeper	4	3		G5	N5	S5					N		x	x	x		x				x	x			
Phalaris arundinacea	Reed Canarygrass	0	-3	X	G5	N5	S5					N	x													
Phalaris arundinacea v	Reed Canarygrass	0	-3	X	G5TNR	N5	S5					N		x			x	x		x						x
Picea abies	Norway Spruce		5		G5	NNA	SNA					I			x									x		
Picea glauca	White Spruce	6	3	X	G5	N5	S5					N				x								x		
Pinus strobus	Eastern White Pine	4	3	X	G5	N5	S5					N			x											
Pinus sylvestris	Scots Pine		3		GNR	NNA	SNA					I												x		
Populus balsamifera	Balsam Poplar	4	-3	X	G5	NNR	S5					N		x												
Populus tremuloides	Trembling Aspen	2	0		G5	N5	S5					N				x		x	x		x	x			x	
Prunella vulgaris	Common Self-Heal	0	0		G5	N5	S5					N						x								
Prunus serotina	Black Cherry	3	3		G5	N5	S5					N			x				x		x	x	x	x	x	
Prunus virginiana	Chokecherry	2	3		G5	N5	S5					N			x	x		x	x			x			x	
Ranunculus acris	Common Buttercup		0	X	G5	NNA	SNA					I				x		x								
Ranunculus recurvatus	Hooked Buttercup	4	-3		G5	N5	S5					N				x										
Ranunculus sceleratus	Cursed Buttercup	2	-5	Indicator	G5	N5	S5					N						x								
Rhamnus cathartica	European Buckthorn		0	X	GNR	NNA	SNA					I	x	x	x	x		x	x		x	x	x	x	x	
Ribes americanum	American Black Curra	4	-3	X	G5	N5	S5					N		x											x	
Ribes cynosbati	Eastern Prickly Goose	4	3		G5	N5	S5					N				x			x			x	x			
Ribes rubrum	European Red Currant		5	X	G4G5	NNA	SNA					I			x								x			
Ribes triste	Swamp Red Currant	6	-5	Indicator	G5	N5	S5					N				x		x		x						
Rubus idaeus ssp. strig	North American Red I	2	3		G5T5	N5	S5					N			x	x	x	x								
Rubus occidentalis	Black Raspberry	2	5		G5	N5	S5					N		x												
Rubus pubescens	Dwarf Raspberry	4	-3	Indicator (South)	G5	N5	S5					N				x		x								
Rudbeckia hirta	Black-Eyed Susan	0	3		G5	N5	S5					N	x													
Rumex britannica	Greater Water Dock	6	-5	Indicator	G5	N5	S5					N						x		x						
Rumex crispus	Curled Dock		0	X	GNR	NNA	SNA					I	x													
Rumex obtusifolius	Bitter Dock		-3	X	GNR	NNA	SNA					I						x								
Salix alba	White Willow		-3	X	G5	NNA	SNA					I		x												
Salix amygdaloides	Peach-Leaved Willow	6	-3	X	G5	N5	S5					N		x			x									
Salix bebbiana	Bebb's Willow	4	-3	Indicator	G5	N5	S5					N					x									
Salix discolor	Pussy Willow	3	-3	Indicator	G5	N5	S5					N								x						
Salix eriocephala	Cottony Willow	4	-3	X	G5	N5	S5					N		x			x			x						
Salix petiolaris	Meadow Willow	3	-3	Indicator	G5	N5	S5					N		x			x			x						
Sambucus canadensis	Common Elderberry	5	-3	X	G5T5	N5	S5					N		x						x						
Sambucus racemosa	Red Elderberry	5	3		G5	N5	S5					N			x	x										
Sambucus sp.	Elderberry sp.											N						x								
Sanguinaria canadensi	Bloodroot	5	3		G5	N5	S5					N		x												
Scirpus atrovirens	Dark-Green Bulrush	3	-5	X	G5	N5	S5					N					x									
Scutellaria lateriflora	Mad-Dog Skullcap	5	-5	Indicator	G5	N5	S5					N								x						
Setaria pumila	Yellow Foxtail		0		GNR	NNA	SNA					I	x													
Solanum dulcamara	Bittersweet Nightshade		0	X	GNR	NNA	SNA					I	x	x		x		x	x	x					x	x
Solidago altissima var.	Eastern Tall Goldenro	1	3		G5T5	NNR	S5					N		x		x	x	x						x		
Solidago flexicaulis	Zigzag Goldenrod	6	3		G5	N5	S5					N													x	
Solidago gigantea	Giant Goldenrod	4	-3	X	G5	N5	S5					N							x							
Sorbus aucuparia	European Mountain-Ash		5		G5	NNA	SNA					I			x				x					x		
Symphyotrichum firmu	Glossy-Leaved Aster	4	-3		G5	N4?	S4?					N					x									
Symphyotrichum lance	Panicled Aster	3	-3	Indicator	G5	N5	S5					N					x			x						
Symphyotrichum lateri	Calico Aster	3	0	X	G5	N5	S5					N													x	
Symphyotrichum novae	New England Aster	2	-3		G5	N5	S5					N					x									

SCIENTIFIC NAME	COMMON NAME	CC	CW	OWES WETLAND PLANT LIST	G RANK	N RANK	S RANK	SARO STATUS	COSSARO STATUS	SARA STATUS	COSEWIC STATUS	Native Status	Unit 3 CUM1-1 with FOC4 inc	Unit 5 SWD	Unit 6 CUP3-9	Unit 7 SWM6-1	Unit 8 MAMM3-1 with SWT2-2 inc	Unit 9 SWC3-1 with SWD4-1 inc	Unit 10 FOC4-1	Unit 11 SWT2-5 with SWM inc	Unit 12 FOD4	Unit 14 FOD4	Unit 15 CUP3-8	Unit 16 FOM	Unit 17 SWC1-1	Unit 18 MAS2
Symphyotrichum punic	Purple-Stemmed Ast	6	-5	Indicator	G5	NNR	S5					N		x				x		x						
Tanacetum vulgare	Common Tansy		5		GNR	NNA	SNA					I	x													
Taraxacum officinale	Common Dandelion		3		G5	N5	SNA					I						x	x			x				
Taxus canadensis	Canada Yew	7	3		G5	N5	S4					N													x	
Thalictrum pubescens	Tall Meadow-Rue	5	-3	X	G5	N5	S5					N									x					
Thuja occidentalis	Eastern White Cedar	4	-3	X	G5	N5	S5					N				x		x		x			x		x	
Tiarella stolonifera	Heart-Leaved Foamfl	6	3	X	G5	N5	S5					N				x		x								
Toxicodendron radican	Western Poison Ivy	2	0		G5	N5	S5					N				x										
Trifolium hybridum	Alsike Clover		3		GNR	NNA	SNA					I	x													
Trillium erectum	Red Trillium	6	3		G5	N5	S5					N				x		x	x							
Tsuga canadensis	Eastern Hemlock	7	3	X	G4G5	N5	S5					N							x						x	x	
Tussilago farfara	Coltsfoot		3	X	GNR	NNA	SNA					I		x					x								
Typha angustifolia	Narrow-Leaved Cattail		-5	Indicator	G5	N5	SNA					I	x														x
Typha latifolia	Broad-Leaved Cattail	1	-5	Indicator	G5	N5	S5					N					x										
Ulmus americana	White Elm	3	-3	X	G4	N5	S5					N						x	x		x						
Verbascum thapsus	Common Mullein		5		GNR	NNA	SNA					I	x														
Veronica serpyllifolia	Thyme-Leaved Speedwell		0		G5	N5	SU					N						x									
Viburnum opulus var. o	Cranberry Viburnum		-3		G5TNR	NNA	SNA					I				x							x				
Vicia cracca	Tufted Vetch		5		GNR	NNA	SNA					I	x														
Viola pubescens	Yellow Violet	5	3		G5	N5	S5					N							x				x				
Viola sororia	Woolly Blue Violet	4	0	X	G5	N5	S5					N				x							x				
Vitis riparia	Riverbank Grape	0	0		G5	N5	S5					N			x		x	x									

APPENDIX D:

Wildlife Species List

TYPE	COMMON NAME	SCIENTIFIC NAME	G_RANK	S_RANK	SARA	SARO	MBCA	CONFIRMED BREEDER	PROBABLE BREEDER	POSSIBLE BREEDER	NO BREEDING BIRD EVIDENCE	INCIDENTAL WILDLIFE OBSERVATION ONLY
Birds	American Crow	*Corvus brachyrhynchos*	G5	S5						X		
Birds	American Goldfinch	*Spinus tristis*	G5	S5					X			
Birds	American Redstart	*Setophaga ruticilla*	G5	S5B					X			
Birds	American Robin	*Turdus migratorius*	G5	S5					X			
Birds	Banded Hairstreak	*Satyrium calanus*	G4	S4								X
Birds	Barn Swallow	*Hirundo rustica*	G5	S4B	SC	SC	SC			X		
Birds	Black-capped Chickadee	*Poecile atricapillus*	G5	S5					X			
Birds	Blue Jay	*Cyanocitta cristata*	G5	S5						X		
Birds	Brown-headed Cowbird	*Molothrus ater*	G5	S5						X		
Birds	Canada Goose	*Branta canadensis*	G5	S5						X		
Birds	Cedar Waxwing	*Bombycilla cedrorum*	G5	S5						X		
Birds	Chipping Sparrow	*Spizella passerina*	G5	S5B,S3N					X			
Birds	Common Grackle	*Quiscalus quiscula*	G5	S5							X	
Birds	Common Whitetail	*Plathemis lydia*	G5	S5								X
Birds	Common Yellowthroat	*Geothlypis trichas*	G5	S5B,S3N						X		
Birds	Downy Woodpecker	*Dryobates pubescens*	G5	S5						X		
Birds	Eastern Kingbird	*Tyrannus tyrannus*	G5	S4B						X		
Birds	European Skipper	*Thymelicus lineola*	G5	S5								X
Birds	European Starling	*Sturnus vulgaris*	G5	SNA				X				
Birds	Gray Catbird	*Dumetella carolinensis*	G5	S5B,S3N					X			
Birds	Great Blue Heron	*Ardea herodias*	G5	S4							X	
Birds	Great Crested Flycatcher	*Myiarchus crinitus*	G5	S5B						X		
Birds	House Finch	*Haemorhous mexicanus*	G5	SNA					X			
Birds	House Sparrow	*Passer domesticus*	G5	SNA					X			
Birds	House Wren	*Troglodytes aedon*	G5	S5					X			
Birds	Indigo Bunting	*Passerina cyanea*	G5	S5B					X			
Birds	Killdeer	*Charadrius vociferus*	G5	S4B						X		
Birds	Mallard	*Anas platyrhynchos*	G5	S5					X			
Birds	Mourning Dove	*Zenaida macroura*	G5	S5					X			
Birds	Northern Cardinal	*Cardinalis cardinalis*	G5	S5					X			
Birds	Northern Flicker	*Colaptes auratus*	G5	S5						X		
Birds	Northern rough-winged Swallow	*Stelgidopteryx serripennis*	G5	S4B							X	
Birds	Red Admiral	*Vanessa atalanta*	G5	S5								X
Birds	Red-bellied Woodpecker	*Melanerpes carolinus*	G5	S4						X		
Birds	Red-eyed Vireo	*Vireo olivaceus*	G5	S5					X			
Birds	Red-winged Blackbird	*Agelaius phoeniceus*	G5	S5				X				
Birds	Ring-billed Gull	*Larus delawarensis*	G5	S5							X	
Birds	Rose-breated Grosbeak	*Pheucticus ludovicianus*	G5	S5						X		

TYPE	COMMON NAME	SCIENTIFIC NAME	G_RANK	S_RANK	SARA	SARO	MBCA	CONFIRMED BREEDER	PROBABLE BREEDER	POSSIBLE BREEDER	NO BREEDING BIRD EVIDENCE	INCIDENTAL WILDLIFE OBSERVATION ONLY
Birds	Savannah Sparrow	*Passerculus sandwichensis*	G5	S5B,S3N					X			
Birds	Song Sparrow	*Melospiza melodia*	G5	S5					X			
Birds	Turkey Vulture	*Cathartes aura*	G5	S5							X	
Birds	Vesper Sparrow	*Pooecetes gramineus*	G5	S4B					X			
Birds	Wild Indigo Duskywing	*Erynnis baptisiae*	G4	S4								X
Birds	Willow Flycatcher	*Empidonax traillii*	G5	S4B						X		
Birds	Yellow Warbler	*Setophaga petechia*	G5	S5B					X			
Amphibians	American Toad	*Anaxyrus americanus*	G5	S5								X
Fish	Brook Stickleback	*Culaea inconstans*	G5	S5								X
Insects	Cabbage White	*Pieris rapae*	G5	S5								X
Insects	Silver-spotted Skipper	*Epargyreus clarus*	G5	S5								X
Mammals	Eastern Chipmunk	*Tamias striatus*	G5	S5								X

APPENDIX E:

Photo Page

PHOTO 1: Looking north towards the Unit 1 Annual Row Crop (OAGM1).

PHOTO 2: Looking north towards the Unit 2 residential house and shed (CVR).

PHOTO 3: Looking east towards the Unit 3 Dry-Moist Old Field Meadow (CUM1-1).

PHOTO 4: Looking east towards the Unit 5 Deciduous Swamp (SWD).

PHOTO 5: Looking east towards the Fresh-Moist White Cedar Coniferous Forest (FOC4) inclusion of Unit 3.

PHOTO 6: Looking south towards the Unit 6 Norway Spruce - European Larch Coniferous Plantation (CUP3-9).

PHOTO 7: Looking north towards the Unit 7 Birch – Conifer Organic Mixed Swamp (SWM6-1).

PHOTO 8: Looking west towards the Unit 8 Mixed Mineral Meadow Marsh (MAMM3-1) with Willow Mineral Deciduous Thicket Swamp (SWT2-2) inclusion in the background.

PHOTO 9: Looking west towards the Unit 9 White Cedar Organic Coniferous Swamp (SWC3-1).

PHOTO 10: Looking south towards the Unit 10 Fresh – Moist White Cedar Coniferous Forest (FOC4-1).

PHOTO 11: Looking north towards the Unit 11 Red-osier Dogwood Mineral Deciduous Thicket Swamp (SWT2-5)

PHOTO 12: Looking north towards the Unit 12 Dry – Fresh Upland Deciduous Forest (FOD4).

PHOTO 7: Looking north towards the Unit 14 Dry – Fresh Upland Deciduous Forest (FOD4)

PHOTO 8: Looking eats towards the Unit 14 Dry – Fresh Upland Deciduous Forest (FOD4) at east terminus of unit. Trail in background.

PHOTO 9: Looking north towards the Unit 15 White Spruce - European Larch Coniferous Plantation (CUP3-8).

PHOTO 10: Looking north towards the Unit 16 Forest (FOM).

PHOTO 11: Looking east towards the Unit 17 White Cedar Mineral Coniferous Swamp (SWC1-1).

PHOTO 12: Looking north towards the Unit 18 Graminoid Mineral Shallow Marsh (MAS2).

APPENDIX F:

Species at Risk and Species of Conservation Concern Screening

SPECIES NAME	ESA STATUS	SARA STATUS	S-RANK	HABITAT DESCRIPTION	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
BOBOLINK	THR	THR	S4B	They breed in a variety of natural grassland habitat types, including remnant prairies, savannahs and alvar grasslands. They also nest commonly in grassland habitat restoration sites and primarily in hayfields and pastures. Bobolinks will also nest in low densities in large grassy bogs, fens and beaver meadows (MNRF, 2013).	Low	Natural grassland habitat types for breeding are not present within the Site. None observed during field investigations and species not anticipated to be present within the Site. No anticipated impact to the species.	NO
EASTERN MEADOWLARK	THR	THR	S4B, S3N	Eastern Meadowlark breed primarily in moderately tall grasslands, such as pastures and hayfields, but are also found in alfalfa fields, weedy borders of croplands, roadsides, orchards, airports, shrubby overgrown fields, or other open areas. Small trees, shrubs or fence posts are used as elevated song perches. In Ontario, the Eastern Meadowlark is primarily found south of the Canadian Shield but it also inhabits the Lake Nipissing, Timiskaming and Lake of the Woods areas (MECP, 2021).	Low	Natural grassland habitat types for breeding are not present within the Site. None observed during field investigations and species not anticipated to be present within the Site. No anticipated impact to the species.	NO
SNAPPING TURTLE	SC	SC	S4	Snapping Turtles spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter, with only their noses exposed to the surface to breathe. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits. It is primarily limited to the southern part of Ontario. (MECP, 2021).	Low.	Suitable habitat is not present within the Site. None observed during field investigations and species not anticipated to be present within the Site. No anticipated impact to the species.	NO
BARN SWALLOW	SC	THR	S4B	Barn Swallows often live in close association with humans, building their cup-shaped mud nests almost exclusively on human-made structures such as open barns, under bridges and in culverts. The species is attracted to open structures that include ledges where they can build their nests, which are often re-used from year to year. They prefer unpainted, rough-cut wood, since the mud does not adhere as well to smooth surfaces. Barn Swallow is found throughout southern Ontario and can range as far north as Hudson Bay, wherever suitable locations for nests exist (MECP, 2023).	Moderate	Three (3) Barn Swallow were observed within the Site during the July 4, 2024, breeding bird survey. The garage present may provide nesting habitat. No nests were observed during field investigations. No anticipated impact to the species.	YES
BANK SWALLOW	THR	THR	S4B	Bank Swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs (MNRF, 2023).	Low	No vertical faces of silt, soil, sand deposits or suitable banks found within the Site. No suitable habitat was found within the Site or Study Area. Bank Swallows may be present within the general area and may utilize the Site as foraging grounds. None observed during field investigations and species not anticipated to be present within the Site. No anticipated impact to the species.	NO

SPECIES NAME	ESA STATUS	SARA STATUS	S-RANK	HABITAT DESCRIPTION	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
CHIMNEY SWIFT	THR	THR	S3B	Chimney Swift are more likely to be found in and around urban settlements where they nest and roost (rest or sleep) in chimneys and other manmade structures. In Ontario, it is most widely distributed in the Carolinian zone in the south and southwest of the province (MNRF, 2014).	Low	Suitable habitat (i.e., chimneys) are not present within the Site. Chimney Swifts may utilize the Site as foraging grounds. None observed during field investigations and species not anticipated to be present within the Site. No anticipated impact to the species.	NO
EASTERN WOOD-PEWEE	SC	SC	S4B	Eastern Wood-pewee lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation (MNRF, 2014).	Moderate	Suitable habitat is present within forest communities present within the Site. Species may be present in forest communities; however, the forest communities will not be removed with the proposed development. None observed during field investigations. No anticipated impact to the species.	YES
SILVER SHINER	THR	THR	S2	Typical suitable habitat for Silver Shiner is primarily medium to large streams or rivers (4th order and higher), usually with widths greater than 20 m, and having alternating riffle-pool sequences (MNRF, 2021).	Low	Suitable habitat is not present within the reach of the Unnamed Tributary of the Grand River present within the Site. None observed during field investigations and species not anticipated to be present within the Site. No anticipated impact to the species.	NO
WOOD THRUSH	SC	THR	S4B	The Wood Thrush lives in mature deciduous and mixed (conifer-deciduous) forests. They seek moist stands of trees with well-developed undergrowth and tall trees for singing perches. These birds prefer large forests but will also use smaller stands of trees. They build their nests in living saplings, trees, or shrubs, usually in Sugar Maple or American Beech (MNRF, 2014).	Low	Suitable habitat is present within forest communities present within the Site. Species may be present in forest communities; however, the forest communities will not be removed with the proposed development. None observed during field investigations. No anticipated impact to the species.	NO
BUTTERNUT	END	END	S2?	In Ontario, Butternut usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams. It is also found on well-drained gravel sites and rarely on dry rocky soil. This species does not do well in the shade, and often grows in sunny openings and near forest edges. In Ontario, this species is found throughout the southwest, north to the Bruce Peninsula, and south of the Canadian Shield. (MECP, 2021).	Low	None observed during field investigations. No anticipated impact to the species.	NO

SPECIES NAME	ESA STATUS	SARA STATUS	S-RANK	HABITAT DESCRIPTION	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
WOODLAND VOLE	S3?	SC	-	In Ontario, the Woodland Vole lives in mature deciduous forest in the Carolinian region where there is a deep litter layer that allows it to burrow. In Ontario, it is known to exist at 30 sites from the Municipality of Chatham-Kent and Lambton County, east to Haldimand County, and north to Halton Regional Municipality and the City of Hamilton. Because it spends most of its time below ground, this species is difficult to spot and may have been missed at other locations in the province.	Low	None observed during field investigations. Deciduous forests areas are present within the Site which may provide suitable habitat for this species; however, the Site and Study Area are not located within one of the 30 known sites within Ontario. The forest communities will not be removed with the proposed development. No anticipated impact to the species.	NO
PAINTED SKIMMER	S3	-	-	Painted Skimmers are typically found near wooded ponds and bogs (New Jersey Odes, 2026).	Moderate	None observed during field investigations. Wetlands and seeps/springs present within the woodland feature within the Site may provide suitable habitat for this species. Wetlands, woodlands and seeps/springs within the Site will be retained. No anticipated impact to the species.	NO
EASTERN SMALL-FOOTED MYOTIS	END	END	S2S3	In the spring and summer, Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. In the winter, these bats hibernate, most often in caves and abandoned mines that remain above zero degrees Celsius. They seem to choose colder and drier sites than similar bats and will return to the same spot each year. The Eastern Small-footed Bat has been found from south of Georgian Bay to Lake Erie and east to the Pembroke area. There are also records from the Bruce Peninsula, the Espanola area, and Lake Superior Provincial Park. Most documented sightings are of bats in their winter hibernation sites. (MECP, 2021).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES
LITTLE BROWN MYOTIS	END	END		During the day they roost in trees and buildings. They often select attics, abandoned buildings and barns for summer colonies where they can raise their young. Bats can squeeze through very tiny spaces (as small as six millimetres across) and this is how they access many roosting areas. Little Brown Myotis hibernate from October or November to March or April, most often in caves or abandoned mines that are humid and remain above freezing. The little brown bat is widespread in southern Ontario and found as far north as Moose Factory and Favourable Lake. (MECP, 2021).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES

SPECIES NAME	ESA STATUS	SARA STATUS	S-RANK	HABITAT DESCRIPTION	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
NORTHERN LONG-EARED MYOTIS	END	END	S3	Northern Long-eared Myotis are associated with boreal forests, choosing to roost under loose bark and in the cavities of trees. These bats hibernate from October or November to March or April, most often in caves or abandoned mines. The Northern Long-eared Myotis is found throughout forested areas in southern Ontario, to the north shore of Lake Superior and occasionally as far north as Moosonee, and west to Lake Nipigon (MECP, 2021).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES
TRI-COLORED BAT	END	END	S3?	During the summer, the Tri-colored Bat is found in a variety of forested habitats. It forms day roosts and maternity colonies in older forest and occasionally in barns or other structures. They forage over water and along streams in the forest. At the end of the summer, they travel to a location where they swarm; it is generally near the cave or underground location where they will overwinter. This bat is found in southern Ontario and as far north as Espanola near Sudbury. Because it is very rare, it has a scattered distribution (MNRF, 2021).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES
HOARY BAT	END	END	S4	In Canada, these bats use mostly treed habitats for roosting or foraging, with a particularly strong dependence on trees as roosting sites. Foraging habitats are less well known, but likely include the area above aquatic habitats, low-elevation meadows, grasslands, and fields, as well as open-canopied forest, the area above forest canopies, and forest edges. Drinking habitat is not well known and assumed to be the same as aquatic foraging habitats. Winter habitat requirements are not well known for any of these species (MNRF, 2024).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES

SPECIES NAME	ESA STATUS	SARA STATUS	S-RANK	HABITAT DESCRIPTION	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
EASTERN RED BAT	END	END	S4	In Canada, these bats use mostly treed habitats for roosting or foraging, with a particularly strong dependence on trees as roosting sites. Foraging habitats are less well known, but likely include the area above aquatic habitats, low-elevation meadows, grasslands, and fields, as well as open-canopied forest, the area above forest canopies, and forest edges. Drinking habitat is not well known and assumed to be the same as aquatic foraging habitats. Winter habitat requirements are not well known for any of these species (MNRF, 2024).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, as the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES
SILVER-HAIRED BAT	END	END	S4	In Canada, these bats use mostly treed habitats for roosting or foraging, with a particularly strong dependence on trees as roosting sites. Foraging habitats are less well known, but likely include the area above aquatic habitats, low-elevation meadows, grasslands, and fields, as well as open-canopied forest, the area above forest canopies, and forest edges. Drinking habitat is not well known and assumed to be the same as aquatic foraging habitats. Winter habitat requirements are not well known for any of these species (MNRF, 2024).	Moderate	ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. Existing buildings may contain alternative roosting areas for bats. No bats were observed within the Site; however, no targeted surveys were conducted. The bat habitat assessment results indicated that the woodland areas within the Site did not meet the density threshold for high-quality bat maternity habitat. As potential habitat areas exist within the Site, bat species are considered potentially present. No tree or snag removals are proposed within woodland areas within the Site. However, the proposed development requires the removal of buildings and other trees (i.e., hedgerows and scattered treed features) found within the Site which may impact bat species. Impacts and mitigation measures towards bat species are discussed further in Section 7.	YES

Glossary

Endangered Species Act (ESA)

Extirpated (EXT) – a species that no longer exists in the wild in Ontario but still occurs elsewhere.

Endangered (END) – a species facing imminent extinction or extirpation in Ontario which is a candidate for regulation under Ontario's ESA.

Threatened (THR) – a species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.

Special Concern (SC) – a species with characteristics that make it sensitive to human activities or natural events.

Species at Risk Act (SARA)

Extirpated (EXT) – a wildlife species that no longer exists in the wild in Canada but exists elsewhere in the wild.

Endangered (END) – a wildlife species that is facing imminent extirpation or extinction.

Threatened (THR) – a wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.

Special Concern (SC) – a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.

Schedule 1 – the official list of wildlife species at risk that are classified as extirpated, endangered, threatened and of special concern.

Schedule 2 – species that have been designated as endangered or threatened and have to be re-assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) using revised criteria.

Schedule 3 – a list of species that were designated as at risk by COSEWIC before SARA came into force in 2003, but which had not yet been reassessed using the updated SARA criteria at that time.

Sub-national Conservation Status Rank (S-rank)

Presumed Extirpated (SX) – species or ecosystem is believed to be extirpated from the jurisdiction (i.e., nation, or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. [equivalent to "Regionally Extinct" in IUCN Red List terminology].

Possibly Extirpated (SH) – Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years in human-dominated landscapes despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.

Critically Imperiled (S1) – at very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.

Imperiled (S2) – at high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.

Vulnerable (S3) – at moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

Apparently Secure (S4) – at a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

Secure (S5) – at very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.

Variant S-ranks

Range Rank (S#) – a numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).

Unrankable (SU) – currently unrankable due to lack of information or due to substantially conflicting information about status or trends.

Unranked (SNR) – sub-national conservation status not yet assessed.

Not Applicable (SNA) – a conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., long distance aerial and aquatic migrants, hybrids without conservation value, and non-native species or ecosystems; see Master et al. 2012, Appendix A, pg. 49 for further details).

Not Provided – Species or ecosystem is known to occur in this nation or state/province. Contact the appropriate NatureServe network program for assignment of conservation status.

Breeding Status Qualifiers

Breeding (B) – conservation status refers to the breeding population of the species in the nation or state/province.

Non-breeding (N) – conservation status refers to the non-breeding population of the species in the nation or state/province.

Migrant (M) – migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province.

APPENDIX G:

Significant Wildlife Habitat Evaluation

SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SEASONAL CONCENTRATION AREAS OF ANIMALS			
WATERFOWL STOPOVER AND STAGING AREAS (TERRESTRIAL)	Fields with sheet water 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 they have spring sheet water available.	CUM1 and CUT1; plus evidence of annual spring flooding from melt water or run-off within these Ecosites.	NO. A CUM1-1 (Unit 3) community is present within the Site; however, this area is highly disturbed and there is no evidence of annual spring flooding from melt water or run-off. Additionally, there is no evidence of historical use by waterfowl.
WATERFOWL STOPOVER AND STAGING AREAS (AQUATIC)	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment ponds and stormwater ponds do not qualify as a SWH; however, a reservoir managed as a large wetland or pond/lake does qualify. These habitats have an abundance food supply (mostly aquatic invertebrates and vegetation in shallow water).	MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, SWD1, SWD2, SWD3, SWD4 SWD5, SWD6, and SWD7	NO. A small MAS2 (Unit 18) community is present near the northwest corner of the Site which is likely too small to support waterfowl staging as it is less than 1 ha in size. Further, there is also no evidence of historical use by waterfowl.
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 shorelines, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and stormwater ponds do not qualify as a SWH.	BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1 MAM2, MAM3, MAM4, and MAM5	NO. No shoreline habitats or community types are present within the Site. A MAMM3-1 (Unit 8) is present largely immediately adjacent to the Site, as this area is situated within a residential subdivision, this area is not considered a suitable shorebird migratory stop-over area.
RAPTOR WINTERING AREA	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Raptor wintering (hawk/owl) sites need to be greater than 20 ha with a combination of forest and upland. Least disturbed sites, idle/fallow or lightly grazed field/meadow (greater than 15 ha) with adjacent woodlands. Field area of the habitat is to be wind swept with limited snow depth or accumulation. Eagle sites have open water and large trees and snags available for roosting.	Hawks/Owls: Combination of ELC community series; need to have present one community series from each land class: Forest: FOD, FOM, or FOC. Upland: CUM; CUT; CUS; or CUW. Bald Eagle: Forest community series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).	NO. The Site does contain a combination of the required ELC community series; however, these communities of forest and upland areas total approximately 11 ha in size and thus do not meet the minimum 20 ha size required. Further, adjacent upland areas (i.e., CUM1-1) are only approximately 2 ha in size (i.e., less than 15 ha) and are highly disturbed, further lowering the potential for raptor wintering areas to be present within the Site.
BAT HIBERNACULA	Hibernacula may be found in caves, mine shafts, underground foundations and karsts. Active mine sites are not SWH. The locations of bat hibernacula are relatively poorly known.	Bat Hibernacula may be found in these ELC ecosites: CCR1, CCR2, CCA1, and CCA2 (Note: buildings are not considered to be SWH).	NO. ELC ecosite types are not present within the Site.

SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
BAT MATERNITY COLONIES	Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH). Maternity roosts are not found in caves and mines in Ontario. Maternity colonies located in Mature (dominant trees greater than 80 years old) deciduous or mixed forest stands with greater than 10 snags/ha large diameter (greater than 25 cm DBH) wildlife trees. Female bats prefer wildlife trees (snags) in early stages of decay, class 1 to 3. Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.	Maternity colonies considered SWH are found in forested ecosites. All ELC ecosites in ELC community series: FOD, FOM, SWD, and SWM.	NO. While potential ELC community series (e.g., FOD4, FOM, SWD, SWD4-1, etc.) exists within the Site, based on the bat habitat suitability assessment the surveyed portions of the woodland feature within the Site contain a snag density of approximately 2.32 snags/ha. As the snag density is lower than 10 snags/ha, high-quality potential roost habitat is not present within the Site.
TURTLE WINTERING AREAS	For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. Over-wintering sites are permanent waterbodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Man-made ponds such as sewage lagoons or stormwater ponds should not be considered SWH.	Snapping and Midland Painted Turtles; ELC community classes; SW, MA, OA, and SA, ELC community series; FEO and BOO. Northern Map Turtle: open water areas such as deeper rivers or streams and lakes with current can also be used as over-wintering habitat.	NO. Most ELC ecosite types are not present within the Site. While wetland habitats are present within the Site, as these areas abut urban residential communities, agricultural fields and roadways which limit the migration potential for turtles within the Site. Further, no turtles were observed within the Site during field investigations. The watercourse within the Site is shallow and is likely be prone to freeze-over during the winter period. As such, turtle wintering areas are not considered present within the Site.
REPTILE HIBERNACULUM	Hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH. Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line. Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures.	For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, rock barren, crevice, cave, and alvar sites may be directly related to these habitats. Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator.	NO. No suitable landscape features or ELC ecosite types identified within the Site that would support reptile hibernaculum. No snakes or congregation of snakes were observed within the Site during field investigations.
COLONIALLY - NESTING BIRD BREEDING HABITAT (BANK AND CLIFF)	Any site or areas with exposed soil banks, sandy hills, borrow pits, steep slopes, and sand piles that are undisturbed or naturally eroding that is not a licensed/permitted aggregate area. Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. Does not include a licensed/permitted mineral aggregate operation.	Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, and barns. Habitat found in the following ecosites: BLO1, BLS1, BLT1, CUM1, CUT1, CUS1, CLO1, CLS1, and CLT1.	NO. No exposed soil banks or exposed sandy habitats were found within the Site. No breeding evidence for colonial bank and cliff nesting birds recorded during breeding bird surveys.

SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
COLONIALLY - NESTING BIRD 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. Most nests in trees are 11 to 15 m from ground, near the top of the tree.	SWM2, SWM3, SWM5, SWM6, SWD1, SWD2, SWD3, SWD4, SWD5, SWD6, SWD7, and FET1	**NO.** Swamp communities are present within the Site, and a Great Blue Heron was observed flying over the Site near station BBS3 during the July 4, 2024 breeding bird survey; however, no breeding evidence was observed within the Site. Further, no nests or other listed species were observed within the Site during field investigations.
COLONIALLY - NESTING BIRD BREEDING HABITAT (GROUND)	Nesting colonies of gulls and terns are on islands or peninsulas (natural or artificial) associated with open water, marshy areas, lake or large river (two-lined on a 1;50,000 NTS map). Brewer's Blackbird colonies are found loosely on the ground in or in low bushes in close proximity to streams and irrigation ditches within farmlands.	Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1;50,000 NTS map). Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird), MAM1–6, MAS1–3, CUM, CUT, and CUS.	**NO.** Habitat features not present within the Site. No Brewer's Blackbirds or other listed species or associated nesting structures were observed during breeding bird surveys. As such, colonially – nesting bird breeding habitat (ground) is not considered present within the Site.
MIGRATORY BUTTERFLY STOPOVER AREAS	A butterfly stopover area will be a minimum of 10 ha in size with a combination of field and forest habitat present and will be located within 5 km of Lake Erie or Lake Ontario.	Combination of ELC community series; need to have present one community series from each land class: Field: CUM, CUT, or CUS, or Forest: FOC, FOD, FOM, or CUP. Anecdotally, a candidate site for butterfly stopover will have a history of butterflies being observed.	**NO.** The Site is not within 5 km of Lake Ontario or Lake Erie.
LANDBIRD MIGRATORY STOPOVER AREAS	Woodlots greater than 10 ha in size and within 5 km of Lake Erie and Lake Ontario.	All ecosites associated with these ELC community series: FOC, FOM, FOD, SWC, SWM, and SWD.	**NO.** The Site is not within 5 km of Lake Ontario or Lake Erie.
DEER YARDING AREAS	Woodlots greater than 100 ha in size or if large woodlots are rare in a planning area, woodlots greater than 50 ha.	All forested ecosites with these ELC community series: FOC, FOM, FOD, SWC, SWM, and SWD. Conifer plantations much smaller than 50 ha may also be used.	**NO. T**he overall contiguous woodland area within the Site is approximately 12 ha in size; no woodlots greater than 50 ha are present within the Study Area.
RARE VEGETATION COMMUNITIES OR SPECIALIZED HABITAT FOR WILDLIFE			
CLIFF AND TALUS SLOPES	A cliff is vertical to near vertical bedrock greater than 3 m in height. A talus slope is rock rubble at the base of a cliff made up of coarse rocky debris.	Any ELC ecosite within community series: TAO, CLO, TAS, CLS, TAT, and CLT.	**NO.** No cliff or talus ecosites identified within or adjacent to the Site.

SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SAND BARREN	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered, but less than 60% coverage.	ELC ecosites: SBO1, SBS1, and SBT1. Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always less than 60%.	**NO.** No sand barren ecosite types identified within or adjacent to the Site.
ALVAR	An 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. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animal species. Vegetation cover varies from patchy to barren with a less than 60% tree cover.	ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1, and CUW2 Five alvar indicator species: 1) *Carex crawei*; 2) *Panicum philadelphicum*; 3) *Eleocharis compressa*; 4) *Scutellaria parvula*; and 5) *Trichostema brachiatum*. These indicator species are very specific to alvars within Ecoregion 6E.	**NO.** No alvar or related ecosite types identified within or adjacent to the Site. No alvar indicator species observed within the Site.
OLD GROWTH FOREST	Old Growth Forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.	Forest community series: FOD, FOC, FOM, SWD, SWC, and SWM.	**NO.** Forest ecosite types with mature trees are present within the Site/Study Area; however, lacks old-growth characteristics and thus is not considered an old-growth forest.
SAVANNAH	A Savannah is a tallgrass prairie habitat that has tree cover between 25 to 60%. No minimum size requirement, site must be restored or be a natural site. Remnant sites such as railway right of ways are not considered SWH.	TPS1, TPS2, TPW1, TPW2, and CUS2	**NO.** Ecosite types are not present within the Site.
TALLGRASS PRAIRIE	A tallgrass prairie has ground cover dominated by prairie grasses. An open tallgrass prairie habitat has less than 25% tree cover. No minimum size requirement, site must be restored or be a natural site. Remnant sites such as railway right of ways are not considered SWH.	TPO1 and TPO2	**NO.** Ecosite types are not present within the Site.
OTHER RARE VEGETATION COMMUNITIES	Rare vegetation communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	Provincially rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG. Any ELC ecosite code that has a possible ELC vegetation type that is provincially rare is a candidate for SWH.	**NO**. Ecosite types are not present within the Site.

SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH			
WATERFOWL NESTING AREA	A waterfowl nesting area extends 120 m from a wetland (greater than 0.5 ha) or a wetland (greater than 0.5 ha) and any small wetlands (0.5 ha) within 120 m or a cluster of 3 or more small (less than 0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur. Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. Wood Ducks and Hooded Mergansers utilize large diameter trees (greater than 40 cm DBH) in woodlands for cavity nest sites.	All upland habitats located adjacent to these wetland ELC ecosites are candidate SWH: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SWT1, SWT2, SWD1, SWD2, SWD3, and SWD4. Note: includes adjacency to PSW.	NO. No suitable upland habitats adjacent to wetland ecosites found within the Site as the CUM1-1 (Unit 3) community is highly disturbed. Further, the Site does not contain or is adjacent to a PSW. Additionally, Mallards were the only indicator species observed; however, required abundance (i.e., presence of 10 or more nesting pairs) were not observed. As such waterfowl nesting area is not considered present within the Site.
BALD EAGLE AND OSPREY NESTING, FORAGING AND PERCHING HABITAT	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree's canopy. Nests located on man-made objects are not to be included as SWH (e.g., telephone poles and constructed nesting platforms).	ELC Forest community series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.	NO. Forest ELC ecosites are present within the Site; however, no stick nests were observed during leaf-off surveys, and no Bald Eagle or Osprey were observed during the breeding bird or other surveys.
WOODLAND RAPTOR NESTING HABITAT	All natural or conifer plantation woodland/forest stands greater than 30 ha with greater than 10 ha of interior habitat. Interior habitat determined with a 200 m buffer. Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers Hawk nest along forest edges sometimes on peninsulas or small off-shore lands. In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest.	May be found in all forested ELC ecosites. May also be found in SWC, SWM, SWD and CUP3.	NO. Forest ELC ecosites are present within the Site. Contiguous woodland area is approximately 12 ha in size with less than 1 ha of interior habitat. As such, woodlands greater than 30 ha with 10 ha of interior habitat is not present within the Site. As such woodland raptor nesting habitat is not considered present. Further, no stick nests were observed during field investigations.
TURTLE NESTING AREAS	Best nesting habitats for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used.	Exposed mineral soil (sand or gravel) areas adjacent (less than 100 m) or within the following ELC ecosites: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, BOO1, and FEO1.	NO. No turtles or exposed mineral soil areas were observed within the Site during field investigations. Further, as the Site is located within an urban community abutting residential areas and roadways, the Site is likely prone to egg predation from common urban species (e.g., racoons, skunks, etc.). As such no turtle nesting areas are considered present within the Site.

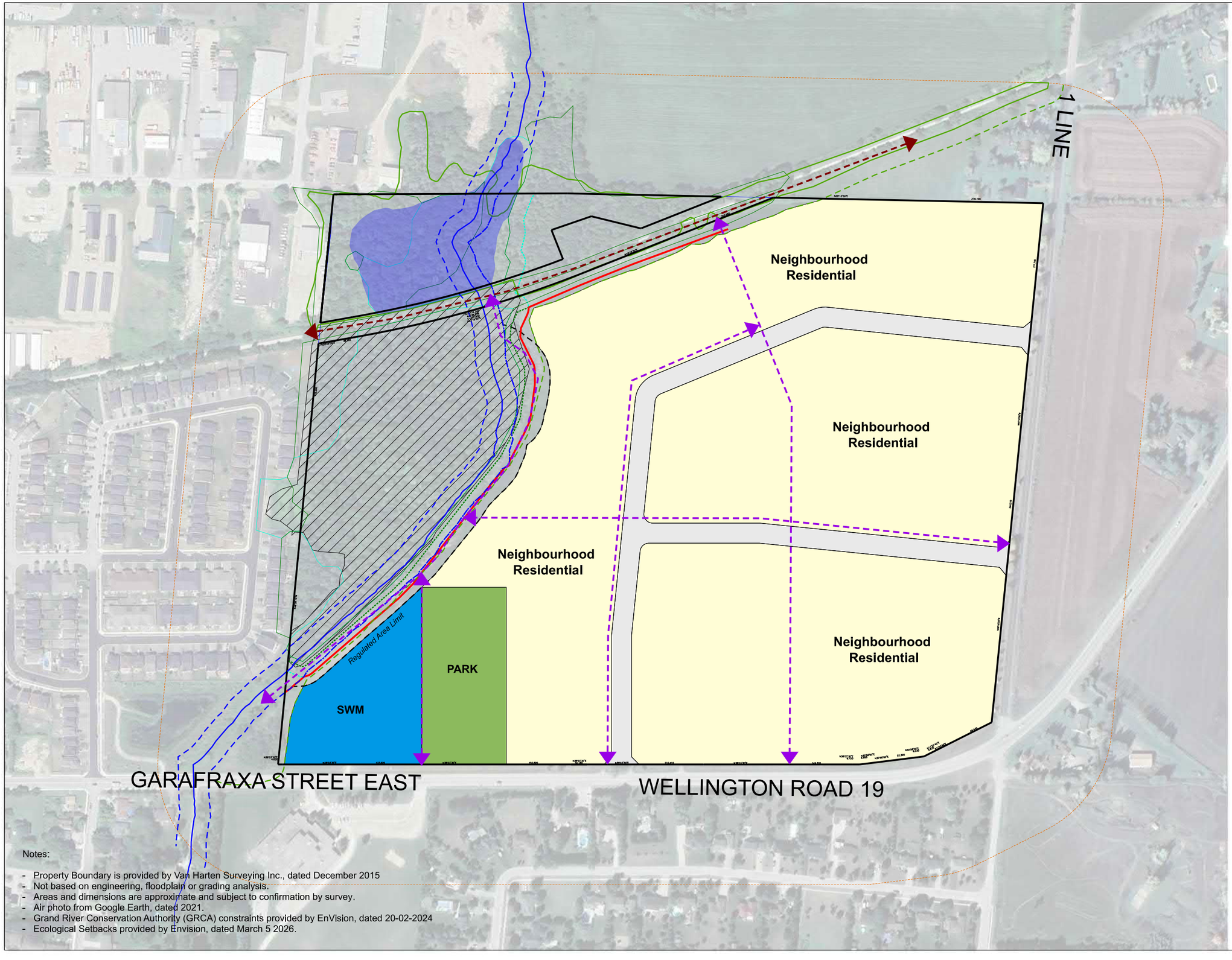
SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SEEPS AND SPRINGS	Any forested area (with less than 25% meadow/field/pasture) within the headwaters of a stream or river system. Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species.	Seeps/springs are areas where groundwater comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested ecosite within the headwater areas of a stream could have seeps/springs.	YES. Two (2) potential groundwater seeps/springs were observed within the woodland feature within the Site (Appendix B, Figure 5). The potential seep/spring closer to the watercourse feature within the Site discharges into the Unnamed Tributary of the Grand River. The second potential seep/spring was noted in the SWM6-1 (Unit 7) community and was observed containing indicator species such as Rough Sedge (*Carex* scabrata). Since at least two (2) potential seeps/springs were observed within the Site, seeps/springs SWH are confirmed present within the Site. The associated watercourse and woodland feature will be retained with setbacks and no development within these features is proposed. As such these potential seeps/springs will be retained and thus, are not anticipated to be impacted by the proposed development.
AMPHIBIAN BREEDING HABITAT (WOODLAND)	Presence of a wetland, pond or woodland pool (including vernal pools) greater than 500 m^2 (about 25 m diameter) within or adjacent (within 120 m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians. Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.	All ecosites associated with these ELC community series: FOC, FOM, FOD, SWC, SWM, and SWD. Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be used due to reduced risk to migrating amphibians.	NO. Over the three (3) amphibian calling survey rounds, a total of less than 10 anuran calls were heard originating from within the Site. Spring Peeper choruses recorded during surveys all originated beyond the Site boundary. Thus at least 20 individuals or two (2) or more of the listed anuran species with call level codes of 3 (i.e., choruses) were not indicated within the Site, in turn, amphibian breeding habitat is not present within the Site.
AMPHIBIAN BREEDING HABITAT (WETLANDS)	Wetlands greater than 500 m^2 (about 25 m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNRF mapping and could be important amphibian breeding habitats. Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators. Bullfrogs require permanent waterbodies with abundant emergent vegetation.	ELC community classes: SW, MA, FE, BO, OA, and SA. Typically, these wetland ecosites will be isolated (greater than 120 m) from woodland ecosites; however, larger wetlands containing predominantly aquatic species (e.g., Bullfrog) may be adjacent to woodlands.	NO. Over the three (3) amphibian calling survey rounds, a total of less than 10 anuran calls were heard originating from within the Site. Spring Peeper choruses recorded during surveys all originated beyond the Site boundary. Thus at least 20 individuals or two (2) or more of the listed anuran species with call level codes of 3 (i.e., choruses) were not indicated within the Site, in turn, amphibian breeding habitat is not present within the Site.
WOODLAND AREA-SENSITIVE BIRD BREEDING HABITAT	Habitats where interior forest breeding birds are breeding, typically large mature (greater 60 years old) forest stands or woodlots greater than 30 ha. Interior forest habitat is at least 200 m from forest edge habitat.	All ecosites associated with these ELC community series: FOC, FOM, FOD, SWC, SWM, and SWD.	NO. Contiguous woodland areas within the Site are approximately 12 ha in size. Thus, no woodlots greater than 30 ha are present within the Site or Study Area.

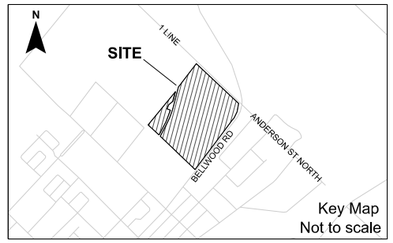
SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
HABITATS OF SPECIES OF CONSERVATION CONCERN			
MARSH BREEDING BIRD HABITAT	Nesting occurs in wetlands. All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present. For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently, it may be found in upland shrubs or forest a considerable distance from water.	MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SAS1, SAM1, SAF1, FEO1, and BOO1 For Green Heron: All SW, MA, and CUM1 ecosites.	NO. One (1) MAMM3-1 (Unit 8) community is present within the Site; however, no Green Herons or required indicator species abundance (i.e., the presence of nesting or breeding pairs of three [3] or more of the listed wildlife species) were found during breeding bird surveys or during field investigations.
OPEN COUNTRY BIRD BREEDING HABITAT	Large grassland areas (including natural and cultural fields and meadows) greater than 30 ha. Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e., no row cropping or intensive hay or livestock pastures in the last 5 years). Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older. Indicator bird species are area sensitive requiring larger grassland areas than common grassland species.	CUM1 and CUM2	NO. One (1) CUM1-1 (Unit 3) community is present within the Site; however, the community is approximately 2 ha in size and thus, less than the required 30 ha size requirement for open country bird breeding habitat.
SHRUB/EARLY SUCCESSIONAL BIRD BREEDING HABITAT	Large field areas succeeding to shrub and thicket habitats greater than 10 ha in size. Shrub land or early successional fields, not Class 1 or 2 agricultural lands, not being actively used for farming (i.e., no row cropping, haying or live-stock pastures in the last 5 years). Shrub thicket habitats (greater than 10 ha) are most likely to support and sustain a diversity of these species. Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands.	CUT1, CUT2, CUS1, CUS2, CUW1, and CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species.	NO. Ecosite types are not present within the Site.
TERRESTRIAL CRAYFISH	Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish. Constructs burrows in marshes, mudflats, and meadows and the ground can't be too moist. They can often be found far from water. Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually, the soil is not too moist so that the tunnel is well formed.	MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, MAS1, MAS2, MAS3, SWD, SWT, SWM, and CUM1 with inclusions of above meadow marsh ecosites can be used by terrestrial crayfish.	NO. While a MAMM3-1 (Unit 8) community is present within the northwestern portion of Site, no terrestrial crayfish burrows were observed along the accessible areas within the Site. As the Unit 8 community is largely located beyond the Site boundary and within a residential subdivision, is likely unsuitable for terrestrial crayfish.

SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SPECIAL CONCERN AND RARE WILDLIFE SPECIES	When an element occurrence is identified within a 1 or 10 km grid for a special concern or provincially rare species; linking candidate habitat on the site needs to be completed to ELC ecosite. Assessment/inventory of the site for the identified special concern or rare species needs to be completed during the time of year when the species is present or easily identifiable.	All plant and animal element occurrences within a 1 or 10 km grid. Older element occurrences were recorded prior to GPS being available; therefore, location information may lack accuracy.	YES. Special concern or rare wildlife species habitat is present within the Site. Background review, including an NHIC records check and consultation with MECP, identified the potential for the following special concern or rare wildlife species within the Study Area. Associated habitat potential based on field investigations are included as well. Generally, these species have low to moderate potential to occur within the Site. • Barn Swallow (moderate); species observed within the Site and considered possible breeders as suitable habitat is present within the existing garage. • Wood Thrush (low); suitable habitat (deciduous and mixed forests) is present within the Site and will be retained in full. No anticipated impact to the species or potential habitat. • Eastern Wood-pewee (moderate); suitable habitat (mid-canopy layer of forest clearings and edges of deciduous and mixed forests) is present within the Site and will be retained in full. No anticipated impact to the species or potential habitat. • Woodland Vole (low); suitable habitat (deciduous forest) is present within the Site which may provide suitable habitat for this species; however, the Study Area is not located within one of the 30 known sites within Ontario where this species occurs. No anticipated impact to the species or potential habitat. • Painted Skimmer (moderate); suitable habitat (wetlands and seeps/springs) are present within the Site and will be retained in full. No anticipated impact to the species or potential habitat.
ANIMAL MOVEMENT CORRIDORS			
AMPHIBIAN MOVEMENT CORRIDORS	Movement corridors between breeding habitat and summer habitat. Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat for these species. Movement corridors must be determined when amphibian breeding habitat is confirmed as SWH.	Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1 of the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015).	NO. Amphibian calling survey results indicated that amphibian breeding habitat is limited within the Site based on less than 10 amphibians calling from within the Site observed. As such no amphibian movement corridors are considered present within the Site or Study Area.
DEER MOVEMENT CORRIDORS	Movement corridor must be determined when deer wintering habitat is confirmed as SWH.	Corridors may be found in all forested ecosites.	NO. No deer wintering yards identified within the Site or Study Area.

APPENDIX H:

Proposed Land Use Plan





LEGEND

- Study Area
- Neighbourhood Residential
- SMW
- Park
- Elora Cataract Trailway
- Potential Trail Connection
- Development Limit (EnVision)
- Proposed Street Network

Grand River Conservation Authority (GRCA)

- Environmental Land Classification
- Wetland
- Regulated Watercourse
- Regulated Watercourse Setback
- Woodland
- Woodland Setback

DEVELOPMENT STATISTICS:

Gross Study Area:	39.0 ha
GRCA Area:	9.0 ha
Estimated Net Developable Area:	**30.0 ha**
- Neighbourhood Residential	24.8 ha
- Park	5%
- SMW	5%

DRAWN / REVISED

18 MAR 2026	Issued for Review
11 MAR 2026	Issued for Review
17 MAY 2024	Issued for Review

PROPOSED LAND USE PLAN

PT LT 8 CON 1 WEST GARAFRAXA
PT 1, 61R11802 TOWNSHIP OF
CENTRE WELLINGTON
WELLINGTON COUNTY

SCALE
0 25 50 75 100m

WESTON CONSULTING

File Number: 11630
Date: 2026-03-18
Drawn By: NDC
Planner: RG
CAD: 11630_Proposed Land Use Plan_2026-03-18.dgn

Drawing
LUP

Notes:

- Property Boundary is provided by Van Harten Surveying Inc., dated December 2015
- Not based on engineering, floodplain or grading analysis.
- Areas and dimensions are approximate and subject to confirmation by survey.
- Air photo from Google Earth, dated 2021.
- Grand River Conservation Authority (GRCA) constraints provided by EnVision, dated 20-02-2024
- Ecological Setbacks provided by Envision, dated March 5 2026.