Reach Street, Port Perry

Environmental Impact Study

1064021 Ontario Limited

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→ The Power of Commitment



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1. Introduction

1.1 Background

GHD Limited (GHD) was retained by 1064021 Ontario Limited (the Client) to prepare an Environmental Impact Study (EIS) for a proposed mixed-use development located at 1520, 1540, and 1580 Reach Street (the Site) in Port Perry, within the Township of Scugog, Region of Durham and in the jurisdiction of the Kawartha Region Conservation Authority (KRCA).

A pre-consultation meeting was held with the Township of Scugog on March 4, 2025, during which it was confirmed that an EIS is required to support applications for an Official Plan Amendment, Zoning By-law Amendment, and Draft Plan of Subdivision.

The proposed development is located within and adjacent to unevaluated wetlands, watercourses, woodlands, and potential Species at Risk habitat. The Site is situated within the Greenbelt Plan area. An EIS is required for development or site alteration proposed within 120 meters (m) of lands identified as environmentally sensitive (the Study Area), such as woodlands. In addition, a Natural Heritage Evaluation (NHE) is required under the Greenbelt Plan for any natural heritage features located on the Site or within the 120 m zone of influence. This EIS has been prepared to satisfy the requirements of both an NHE under the Greenbelt Plan and an EIS under the Township Official Plan and KRCA guidelines. The study includes the identification of key natural heritage and hydrologic features, an assessment of potential impacts, and recommendations for mitigation, restoration, and enhancement measures.

1.2 Location and Study Area

The Site is located within the urban area boundary of the Town of Port Perry, in the Township of Scugog, Region of Durham. The Township of Scugog Official Plan delegates the land as open space, pristine industrial and general industrial as listed on Schedule A-I *Port Perry Urban Area Land Use.* The eastern 2/3 of the lands were redesignated “Community Area” in the Durham Region Official Plan a few years ago and the Township of Scugog is required to bring their OP into conformity with the Region OP. The Site is also known as Part of Lot 15, Concession 6. The Study Area includes a warmwater tributary of the Scugog River, Cawkers Creek.

1.3 Scope and limitations

This report: has been prepared by GHD for 1064021 Ontario Limited and may only be used and relied on by 1064021 Ontario Limited for the purpose agreed between GHD and 1064021 Ontario Limited as set out in section 1 of this report.

GHD otherwise disclaims responsibility to any person other than 1064021 Ontario Limited arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 1 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

1.4 Study Rationale

This section summarizes the federal, provincial, and local legislation, policies, official plans (OPs) and official plan amendments relevant to the Study Area and surrounding lands including the policies that triggered the EIS. The identified documents may address SAR, natural heritage features and habitats, hydrologic features, and other considerations relevant to the assessment and recommended mitigation measures.

1.4.1 Federal Legislation

1.4.1.1 Migratory Birds Convention Act

The Migratory Birds Convention Act (MBCA; 1994) and *Migratory Birds Regulations, (MBR; 2022)* protect most species of migratory birds and their nests and eggs. Under the MBR 2022 it is now prohibited to damage, destroy, disturb or remove migratory bird nests when they contain a live bird or viable egg and prohibit the deposit of harmful substances in waters and areas frequented by them. For 18 species of migratory birds identified on Schedule 1, the MBR 2022 provide year-round nest protection until they can be deemed abandoned. The Schedule includes certain migratory birds who either re-use their own nests from one year to the next (colonial species), or whose nests are commonly re-used by other species of migratory bird species, like Pileated Woodpeckers. If the nest of a Schedule 1 species has not been occupied by a migratory bird for the entirety of the waiting time indicated in the MBR 2022, it is considered abandoned, and to no longer have high conservation value for migratory birds.

ECCC implements policies and guidelines to protect migratory birds, and guidance on the Environment Canada website is provided to help to minimize the risk of detrimental effects to migratory birds and to achieve compliance with the law. Compliance with the MBCA and MBR is best achieved through a due diligence approach based on a site-specific analysis in consideration of the avoidance guidelines on the ECCC website, such as the implementation of timing restrictions to ensure migratory birds and their young have left an area before it is disturbed due to construction or prior to vegetation removal.

The Study Area has been identified to be within Zone C2 (ECCC 2019) and as such this area of southern Ontario typically has migratory birds nesting between the period of April 1 to August 31 of every year.

1.4.1.2 Species at Risk Act

The Species at Risk Act (SARA 2025) incorporates several prohibitions to protect individuals of listed Threatened (THR), Endangered (END), or Extirpated (EXT) species at risk (SAR) – as designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Per Section 34, Section 58 and Section 61, these prohibitions apply to aquatic species and migratory birds protected by the MBCA, on all lands, and any other listed wildlife species when on federal lands, or any lands if recommended by the Minister of the ECCC to the Governor in Council.

1.4.1.3 Fisheries Act

Fish and fish habitat is protected under the Fisheries Act, which is managed by the Fisheries and Oceans Canada (DFO). The act and associated guidelines include protections for fish and fish habitat in the form of standards, codes of practice and guidelines for projects in and near water. DFO works to provide guidance on how to avoid and mitigate impacts to fish and fish habitat and comply with the Fisheries Act to avoid causing the death of a fish or harmful alteration, disruption or destruction (HADD) of fish habitat from your work, undertaking or activity.

The purpose of the Fisheries Act is to maintain healthy, sustainable and productive Canadian fisheries through the prevention of pollution and the protection of fish and their habitat. The Fisheries Act provides protection provisions for fish and fish habitat in the form of standards, codes of practice and guidelines for projects in and near water. These provide guidance on how to avoid and mitigate impacts to fish and fish habitat and comply with the Fisheries Act to avoid causing the death of a fish or HADD of fish habitat from your work, undertaking or activity.

Projects affecting waterbodies that support fish and fish habitat must comply with the provisions of the Fisheries Act. The proponent is responsible for determining if the project is likely to cause impacts to fish and fish habitat and if these

impacts can be avoided or mitigated. The proponent must gather information on the type and scale of impact on the fishery and determine if the impacts will result in the death of fish or a HADD of fish habitat. A Request for Review (RFR) should be submitted to DFO if impacts cannot fully be avoided. Following DFO review, if it is determined that the impacts cannot be avoided or mitigated and will result in death of fish or a HADD of fish habitat, an authorization under Subsection 35 (2) of the Fisheries Act must be obtained from DFO. Projects that have the potential to obstruct fish passage or affect flows needed by fish may require an authorization.

1.4.2 Provincial Legislation

1.4.2.1 Endangered Species Act, 2007

The purposes of the Ontario Endangered Species Act, 2007 (ESA) are to:

1. identify Species at Risk (SAR) based on the best available scientific information, including information obtained from community knowledge and aboriginal traditional knowledge;
2. protect species that are at risk and their habitats, and to promote the recovery of species that are at risk;
3. promote stewardship activities to assist in the protection and recovery of species that are at risk. 2007, c. 6, s. 1. (Government of Ontario 2021)

The ESA clearly defines the five classifications of species status as extinct, extirpated, endangered, threatened, or special concern, and provides guidelines on the process of species status determination. Regulations made under this Act include Ontario Regulation 230/08 and 242/08. Ontario Regulation 230/08 provides the list of Species at Risk (SAR) in Ontario, which is updated regularly. This list was recently consolidated in 2024 (Government of Ontario, 2024). Species status provided in the list is assessed by an independent body, the Committee on the Status of Species at Risk in Ontario (SARO), based on the best-available science and Aboriginal Traditional Knowledge.

General habitat protection is afforded to all species listed as endangered or threatened. General habitat descriptions are technical, science-based documents that have been developed for some of the species that are likely to be affected by human activity (Government of Ontario, 2022). Further information including a Recovery Strategy or Management Plan is required for each listed species, on a timeline dictated by the species status. Ontario Regulation 242/08 explains possible exemptions to the ESA and details on how the purpose of the ESA is to be carried out (Government of Ontario 2022).

Bill 5 recently passed by the Government of Ontario includes numerous changes to the ESA, including to the definition of “habitat” and other policies regarding the former conservation fund and permitting. At the time of report preparation, the Province has indicated that new species-protection legislation (referred to as the proposed Species Conservation Act) is under development and is intended to replace the Ontario Endangered Species Act, 2007. Until such time as new legislation is enacted, the ESA remains in force.

1.4.2.2 Provincial Planning Statement (2024)

The Provincial Planning Statement, 2024 (PPS) is the statement of the Ontario government’s policies on land use planning. It applies province-wide (in the province of Ontario) and provides provincial planning direction on land use planning. Municipalities use the PPS to develop their official plans and to guide and inform decisions on other planning matters. The PPS is issued under Section 3 of the Planning Act and all decisions affecting land use planning matters ‘shall be consistent with’ the Provincial Planning Statement (Government of Ontario 2024).

The Study Area is located within Ecoregion 6E. Policy Section 4.1 of the PPS 2024 outlines policies for Natural Heritage, and portions relevant to this project include:

4.1.4 Development and site alteration shall not be permitted in:

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

b. significant coastal wetlands.

4.1.5 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;*

e. *significant areas of natural and scientific interest; and*

f. *coastal wetlands in Ecoregions 5E, 6E and 7E1 that are not subject to policy 4.1.4.b), unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.*

4.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

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

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

1.4.2.3 Greenbelt Plan, 2017

The Greenbelt Plan (2017) states, "the Greater Golden Horseshoe (GGH) is one of the most dynamic and fast growing regions in North America {being} home to over two thirds of Ontario's and more than one-quarter of Canada's population… The Greenbelt was introduced in 2005 to help shape the future of this region." It also indicates, "The Greenbelt Plan, together with the ORMCP and the NEP, identifies where urbanization should not occur in order to provide permanent protection to the agricultural land base and the ecological and hydrological features, areas and functions occurring on this landscape."

The Study Area is designated "Protected Countryside" under the Greenbelt Plan. Section 3.2.1 indicates the protected countryside contains a Natural System that provides a continuous and permanent land base necessary to support human and ecological health in the Greenbelt and beyond. The Natural System policies protect areas of natural heritage, hydrologic and/or landform features, which are often functionally inter-related, and which collectively provide essential ecosystem services, including water storage and filtration, cleaner air, habitat, support for pollinators, carbon storage and resilience to climate change. The Natural System policies contribute to conserving Ontario's biodiversity and maintaining the ecological integrity of the Greenbelt.

The available GIS mapping of the site shows that several key natural heritage features and key hydrologic features are present on the Site or within the 120 m zone of influence. The presence of those features does trigger the need for submission of a Natural Heritage Evaluation.

1.4.3 Local and Other Regulatory Bodies

1.4.3.1 Township of Scugog Official Plan (Office Consolidation, September 2017)

The Township of Scugog Official Plan designates the Site as within the Port Perry Urban Area (Schedule A – Rural Area Land Use). Schedule A-1, the Port Perry Urban Area Land Use map indicates the Site as Prestige Industrial, General Industrial and Open Space. Open Space is discussed in Section 4.9 of the Official Plan, Prestige Industrial in Section 4.7.3, and General Industrial in Section 4.7.4. Section 3.23 of the Official Plan outlines the Woodlot, Tree Preservation, Replacement and Enhancement.

The Township's policies relating to natural heritage and resource management are contained in Section 2.2 of the Official Plan. Section 3.7 (Environmental Impact Studies) describes the purposes of an EIS and information that must be included in an EIS. GHD has prepared this document following those guidelines.

Section 6.14.2 (c) of the OP states the need for an EIS with areas of significant woodlands.

> *Development may be permitted, subject to an EIS only if it does not negatively impact the features or the ecological functions for which the area is identified, in areas of significant woodlands situated outside significant valleylands, fish habitat outside of Section 6 – Greenlands System Township of Scugog Official Plan Page 166 Adopted by Council on June 22, 2009 Approved by the Ontario Municipal Board on March 2, 2011 Office Consolidation – September, 2017 significant woodlands or valleylands, sensitive water quality and areas for natural corridor enhancement.*

Section 4 of the OP applies to the Port Perry Urban Area.

General development policies in Section 4.7 (Employment Areas) of the Official Plan indicate that no development shall be permitted within 120 meters of a wetland until an EIS has been completed and the recommendations incorporated into the development approval process.

Open Space designation is discussed in Section 7.1.2 of the OP Permitted Uses:

a. The Parks and Open Space designation includes Township Parks, Community Parks, Neighbourhood Parks, Parkettes and Open Space Linkages and Trails. Lands designated Parks and Open Section 7 – Parks and Open Space shall be used primarily for active and passive recreational purposes and accessory uses. Public and private parks, including golf courses, are included in this designation.
b. Community recreation facilities, community facilities such as public cemeteries and public community centres, stormwater management facilities, infrastructure and utilities may also be permitted, provided any adjacent natural features and functions are protected and enhanced, and the scale of the use is compatible with the character of adjacent development.

Section 3.7 outlines the content requirements of an EIS.

> 3.7 ENVIRONMENTAL IMPACT STUDIES Where the policies of this Plan require that an Environmental Impact Study (EIS) be prepared, such EIS shall be prepared in accordance with the requirements of this section and a Terms of Reference approved by the Township, in consultation with the appropriate Conservation Authority. The purpose of an EIS is to: a) Collect and evaluate the appropriate information in order to have a complete understanding of the boundaries, attributes and functions of natural heritage features and associated ecological and hydrological functions; and, b) Make an informed decision as to whether or not a proposed use will have a negative impact on the natural heritage features and ecological and hydrological functions. Any EIS required by this Plan must describe the natural heritage features and ecological functions, identify their significance and sensitivities and describe how they could be affected by the proposed use. The EIS should give consideration to the relevant aspects and inter-relationships of various components of the natural heritage system on and off the site.

An EIS must be completed to the satisfaction of the Township, Region of Durham (where required) and appropriate Conservation Authority prior to the granting of development approvals. The recommendations of an EIS shall be implemented through Official Plan amendments, Zoning By-laws, subdivision conditions, Site Plan Control, or other applicable regulations. Before development is approved in the area subject to the EIS, the EIS shall demonstrate that the relevant policies of this Plan are met.

The EIS shall demonstrate that the use will:

a. Not have a negative impact on significant natural heritage features and related ecological functions;
b. Not discharge any substance that could have an adverse effect on air quality, groundwater, surface water and associated plant and animal life;

c. *Be serviced by an adequate supply of water and that the groundwater takings associated with the use will not have an adverse effect on existing water supplies, surface water features and associated plant and animal life;*

d. *Not cause erosion or siltation of watercourses or unacceptable changes to watercourse morphology;*

e. *Not interfere with groundwater recharge to the extent that it would adversely affect groundwater supply for any use;*

f. *Not cause an increase in flood potential on or off the site;*

g. *Maintain/enhance/restore/rehabilitate the natural condition of affected watercourses, and protect/enhance/restore/rehabilitate aquatic habitat;*

h. *Not encourage the demand for further development that would negatively affect wetland function or contiguous wetland areas;*

i. *Enhance and restore endangered terrestrial and aquatic habitat where appropriate and feasible;*

j. *Not unduly interfere with the function of existing or potential natural corridors that are determined to be of significance;*

k. *Not lead to a reduction to the extent of significant woodlands; and,*

l. *Not lead to species loss or negative impacts on endangered, threatened or special concern species and/or their habitat.*

In determining whether the above criteria have been satisfied, reference may be made to applicable Federal and Provincial standards and regulations as well as referring to the relevant policies of this Plan.

1.4.3.2 Envision Durham- Regional Municipality of Durham Official Plan, (Consolidation-December 13, December 2024)

The Envision Durham-Adopted Official Plan defines the intent of Regional Council regarding growth and development in the Regional Municipality of Durham. Map 1 (Regional Structure) indicates the Site falls within lands classified as Community Areas, and Major Open Space Areas (Region of Durham Official Plan, 2024). Map 2a Regional Natural Heritage System indicates that there is a portion of the Regional Natural Heritage System the runs down the middle of the Site. Map 2b (Provincial Oak Ridges Moraine Conservation Plan and Greenbelt Plan Land Use Designations) identifies the western portions of the Site to be part of Greenbelt Natural Heritage System.

Section 7.1 of the OP states that, "*Major Open Space Areas are a component of the region's Greenland's System that generally follow major permanent and/or intermittent stream and valleys and contain high concentrations of key natural heritage features and key hydrologic features"* (Region of Durham Official Plan, 202420234).

Regarding the Regional Natural Heritage System identified in Map 2a on the Site the OP states:

It is the policy of Council to:

7.4.4 Prohibit development and site alteration within the regional natural heritage system, except as permitted by the applicable provincial plans including:

a. *legally existing uses that conform to area municipal official plans and zoning by-laws;*

b. *new buildings and structures and the full range of uses for existing and new agricultural uses, agricultural-related uses and on-farm diversified uses and normal farm practices, subject to the key natural heritage features policies in this section; as Amended*

c. *naturalized stormwater management systems and facilities and passive recreational uses if an approved environmental impact study demonstrates that construction will have no negative impact; and*

d. *new infrastructure if authorized through an Environmental Assessment or if no reasonable alternative location exists and an environmental impact study demonstrates that construction will have no negative impact.*

With section 7.4.15 addressing the presence of Key Natural Heritage Features and Key Hydrologic Features as identified on the Site on Map 2c and part of the trigger for this EIS:

> *Require that any proposal for development or site alteration in proximity to key natural heritage features or key hydrologic features include an environmental impact study as part of a complete application. The Region, in consultation with the area municipality, conservation authority and applicant, may select and retain a qualified environmental consultant to peer review the study at the applicant's expense.*

Significant woodlands, at the regional scale, are defined in the Official Plan glossary as:

> *e. Any woodland occurring with the Rural Area which is 4 hectares in size or larger; and includes:*
>
> *i. a vegetation community with a provincial ranking of S1, S2, or S3 as designated by the Natural Heritage Information Centre;*
>
> *ii. rare, uncommon species or species with a restricted habitat preference; or*
>
> *iii. characteristics of older woodlands, including:*
>
> *A. woodlands having 10 or more trees per hectare greater than 100 years old; or*
>
> *B. woodlands having 10 or more trees per hectare at least 50 centimetres in diameter, or a basal area of eight or more square metres in trees that are at least 40 centimetres in diameter.*

Section 7.4.22 highlights the Regional Municipality of Durham's commitment to preserving significant woodlands: Prohibit development and site alteration within significant woodlands, as verified by an appropriate site-specific study, such as an environment impact study.

Section 2.3.43 requires the completion of an Environmental Impact Study (EIS) / Natural Heritage Evaluation (NHE) when development application involves lands located on or adjacent to any natural features as identified on Map B and any significant natural heritage features which may exist, but which are not presently identified on Map B.

1.4.3.3 Kawartha Region Conservation Authority (Ontario Regulation 182/06)

The Site is located within the jurisdiction of KRCA. Cawkers Creek, a tributary to the Scugog River, is identified within the Study Area. Under the Conservation Authorities Act, Ontario Regulation 41/24 for the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses is applicable to the Study Area. The regulated area includes the watercourse and a 30 m regulated distance. As such, a permit will be required from KRCA to complete any project works proposed within the regulated lands.

1.5 Other Resources Referenced

Prior to field surveys, background information for the subject property and surrounding area was reviewed to provide context for the setting and sensitivity of the site. Background information sources included:

1.5.1 Data Sources

- Aerial imagery
- Land Information Ontario (LIO) mapping and Natural Heritage Information Centre (NHIC) Make-a-Map tool (2022)
- Ontario Breeding Bird Atlas data (Bird Studies Canada, 2007)
- Ontario Reptile and Amphibian Atlas data (Ontario Nature, 2019)
- Ontario Ministry of Natural Resources and Forestry (OMNF), Aquatic Resource Area and Fish Species List (OMNRF, 2024)
- OMNRF Fish ON-Line (OMNRF, 2024)
- Department of Fisheries and Oceans (DFO) Aquatic Species at Risk Mapping (2024)

1.5.2 Literature and Resources

- Pre-consultation meeting minutes dated March 4, 2025
- Natural Heritage Reference Manual (OMNR, 2010)
- Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. Peterborough, 38pp. (OMNRF, 2015)
- Greenbelt Plan, schedules and on-line natural heritage feature mapping (2017)

1.6 Description of Development

The proposed development plan prepared by Malone Given Parsons (MGP), dated December 22, 2025, includes a mix of medium density residential lots, condominium/ townhouses, a mid-rise mixed use buildings, a park, two stormwater management ponds, a noise berm on the south side with possible trail systems and a natural heritage woodlot and a future industrial subdivision to the west (**Appendix A**).

1.7 Scope of Report

The scope of this EIS with respect to the Site and Study Area, is to confirm the boundaries of natural features (e.g., wetlands and woodlands), confirm and identify the functions of any natural features found, determine whether any Species at Risk or their habitats occur on the subject property, and develop appropriate buffers and mitigation measures to prevent negative impacts of the proposed development on natural features and their functions.

2. Study Methods

2.1 General Approach

The approach to the preparation of the EIS consisted of multiple distinct phases.

In the first phase, GHD collected available information on the site including recent air photography, Region of Durham Official Plan, provincial key natural heritage system GIS mapping, MNRF GIS database mapping and significant woodland layers and other correspondence or files, as well as our previous work in the area.

The second phase consisted of a site visit by our terrestrial/wetland and aquatic biologists to perform the following tasks:

- Description of current and proposed land uses within the Study Area
- Conduct Ecological Land Classification (ELC) of all vegetation communities
- Complete a plant species inventory
- Undertake breeding bird surveys
- Cavity tree habitat assessment
- Record incidental wildlife observations
- General SAR surveys
- Complete general assessment of Significant Wildlife Habitat (SWH)
- Wetland delineation and confirmation
- Conduct fish habitat assessments
- Collect surface water quality
- Analysis of potential negative impacts of the proposed residential development on natural features and the ecological functions of any significant features identified

– Mitigation recommendations
– Figure illustrating proposed development showing all natural heritage features and buffers/setbacks per EIS recommendations
– Compliance statements to relevant official plan policies and applicable legislation

The final phase consisted of preparing this EIS report based upon the literature review and the field surveys completed. The report follows the requirements in the Official Plans, as well as the KRCA policy requirements for an EIS report. GHD mapped all the key natural heritage features and key hydrologic features, as well as recommended buffers and setbacks. Our impact assessment section, mitigation measures and recommendations will relate to trees, wetland, wildlife issues and natural linkage and corridors in the area. Discussion in the report regarding setbacks from the woodland was based on the exact staked location of the current boundary and a detailed assessment of the ecological and hydrological functions of this wetland.

This report only deals with the suitability of the site from a biological perspective and the constraints due to the presence of natural features, such as wetlands. Other approvals or constraints due to zoning, official plans, archaeology, minimum distance separation (MDS) flood and fill regulations, health regulations or other approvals are not addressed in this report.

2.2 Study Site Methodology

2.2.1 Physical Site Characteristics

GHD biologists assessed site characteristics during field visits. These included general documentation of existing disturbances, age of vegetation cover, accessibility, topography and other natural features.

2.2.2 Biophysical Inventory

2.2.2.1 Vegetation

All vegetation communities encountered in the study area were inventoried during the site visits. Delineation and classification of the vegetation community types were based on the Ecological Land Classification for Southern Ontario (Lee et al., 1998). Delineation was done to the finest scale possible (e.g., Ecosite or Vegetation Type).

Rare, significant, or unusual species were searched for. Species significance or rarity on a national, provincial, regional and local level was based on published literature and standard status lists. These included SARA (2025), COSEWIC (2024), SARO (2025), Ontario Endangered Species Act (2007) and Varga et al. (2000).

2.2.2.2 Birds

Breeding Bird Surveys

Bird surveys were conducted following the protocols of the Ontario Breeding Bird Atlas (OBBA) point count. Two BBS surveys were conducted in peak breeding season (May 24 -July 10) approximately 10-15 days apart in 2025. All birds seen or heard within each five-minute station period were documented and breeding evidence codes recorded. Surveys were conducted in the early morning between dawn and 9 am. Multiple survey stations were established to cover the whole Site and the habitat types present (**Figure 1**). These stations allowed biologists to detect birds using all habitats on site.

Area Searches

In addition to breeding bird point counts, birds detected while biologists were on site conducting other surveys were recorded along with a breeding evidence code if known. The search area for these surveys included all of the vegetation communities within the study area. Species significance or rarity on a national, provincial, regional and

local level was based on published literature and standard status lists. These included SARA (2025), COSEWIC (2024), and SARO (2025).

2.2.2.3 Other Wildlife

Incidental observations of any other wildlife (e.g., amphibians, reptiles and mammals) encountered while biologists were on site were recorded. Documentation included notes about the species, location and type of observation (e.g., direct sightings and indirect evidence such as calls, tracks, scat, burrows, dens and browse). GHD biologists searched for significant or unusual species. Species significance or rarity on a national, provincial, regional and local level was based on published literature and standard status lists. These included SARA (2025), COSEWIC (2024), and SARO (2025). Marsh Monitoring Program surveys were not conducted due to lack of ponds, vernal pools and wetlands within the Site and Study Area.

2.2.2.4 Wetlands

The presence of any wetlands in the study area was confirmed in the field by GHD staff familiar with the methodologies described in the Ontario Wetland Evaluation System Southern Manual, Third Edition (OMNR, 2014 and updates, version 3.3). Subsequently the boundaries of these wetlands were delineated using a high-accuracy hand-held GIS unit.

2.2.2.5 Woodlands

The treed communities that were identified on the property were evaluated according to the Significant Woodland Evaluation Criteria and Standards in Table 7-2 of OMNR's Natural Heritage Reference Manual. The boundaries of these woodlands and associated woodland characteristics were confirmed by GHD biologists in the field. Driplines of the eastern woodland edge and the western rectangular woodlot was delineated with agency staff.

2.2.2.6 Significant Wildlife Habitat

Prior to site visits, a candidate list of Significant Wildlife Habitat (SWH) features was created using the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E, 2015. During site visits, GHD biologists looked for evidence to confirm the presence of SWH. GHD biologists looked for: tree cavities or other evidence of bat maternity colonies; rock piles, large stick nests and other evidence of woodland raptors; seeps and springs; vernal pools, ponds and other potential amphibian habitat in woodlands and wetlands. All field survey data was reviewed and assessed to determine if additional candidate SWH were present the study area.

2.2.2.7 Fish and Fish Habitat

2.2.2.7.1 Fish Habitat

A fish habitat assessment was conducted using standardized provincial aquatic protocol methods (Ontario Stream Assessment Protocol /Ministry of Transportation). Aquatic habitat was quantified and characterized based on local substrate composition, vegetation, flow influence and condition, sediment transport, cover, channel morphology, groundwater indicators, riparian habitat, barrier presence and form, land use and landscape influences, human modifications and unique features. Appropriate assessment types were determined on-site based on feature type using professional judgment.

Two aquatic features were identified within the Site and Study Area (**Figure 1**), Cawkers Creek along the eastern boundary of the site and a pond located along the northern boundary of the site. Two fish habitat assessment stations (HZ1-1 and HZ1-2) were located within the Cawkers Creek channel with the pond was assessed as a single station. The fish habitat stations in Cawkers Creek were located and differentiated based on presence of barriers, substrate composition, channel morphology, riparian habitat, percent instream cover, hydrological connection, and unique features. Photos of habitat zones can be found in **Appendix C**. The habitat characteristics have been summarized in **Appendix F**.

Surface water quality parameters were measured in-situ using a Horiba U-52 Water Quality Meter. Parameters collected included temperature, pH, conductivity, turbidity, dissolved oxygen, total dissolved solids and salinity. The Canadian Water Quality Guidelines for the Protection of Aquatic Life (Canadian Council of Ministers of the Environment 2024, PWQO, 1994) were used to interpret water quality data.

2.2.2.7.2 Fish Community

Due to the current conceptual site plan envelope avoiding any near or in-water work and the Cawker's Creek channel being located outside the subject property, fish community sampling was not completed by GHD. A fish species list was sought from existing data sources such as the Ontario Ministry of Natural Resources and Forestry (OMNRF 2024) website.

3. Survey Results

The following section presents GHD site-specific survey data only. Supporting information, the background review and other sources of information will be presented and discussed in Section 4.0 – Discussion and Analysis.

3.1 Physical Site Characteristics

The Study Area is rectangular in shape and approximately 60 hectares (150 acres) in size. The Site itself is relatively flat with some gentle rolling hills in the agricultural fields and a large rectangular woodlot. There is a slight slope on the eastern portion of the property. Most the Site is agricultural fields (soya at time of assessments) with hedgerows and two homes off of Reach Street.

3.2 Biological Inventories

3.2.1.1 Level of Effort

The vegetation communities in the study area were delineated by GHD biologists according to the methodologies outlined in Section 2.2.2.1. A summary of the level of effort and environmental conditions at the time of ELC surveys have been provided in **Table 1**. The location of each of these communities is depicted on **Figure 1**.

Table 1 Vegetation Surveys: Level of Effort and Environmental Conditions

Survey Date	Survey Type	Weather	Start Time	Effort (Person hours)
June 13, 2025	Ecological Land Classification, botany, incidental wildlife, SAR	100% Cloud Cover, Beaufort Wind Scale 1, no precipitation. Air temperature 19 °C	06:30	4.5hrs x 2 biologists ELC
	Breeding Bird Surveys		06:30	3hrs x1 biologist-BBS
June 25, 2025	Aquatic Habitat Assessment and Surface Water Quality	Warm, 15% cloud cover, Beaufort Wind Scale 1, large rainfall event 24 hours prior to site assessment, no precipitation during the site assessment. Air temperature 20-25 °C.	07:00	5.5hrs x 2 biologists
	Botany and Wetland Delineation		08:05	1 hrs x 1 biologist for wetland delineation
	Breeding Bird Surveys		06:29	1.5 hrs x 1 biologist
	SAR incl. butternut		09:00	1 hour x 1 biologist
August 14, 2025	Woodland staking with KRCA, Township and Region	Sunny, 27 degrees, no precipitation, wind 1	10:00	2 hours

3.2.2 Vegetation

3.2.2.1 ELC Code Descriptions

Excluding the agricultural field, seven vegetation communities were identified within the study area. Each of the communities are described below and illustrated on **Figure 1**.

A total of 132 plant species were identified during field surveys. The dominant plant species in each community are described below, and a complete plant list is found in **Appendix B**. Photos of each vegetation community found on Site can be found in **Appendix C**.

Agricultural (No Community number, no ELC Code)

Much of the Site consists of large agricultural fields. At the time of field assessments in 2025, soybeans were planted. There were large open fields with general rolling slopes with slightly steeper slopes on the southeast leveling out towards the forested areas.

Community 1 - Shallow Marsh-pond ELC Code: MAS

Community 1 contains an offline pond and is located at the north of the Site and is approximately 30 metres in length. It is surrounded by common cattail (*Typha latifolia*), multiple willow species such as weeping willow (*Salix babylonica*), Bebb's willow (*Salix bebbiana*), pussy willow (*Salix discolor*), slender willow (*Salix petiolaris*). As well as quite a few 'weed' species due to the proximity to the road and how close the field edge is.

Community 2 - Homesteads and Gardens No applicable ELC code

Community 2 is split into two different areas, both in the north portion of the Site on the east side are the homes associated with 1520 and 1580 Reach Street. Vegetation found here were typical garden plants and 'weedy' plants. Some of the trees identified here included Norway spruce (*Picea abies*), white spruce (*Picea glauca*), rugosa rose (*Rosa rugosa*), black medick (*Medicago lupulinal*), alsike clover (*Trifolium hybridum*), and white clover (*Trifolium repens*).

Community 3 - Dry- Fresh White Ash Deciduous Forest ELC Code: FOD4-2

This community is the forest block located in the agricultural field on the western portion of the Site. The area was relatively flat and quite dense in vegetation. More successional vegetation species were identified on the north and east side of the forest block including trembling aspen (*Populus tremuloides*) and shrubs. This community was high in species diversity. There were many tree species present but the most common occurring tree species were sugar maple *(Acer saccharum)*, American beech *(Fagus grandifolia)*, white birch *(Betula papyrifera)*, eastern hemlock *(Tsuga canadensis)*, ironwood *Ostrya virginiana)*, black cherry *(Prunus serotina)*, white ash (*Fraxinus americana*), and Manitoba maple (Acer negundo). Other species found here included, herb Robert (*Geranium robertianum*), zig-zag goldenrod (*Solidago flexicaulis*), woodland strawberry (*Fragaria vesca*), red baneberry *(Actaea rubra)*, marginal wood fern *(Dryopteris marginalis)*, white avens (*Geum canadense*) and prickly gooseberry (*Ribes cynosbati*).

Community 4 - Sumac Cultural Thicket ELC Code: CUT1-1

There was a small stand of cultural thicket, between farm fields on the eastern portion of the Site, which was dominated by staghorn sumac (*Rhus typhina*).

Community 5 - FOC

This community was delineated as viewed from the Site boundary and therefore, only classified to the ELC Community Series (FOC) since the whole community could not be viewed. This community was comprised of various coniferous trees including Scot's pine (*Pinus sylvestris*) and eastern white cedar (*Thuja occidentalis*). Other species that were identified here included red-berried elderberry (*Sambucus racemosa*), wild grape (V*itis riparia*), European mountain ash (*Sorbus aucuparia*) and dame's rocket (*Hesperis matronalis*).

Community 6 - FOD

Community 6 was also viewed from the Site boundary and was also classified to the ELC Community Series based on vegetation in the community visible form the Site. The deciduous tree species identified included sugar maple (*Acer saccharum*) and American basswood (*Tilia americana*). Some of the other species identified in this community included common St. John's-wort (*Hypericum perforatum*), rough bedstraw (*Galium asprellum*), awnless brome grass (*Bromus inermis*) and common milkweed (*Asclepias syriaca*). A butternut (*Juglans cinerea*) was identified within the Study Area of this community but just off the property line (**Figure 1**).

Community 7 - Fencerows No applicable ELC code

Fencerows were present at various locations between fields on Site. Three run north to south between the agricultural fields on slope transitions. The fencerows were high in species diversity with 72 plants identified including many non-native and native species. Some of the vegetation identified here included, balsam poplar (*Populus balsamifera*), dame's rocket (*Hesperis matronalis*), choke cherry (*Prunus virginiana*), European mountain ash (*Sorbus aucuparia*), European buckthorn (*Rhamnus cathartica*), sugar maple (*Acer saccharum*), Manitoba maple (*Acer negundo*), and common milkweed (*Asclepias syriaca*).

Legend

- Butternut Location
- BBS - Breeding Bird Survey Station
- Water Quality Location
- OHN Watercourse
- 30 M Setback from South HZ-1
- Site Boundary
- Study Area (120 m Buffer)
- Vegetation Community
- Forest Community
- Aquatic Habitat Zone 1
- Aquatic Habitat Zone 2
- 10 m Setback from Woodlot
- Woodland Removal Area (0.23 ha)
- Woodland Compensation Area (0.25 ha)
- Roadside Ditch

ELC Types - 1st Approximation

Ecological Land Classification for Southern Ontario: First Approximation and Its Application. 1998

ELC Code	Ecosite-Vegetation Type Description
CUT1-1	Sumac Deciduous Thicket
FOD	Deciduous Forest
FOC	Coniferous Forest
FOD4-2	Dry-Fresh White Ash Deciduous Forest

Roadside Ditch
AGRICULTURAL
Fallow field
EXISTING COMMERCIAL
Commercial
Residential
1 Pond
REACH STREET
AGRICULTURAL
Ag
SCUGOG WASTE MANAGEMENT FACILITY
FUTURE WATER
2 Homestead
HZ1-1
BBS2
HZ-2
BLOCK 34 RM4 (LONG TERM CA... /MID-RISE / MIXED USE) 2.48 ha.
BLOCK 31 RM4 (MID-RISE / MIXED USE)
BLOCK 32 RM4 (MID-RISE / MIXED USE) 1.28 ha.
BLOCK 33 RM4 (MID-RISE / MIXED USE) 0.65 ha.
2 Homestead
5 FOC
EXISTING STORMWATER POND
BLOCK 36 STORM WATER MANAGEMENT FACILITY 2.68 ha.
BLOCK 42 PRESTIGE INDUSTRIAL 6.00 ha.
BLOCK 29 CONDO TOWNHOMES 3.92 ha.
BLOCK 30 CONDO TOWNHOMES 3.49 ha.
BLOCK 37 STORM WATER MANAGEMENT FACILITY 1.90 ha.
BLOCK 41 WOODLOT / NATURAL HERITAGE SYSTEM 0.23 ha.
BBS1
BBS7
Ag
Industrial Park
EXISTING INDUSTRIAL
7 Fencerows
4 CUT1-1
Woodland Removal Area (0.23 ha)
BBS3
BBS06
BBS8
Cawkers Creek
3 FOD4-2
WOODLOT / NATURAL HERITAGE SYSTEM 2.37 ha.
BLOCK 35 PARK 2.38 ha.
BLOCK 43 GENERAL INDUSTRIAL 8.79 ha.
Woodland Compensation Area (0.73 ha)
BBS9
EXISTING RESIDENTIAL
FIFESHIRE COURT
CHIMNEY HILL WAY
OPEN SPACE
6 FOD
BLOCK 40 WOODLOT / NATURAL HERITAGE SYSTEM 0.48 ha.
GLENHAVEN COURT
ROSEBOROUGH DRIVE
DOCTOR ARCHER DRIVE
BBS4
BBS5
BBS10
7 Fencerows
BLOCK 44 POSSIBLE FUTURE ROAD CONNECTION 0.07 ha.
HZ1-2
EXISTING INDUSTRIAL
AGRICULTURAL
TAYLOR BLVD
TAYLOR BOULEVARD
NORTH PORT ROAD
STREET A
STREET B
STREET D
STREET E
STREET F
STREET G
STREET H
STREET I
STREET J
STREET K
STREET L
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Paper Size ANSI B

0 30 60 90 120

Meters

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N

GHD

REACH STREET SUBDIVISION
PORT PERRY, ONTARIO
ENVIRONMENT IMPACT STUDY

NATURAL FEATURES, SURVEY STATIONS AND CONSTRAINTS

Project No. 12669249
Revision No. -
Date Mar 19, 2026

FIGURE 1

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Print date: 19 Mar 2026 - 10:21

Data source: Tiled service layer: © OpenStreetMap (and) contributors, CC-BY-SA
Created by: yxiong2

3.2.3 Birds

3.2.3.1 Level of Effort

Breeding bird surveys were conducted within the Study Area by GHD biologists according to the methodologies outlined in Section 2.2.2.2. A summary of the level of effort and environmental conditions have been provided in **Table1.**

3.2.3.2 Breeding Bird Surveys

A total of 30 bird species were detected by GHD biologists during the breeding bird surveys conducted twice in June 2025 as listed in **Table 2** with a full list of birds found in **Appendix D**. Survey stations were established to cover that all habitats within the naturally vegetated portions of the property were included (**Figure 1**).

Several species that are typically associated with edge habitats, agricultural fields, segregated forest blocks, and residential homes were observed throughout the Site. Some of these species included killdeer (*Charadruius vociferous*), brown-headed cowbird (*Molothrus ater*), brown thrasher (*Toxostoma rufum*), gray catbird (*Dumetella carolinensis*), indigo bunting (*Passerina cyanea*), cedar waxwing (*Bombycilla cedrorum*), and red-eyed vireo (*Vireo olivaceus*). There were also barn swallows (*Hirundo rustica)* identified on site, a listed Species at Risk. A detailed list of birds observed during each station survey and associated observations can be found in **Appendix E**.

3.2.3.3 Area Searches

Five additional bird species were identified while conducting other surveys on Site. These species were sandhill crane (*Antigone canadensis*) seen feeding in the fields, ring billed gull (*Larus delawarensis*), green heron (*Butorides virescens*), wood duck (*Aix sponsa*) all identified flying over the Site and a house finch (*Haemorhous mexicanus*) identified near the houses. Sandhill cranes nest in the nearby wetlands and make diurnal movements to forage. The green heron also moves during the days and was only flying over.

3.2.4 Other Wildlife

GHD biologists also noted any records of mammal and/or herpetofauna species encountered during their visits to the subject property (i.e., to conduct breeding bird surveys and vegetation surveys). Porcupine (*Erethizon dorsatum*), coyote (*Canis latrans*), white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), eastern grey squirrel (*Sciurus carolinensis*), red squirrel (*Sciurus vulgaris*), and green frog (*Lithobates clamitans*). A green frog (*Aquarana clamitans*) was heard in the pond community 1.

No other incidental observations of amphibians, snakes or turtles were detected in the study area.

3.2.5 Wetlands

No wetlands were identified on site. A dug pond within vegetation Community 1 was located in the north central portion of the property adjacent to Reach Street (**Figure 1**). Small patches of cattail and some submergent vegetation was noted. This pond was offline and does not provide any direct fish habitat.

3.2.6 Woodlands

One woodland community was identified on Site located on the west in the middle of a soya been field (**Figure 1**) and is approximately 2.37 ha in size (Community 3). The dripline was originally delineated in the field by GHD biologists on June 25, 2025, and subsequently with the KRCA and Township of August 14th, 2025. The attributes are discussed in **Section 3.2.2.1** and illustrated on **Figure 1**. Two other woodland communities were identified in the eastern portion of the Study Area (**Figure 1**) identified as Community 5 and 6.

3.2.7 Significant Wildlife Habitat

In Ecoregion 6E, OMNRF has developed criteria that can be used to confirm five broad categories of Significant Wildlife Habitat (SWH): seasonal concentration areas of animals, rare vegetation communities, specialized habitat for wildlife, habitat for species of conservation concern (not including endangered or threatened species) and animal movement corridors. Within each category, there can be more than one specific type of significant wildlife habitat (for example, seeps and springs are considered one type of specialized habitat for wildlife which is a category of SWH).

Prior to field work, GHD biologists identified the following candidate SWH types as having the potential to occur in the study area: bat maternity colonies, reptile hibernaculum, seeps and springs, amphibian breeding habitat, and special concern/ rare wildlife species.

3.2.8 Fish and Fish Habitat

3.2.8.1 Fish Habitat

Fish habitat surveys were conducted on the Site by GHD biologists on June 25, 2025. Surveys were conducted following the methodologies outlined in **Section 2** and level of effort in **Table 1**. Detailed habitat assessment characteristics have been provided in **Appendix F**. Representative photos of the fish habitat have been provided in **Appendix F**.

3.2.8.1.1 Habitat Zone 1 - Cawkers Creek

Cawkers Creek, a tributary to Lake Scugog, is located within the 120 m Study Area but is located east of the proposed development, being closest at the southeast corner (Figure 1). Cawkers Creek is a notable watercourse situated southwest of Lake Scugog in the Kawartha region. Originating from the Oak Ridges Moraine, the creek flows northward through Port Perry before emptying into Lake Scugog. It is flanked by the Nonquon River to the west and the South Scugog Tributaries to the east. The Cawkers Creek watershed encompasses an area of approximately 12 square kilometers, with the creek extending over 16 kilometers. The landscape is predominantly characterized by deciduous forests, contributing to 14% natural vegetation cover. Notably, there are no significant natural sites within this watershed.

The northern station (HZ1-1) in Cawkers Creek was assessed within the road allowance of Reach Street and the southern station (HZ1-2) was observed from the property boundary. The two stations had similar habitat characteristics at the time of field investigations and therefore considered the same habitat zone.

At the time of field investigations, HZ1 substrate was dominated by sand with some silt, boulder, and gravel. The canopy cover was moderate, covering 25-49% of the surface water. The overhead cover was moderate and consisted of shrubs with a mix of trees and non-woody debris and a pedestrian trail crossing. Instream cover was moderate and consisted of large woody debris and undercut banks with some small woody debris and submergent vegetation. The average water depth was 0.2m and wetted width was 2 m. There was also a closed corrugated steel pipe (CSP) type culvert present under Reach Street that was approximately 2.19 m in height and a width of 3.4 m that conveyed flows upstream (north) of Reach Street.

Within the Study Area, there is a roadside drainage ditch that flows along the southern boundary of Reach Street that discharges into Cawkers Creek near HZ1-1 **(Figure 1)**. The ditch was dry at the time of field investigations and is not considered fish habitat.

Surface water quality was collected in Cawkers Creek within the road allowance on July 25, 2025 (**Figure 1**) at Station HZ-1-1 approximately 0.20 m below the surface of the water. The results and information on parameter specifics are provided in **Appendix G**. Further discussions regarding the results have been provided in **Section 4.2.7**.

Habitat Zone 2 - Pond

The second habitat zone was the pond that is located just south of Reach Street. The average water depth was between 0.4-1.5m and the pond was approximately 480 square meters. At the time of field assessments, HZ2

substrate composition was uniform consisting of fine organics with a small amount of sand. Overhead cover was minimal, covering 0-24% of the surface water, consisting of scattered trees around the shoreline. Instream cover was moderate and consisted of submergent vegetation, large woody debris, emergent vegetation, and small woody debris.

3.2.8.2 Fish Community

Cawkers Creek is a warm-water tributary that flows north-east eventually entering Lake Scugog just north of Highland Beach. Fish community sampling was not conducted by GHD biologists. A search of existing ARA and other online fish databases did not find a fish list for this small creek. Cawkers Creek is classified as a warmwater water course. Lake Scugog is classified as a warmwater waterbody that supports a warmwater fish community and baitfish known to inhabit Lake Scugog may also inhabit Cawkers Creek (OMNRF 2024).

4. Discussion and Analysis

4.1 Physical Site Characteristics

4.1.1 Geology and Topography

The site is located west of Port Perry and Lake Scugog, with some gently rolling topography. A higher ridge runs through the centre of the property, and the slope is generally from east to west. The glaciolacustrine deposits are comprised of sand, silts, gravel, and nearshore beach deposits.

4.2 Species and Communities

4.2.1 Vegetation

GHD biologists identified 132 plant species in the Study Area. A review of the plant list found one species, butternut (*Juglans cinerea*) which is nationally threatened and provincially endangered (**Appendix B**). This species was found in the Study Area on the eastern portion of the property in Community 6.

Three species on Site are considered regionally rare in the area according to Varga (2001), these species are wood horsetail (Community 7), white oak (Community 2) and red-panicled dogwood (Communities 3, 5, and 7).

None of the ecological ecosites or vegetation types identified on the property are considered provincially rare (MNRF 2015).

The Ministry of Natural Resources and Forestry (MNRF)'s Natural Heritage Information Centre (NHIC) maintains records of rare species that have been reported in Ontario and makes that information available through a series of 1km x 1km grid squares. The square overlapping the study area is 17PJ6285 no vegetative species at risk were recorded.

4.2.2 Birds

GHD biologists detected one Special Concern bird species, the barn swallow, during point count surveys (SARA 2023; COSEWIC 2022; SARO 2023) (**Appendix C**).

The barn swallow is listed as a Special Concern species provincially and nationally (SARO 2023; SARA 2023; COSEWIC 2022). Barn swallows often live near human settlements, building cup-shaped nests in culverts, under bridges, and on human-made structures such as barns. They prefer to build their nests in open structures that include ledges, frequently re-using such areas year after year and none were observed on Site. However, the species could be using buildings and barns on adjacent lands.

None of the species detected during field inventories were considered to be area sensitive. Area sensitive species are species that require a minimum area of suitable habitat to successfully breed. The community 3 woodland was not large enough to have interior forest habitat.

MNRF-NHIC's 1km x 1km square overlapping the study area (17PJ6285) includes records of least bittern (*Ixobrychus exilis*), bobolink (*Dolichonyx oryzivorus*), eastern meadowlark (*Sturnella magna*), eastern wood-pewee (*Contopus virens),* wood thrush (*Hylocichla mustelina*), grasshopper sparrow (*Ammodramus savannarum*), blue-winged teal (*Spatula discors*), American coot (*Fulica americana*) and common gallinule (*Gallinula galeata*).

Species records for the 10km x 10km Ontario Breeding Bird Atlas square overlapping the Site (17TPJ68) include the following: bank swallow (*Riparia riparia*) Status: SARO: (THR), SARA: (Threatened), barn swallow (*Hirundo rustica*) Status: SARO: (SC), SARA: (Threatened), black tern (*Chlidonias niger*) Status: SARO: (SC), bobolink (*Dolichonyx oryzivorus*) Status: SARO: (THR), SARA: (Threatened), chimney swift (*Chaetura pelagica*) Status: SARO: (THR), SARA: (Threatened), eastern meadowlark (*Sturnella magna*) Status: SARO: (THR), SARA: (Threatened), king rail (*Rallus elegans*) Status: SARO: (END), SARA: (END).

The NHIC and Breeding Bird Atas Atlas species records listed above would not find suitable habitat on site. There are no wetlands on Site or adjacent lands for the wetland species. Those species are likely inhabiting the larger wetlands and Lake Scugog marshes within 4 km of the site. The Site is an active farm with soya crops Site in 2025 that is not suitable for the grassland species listed. The rectangular woodlot on the west side did not contain interior habitat or suitable conditions for pewees or wood thrush. Neither species was observed by GHD during our site surveys. No chimney swift were observed during our surveys. Structures on site has capped chimneys, preventing access for nesting.

4.2.3 Other Wildlife

No reptile species were detected by GHD staff during field visits to the subject property. Green frogs (*Rana clamitans*) were observed by sound in the pond along Reach Street. Mammals were identified by sight, sound, and scat. Species included eastern grey squirrel- black phase (*Sciurus carolinensis*), white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), red squirrel (*Sciurus vulgaris*), and porcupine (*Erethizon dorsatum*). None of which are listed species at risk federally or provincially. MNRF-NHIC's 1km x 1km square overlapping the study area (17PJ6384, 17PJ6285) includes records for western chorus frog (*Pseudacris triseriata*), and midland painted turtle (*Chrysemys picta*).

Species records for the 10km x 10km Ontario Reptile and Amphibian Atlas square overlapping the subject property (17PJ68) that are species at risk include the following: Blanding's turtle (*Emydoidea blandingii*), midland painted turtle, snapping turtle (*Chelydra serpentina*) and western chorus frog.

4.2.4 Wetlands

No wetlands were identified on the Site or in the 120 m adjacent lands. The closest provincially significant wetland is the Nonquon River wetland #7, located approximately 135 m to the west of the Site's western property line.

4.2.5 Woodlands

GHD staff recorded three vegetation communities in the Study Area that would be considered woodland which are communities 3, 5 and 6. Community 3 was staked on August 14th, 2025 with GHD's senior terrestrial and wetland biologist, KRCA and the Township of Scugog, along with the client and study team. This forest block is 2.43 ha in size. Communities 5 and 6 in the east side of the property are the outer edge of a much larger woodland located offsite associated with the Cawkers Creek.

The Township of Scugog Official Plan defines significant woodlands as *Woodlands that are ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to their contribution to the broader landscape because of their location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition or past management history.*

The Region of Durham Official Plan classifies significant woodlands as:

> *Any woodland occurring with the Rural Area which is four hectares in size or larger; and includes:*
>
> *i. a vegetation community with a provincial ranking of S1, S2, or S3 as designated by the Natural Heritage Information Centre;*
>
> *ii. rare, uncommon species or species with a restricted habitat preference; or*
>
> *iii. characteristics of older woodlands, including:*
>
> *A. woodlands having 10 or more trees per hectare greater than 100 years old; or*
>
> *B. woodlands having 10 or more trees per hectare at least 50 centimetres in diameter, or a basal area of eight or more square metres in trees that are at least 40 centimetres in diameter.*

Community 3 would not be classified as significant woodland by the Region, as it is less then 4 hectares in size. The community woodland is shown as open space on Schedule A-1 and B-1 of the Township OP. The property is within the Town of Port Perry Urban Area.

GHD staff also used the Natural Heritage Reference Manual Second Edition (OMNRF 2010) to assess the significance of woodlands in the study area. The Durham Regional Official Plan indicates the region is striving to attain a minimum woodland cover target of 30%, suggesting that the current amount of cover is less than this.

Based on the Natural Heritage Reference Manual, in areas where the woodland cover is 15-30% of the land cover, woodlands 20ha in size or larger would be considered significant. However, that same document indicates that when woodlands are about 5-15% of the land cover, woodlands 4ha in size or larger should be considered significant. The Region of Durham specifies that significant woodlands in rural areas must be at minimum 4ha. GHD's analysis indicates that the woodland would not be considered significant based on size alone.

The other woodlands in the Study Area (Community 5 and 6) is part of a much larger woodland that is greater than 4 ha and would therefore be considered as significant woodland. These woodlands both serve a water protection function and are associated with Cawkers Creek. The woodland does meet the criteria for woodland diversity, uncommon characteristics, or economic and social functional values. It is also delineated as open space on Schedule A-1 and B-1 of the Township of Scugog OP.

4.2.6 Significant Wildlife Habitat

In the Provincial Planning Statement (2024) wildlife habitat is defined as, "… areas of the natural environment where plants, animals, and other organisms live, and find adequate amounts of food, water, shelter and space needed to sustain their populations." This document also states, "specific wildlife habitats of concern may include areas where the species concentrate at a vulnerable point in their annual or life cycle; and areas which are important to migratory and non-migratory species."

Significant Wildlife Habitat often occurs within other natural heritage features and areas covered by Policy 4.1 of the Provincial Planning statement (e.g., significant wetlands and significant woodlands). Therefore, it has been suggested that identification and evaluation of SWH is best undertaken after other natural heritage features have been identified (Natural Heritage Reference Manual, 2010).

One provincially listed species at risk bird was observed in the study area, a barn swallow, foraging in the vicinity of breeding bird survey station 4 and 9.

There was also no evidence of reptile hibernaculum or seeps and springs. GHD staff did not carry out marsh monitoring surveys on this property for amphibian presence, as the site is mostly rolling farmland and there are no ponds, vernal pools, or flooded areas on the property itself and cannot confirm the presence of amphibian breeding habitat for woodlands or wetlands.

GHD biologists analyzed the information collected from the ecological communities on the Site using the criteria for Significant Wildlife Habitat in Ecoregion 6E (2015) and identified seven candidate Significant Wildlife Habitat types. Based on our field data the only confirmed Significant Wildlife Habitat on Site was for Special Concern and Rare

Wildlife Species due to the presence of barn swallow, a Special Concern species under the ESA. Although no appropriate breeding habitat was identified.

4.2.7 Endangered Species Act - Species at Risk

One endangered tree species, a butternut (*Juglans cinerea*) tree was identified in the Study Area in community 6 along the property line (**Figure 1**). Several butternut hybrids were identified elsewhere on Site although hybrids are not protected under the ESA. The butternut was classified as a Category 2. This category receives protection under the ESA but no standard buffer width is applied under the revised ESA (2025) and definition of “habitat” and harm. The Site Plan does not show any direct impacts on this Category 2 tree.

No snags or cavity trees suitable for bat maternity use were found on Site.

4.2.8 Fish and Fish Habitat

4.2.8.1 Fish Habitat

The reach of Cawkers Creek that was present within the Study Area (HZ1) has a well-defined, naturally meandering channel and provides direct fish habitat. Specifically, it provides feeding, nutrients, overwintering habitat, hydrological and groundwater connections to the downstream fish habitat of Cawkers Creek. These attributes are important for the sustainability of the existing warmwater fish community present in Cawkers Creek. The pond (HZ2) is not directly connected to any natural waterbody and does not provide direct fish habitat. Since the reach of Cawkers Creek functions as direct fish habitat, the *Fisheries Act* applies to the creek. No critical habitat for Aquatic SAR was identified within the Site (DFO 2024).

The surface water quality parameters collected within the Site were within the acceptable range for aquatic life. The baseline surface water quality data may be used for construction and/or post construction effectiveness monitoring for comparison to baseline conditions. Surface water quality details have been provided in **Appendix G**.

Based on conditions observed within the Study Area, Cawkers Creek provides direct fish habitat that likely supports a warmwater fish community.

4.2.8.2 Fish Community

The thermal regime of Cawkers Creek was classified by the MNR as warmwater. Since it is connected to Lake Scugog, the creek likely supports a warmwater fish community that is similar to Lake Scugog (ARA, 2024).

4.3 Other Natural Features

There are no provincially significant Areas of Natural and Scientific Interest (ANSI) located within 120m of the subject property. The nearest ANSI, the provincially significant Nonquon River Wetlands ANSI, is located approximately 290m to the north and 300m to the west. No provincially significant valleylands have been previously identified in the study area.

5. Impact Assessment and Recommendations

The following section provides a description of the predicted impacts that may result from the proposed development. It also identifies mitigation measures to be implemented to avoid and/or minimize adverse effects to the natural environment features within or near the project.

5.1 Vegetation Communities and Species

5.1.1 Vegetation

The federally and provincially endangered butternut tree, was identified on the subject property within Community 6.

Recent changes to the definition of “habitat” in the 2025 Endangered Species Act only require the area immediately around a tree or for the plants functions to be maintained. This can be a defined as the critical root zone around each Category 2 and 3 butternut trees. This tree is categorized as a Category 2 (retainable). As the tree is located just east of the property line, it will not be removed by the lot grading. The tree should be flagged and identified as sensitive for any grading works. Installation of tree hoarding fencing is recommended to prevent damage to this tree and its critical rooting zone.

5.1.2 Birds and Other Wildlife

According to Environment and Climate Change Canada, the Site falls within Nesting Zone C2 (ECCC, 2018). The regional nesting period for Nesting Zone C2 extends from early April to late August. General impacts to the breeding birds identified during surveys include loss of nesting habitat and defended territories. Other impacts may include increased noise resulting in increased energy expenditure to advertise territories, potential window collisions with newly built structures, and road mortality. No vegetation removal should occur between the period of April 1 to August 31 of any given year. Should development be proposed within that time, an experienced avian biologist should conduct a nest search to ensure compliance with the Migratory Bird Regulations (2022). The garage structure in the homestead area did not have appropriate openings and habitat for barn swallows, a special concern species observed flying over the property from breeding bird station 9 (BBS9).

No appropriate bat maternity roost trees/cavity trees were identified on Site during our field surveys. It is likely however that bat maternity or roosting trees may be present in Community 3. Any tree clearing required shall be completed outside of the active season for bats that use treed habitats (April 1 to November 30). This is particularly important to the removal of the northern portion of Community 3.

5.2 Woodlands

Three woodland communities were delineated by GHD staff in 2025 and were staked with KRCA. These are communities 3 (FOD4-2), 5 (FOC), 6 (FOD).

Community 5 and 6 are within the Study Area are part of the continuous forest off Site and a 10 m buffer has been recommended from the staked dripline. The nature of the trees and age of the forest and edge trees, is the rationale for this width of buffer. The buffer line will be located outside the rear lot line of the easternmost residential lots.

Community 3 is a 2.3 ha rectangular block of woodland with a variety of tree species and a well-defined dripline, due to historic farming on this property. This is an isolated woodland as a result. The north end of the woodlot is successional growth, young regenerating trees, and a line of trembling aspen. A 10 m buffer is recommended on the western, and southern edges in the future industrial park blocks. A 10 m buffer is also recommended on the east side where a park block is proposed. The buffer area should have limited grading to protect the roots of the edge trees from damage and compaction of the soils. Silt fencing will be erected around the development envelope to ensure no

sediment enters the protected areas during construction and involves the woodland removal (0.23ha) to support the creation of the proposed residential development.

Woodland Compensation Plan

The northern portion of the woodlot will have a total area of 0.23 hectares (ha) removed and 2.37 ha retained (**Figure 1**). Durham Regional Official Plan defers to the lower tier municipality for woodland compensations. The Township of Scugog Official Plan states that where woodland removal is unavoidable, compensation is one of the possible forms of mitigation and will be the focus of this woodland compensation plan.

The woodlot portion to be removed is a small, young successional portion of the woodlot in the northern edge. The removal will create a new edge with direct exposure to typical negative impacts such as windthrow, blowdown from west and northwest dominant winds and invasive species. It is recommended that the new forest edge be sealed as part of an Edge Management Plan, as a condition of draft approval. This will maintain the ecological integrity and long-term stability of the retained woodland and trees along that new edge.

Section 6.4 of the Municipality of Scugog Official Plan (OP) identifies the Natural Linkage Area designation as applying to lands within the Greenbelt that function as vegetated buffer zones associated with key natural heritage features within the Natural Heritage System. These areas form part of a broader, interconnected corridor network that supports, or has the potential to support, the movement of flora and fauna and provides functional linkages between natural heritage features.

Compensation for the proposed removal of 0.23 ha of woodland, through a minimum 1:1 replacement ratio, will maintain and enhance landscape connectivity by establishing a linkage between the retained woodland and the adjacent open space berm. This connection extends to agricultural lands and forested areas to the southeast, thereby facilitating continued wildlife movement and preserving corridor functionality.

Eastern white cedar (*Thuja occidentalis*) is recommended for planting along the west property line adjacent to the proposed park area to enhance ecological connectivity and a direct connection between the existing woodlot and the open space berm. As a native species, eastern white cedar will function as a living vegetative fence, establishing a dense, continuous planting that provides cover, movement opportunities, and habitat for a range of wildlife species.

A noise berm is required as part of the Noise Study mitigation measures. This will create an open space block between the development and adjacent industrial uses and is an opportunity for a native forest community to be established. **Figure 1** shows the recommended location for the woodland compensation area. The location allows for connectivity to fencerows to the south and east. As a condition of draft approval, preparation of a Landscape Plan and woodland restoration plan is recommended. The plan should include nodes of native trees, shrubs and native seed mix with a minimum of 0.25 ha of tree cover. Species recommended are shade intolerant species on this open and likely dry berm, such as trembling aspen, downy serviceberry, ironwood, red oak and eastern white cedar.

5.3 Significant Wildlife Habitat

Special Concern and Rare Species SWH has been confirmed on Site due to the presence of barn swallows. No confirmed breeding was identified, and the homestead and outbuildings (metal garage structure) did not present appropriate breeding habitat due to a lack of openings. Recommendations have been made to address bird species in Section 5.1.2 (Birds and Other Wildlife).

5.4 Species at Risk

Barn swallows were identified during the field surveys foraging over the Site. GHD did not locate any nests or nest sites in the barns, houses, or structures on Site.

While no breeding habitat was confirmed on the Site for amphibians, there remains a likelihood that they could cross into the Site, primarily from the woodland and PSW. Impacts to amphibians are associated with road mortality due to increased traffic into the area of the Subject Property. The installation of ESC fencing around all access and

construction envelopes can act as an exclusionary boundary to reduce herpetofauna from entering the Site. Fencing would be installed prior to or after the active herpetofauna season which is from April 1st to November 1st and would remain in place over the construction period.

Butternut was identified on Site, within Community 6. The species will not be impacted by the proposed development, with impacts detailed in Section 5.1.1.

5.5 Stormwater

There will be an increase in impervious surface flow through construction of the residential and commercial facilities. Two stormwater ponds with outlets will create major site grade changes.

To avoid point source erosion, the outfall to the watercourse should be designed to minimize impacts, such a bioswale planted with native shrubs and non-woody vegetation.

The stormwater design must incorporate mitigation measures to minimize impacts of discharged waters into the watercourse to protect the habitat for the fish species present in the watercourse and downstream in Cawkers Creek. The design must be designed to provide MOE “Enhanced” level of stormwater treatment as defined in the MOE SWM.

A multiple treatment approach should be used to manage stormwater onsite. A combination of lot level conveyance and end-of-pipe treatments should be incorporated where possible. Low impact development (LID) practices should be considered to manage run-off through runoff prevention by minimizing impervious cover, incorporating rainwater collection systems and stormwater infiltration practices, and maintain existing vegetation where possible.

A detailed erosion and sediment control (ESC) plan must be prepared and reviewed by a professional biologist to minimize or avoid sediment transportation off-site into downstream aquatic habitat. GHD has provided additional SEC mitigation measures to be incorporated into the plan in **Section 7** of this report. In addition, the final stormwater management design must be reviewed by a professional aquatic ecologist (or equivalent) for compliance with the *Fisheries Act*.

5.6 Fish and Fish Habitat

Cawkers Creek provides direct fish habitat, including cover, feeding, potential rearing, and potential spawning habitat for the resident fish community. These attributes are important for the sustainability of the warmwater fish community of the Scugog River/ Scugog Lake. The current Site plan includes appropriate buffers around the creek and Cawkers Creek will be protected by a minimum 30 m setback from the high-water mark. As a result, there is no in-water work proposed and no potential to cause HADD of fish habitat. Therefore, the project is not required to be reviewed under the FA.

There are two proposed stormwater management (SWM) ponds that are associated with the subdivision. The eastern SWM facility will outlet into the wooded area that slopes eastward to Cawkers Creek. The stormwater management pond on the east side (Block 392) will outlet into the existing roadside ditch on the south side of Reach Street. The outfall is located over 120 m from Cawkers Creek. No impacts to fish or fish habitat are expected from the discharge of this water into this ditch, as the stormwater ponds will be designed to meet MECP guidelines and the ditch will provide additional treatment prior to discharge into Cawkers Creek.

The stormwater management pond on the west side (Block 391), in the future industrial area will outlet into the existing roadside ditch on the south side of Reach Street. The outfall is located approximately 380m from a creek to the west. This stormwater pond will be designed to meet MECP guidelines, and the ditch will provide additional treatment prior to discharge into the creek. No impacts are expected on fish or fish habitat from the discharge of this water into this ditch.

A site-specific sediment and erosion control plan should be developed and should be reviewed by a qualified aquatic ecologist (or equivalent professional). Appropriate measures are to be incorporated to protect fish and fish habitat from sedimentation risks, in accordance with applicable regulatory guidelines and best practices.

A professional biologist should review the final site plan design to confirm that there are no potential impacts to fish and fish habitat.

5.7 Greenbelt Plan- Natural heritage features

The Greenbelt Plan includes the site as in the Protected Countryside classification. The Greenbelt Plan includes protection measures for key natural heritage features and key hydrologic features. The property is within the urban area of the Town of Port Perry.

There are key natural heritage features (significant woodlands) to the east edge of the Site and Community 3. There are no negative impacts on those features anticipated with the buffers recommended, timing windows and mitigation measures.

The key hydrologic features (Cawkers Creek) is located to the east of the Site. A 30 m buffer (VPZ) has been recommended from the creek. The development plan does not include any development within that buffer area.

5.8 Impact Summary

A summary of impacts including mitigation and recommendations has been provided below in **Table 3**.

Table 2 Impact Assessment and Recommendations Summary

Feature or Function	Impact to Feature or Function	Mitigation	Residual Effect
Woodland	Loss of woodland area (0.23 ha) in Community 3 from development. Potential introduction of invasive species and loss of biodiversity Loss of edge habitat	A minimum 10-metre buffer/vegetation protection zone/setback to be established from the dripline of woodland communities. No vegetation removal during the core breeding bird season (April 1 to August 31) or within the bat active window (April 1 to November 31). Consultation with the Township is recommended to determine any compensation requirements	Low – removal of 0.23ha of woodland but 1:1 compensation recommended within the Open Space block and the berm.
Significant Wildlife Habitat – Habitat for Special Concern and Rare Wildlife Species – Barn Swallow	See Birds and Wildlife row for details	See Birds and Wildlife row for details	See Birds and Wildlife row for details
Species at Risk	Barn swallow Butternut	There were no nesting sites available on Site. The butternut is a category 2 but under new ESA habitat definition, no buffer is required.	None
Birds and Wildlife General Breeding Birds	Potential loss of breeding bird habitat. Potential increase in bird mortality due to increase in window collisions once build out is complete. Bird breeding disturbance as a result of vegetation clearing.	Incorporation of bird friendly design on commercial structures to reduce bird window collisions. No vegetation removal from April 1 to August 31 of any given year to reduce impacts to breeding birds and be in compliance with federal policy.	None, but potential loss of nesting and foraging habitat throughout Site.

Feature or Function	Impact to Feature or Function	Mitigation	Residual Effect
Fish Habitat	Two stormwater management pond with outlets into ditches that eventually discharge into fish habitat Potential loss of vegetation in riparian zone of Cawkers Creek Potential for sediment discharge during construction	Design stormwater management pond to appropriate MECP treatment level guidelines. Roadside drainage ditch on west pond outlet and wooded area on east pond outlet will provide additional treatment. Maintain vegetated 30 m buffer between site and Cawkers Creek. Prepare Erosion and Sediment Control plan to minimize risk of sediment releases during construction. Maintain ESC measures during all construction phases. Stabilize disturbed areas as soon as possible following construction. Restore areas adjacent to creeks and natural areas using native vegetation.	None

6. Policies and Legislative Compliance

6.1 Federal Legislation

6.1.1 Fisheries Act

The project will comply with the Fisheries Act protective provisions of the Fisheries Act by implementing the *DFO Measures to Protect Fish and Fish Habitat* and avoiding all work in and around water for waterbodies that are protected under the Fisheries Act. All project undertaking will: prevent the death of fish, maintain riparian vegetation, carry out work on land only, maintain fish passage, ensuring property sediment control, and preventing entry of deleterious substances in water.

In the event that the site plan changes to include near or in-water work the site plan should be reviewed a professional biologist to confirm that there are no potential impacts to fish and fish habitat.

6.1.2 Species at Risk Act

The lands are not federally owned and are not lands recommended by the Minister of the ECCC to the Governor in Council. No federally listed threatened or endangered species will be impacted due to the construction of the proposed development should the recommendations outlined in Sections 5 and 7 be followed.

6.1.3 Migratory Birds Convention Act

The core breeding period in Ontario for migratory birds under the MBCA for Bird Conservation Region 13 (i.e., the one the subject property lies within) extends from April 15th to August 15th (Environment and Climate Change Canada, 2014). As such clearing of the trees and other vegetation for the development cannot occur during this timing window.

6.2 Provincial Legislation

6.2.1 Endangered Species Act 2007

The butternut tree is listed as endangered in Ontario, the Ministry of the Environment, Conservation and Parks. Proponents need to seek authorizations for activities that impact the species. However, the current Site plan does not encroach directly on the tree located just outside the eastern property line and therefore, no permits are required since the tree will not be removed.

No structures suitable for barn swallow nesting were found on the subject property. As such, there is no constraint to development as a result of observing the species in the study area.

6.2.2 Provincial Planning Statement 2024

The Site contains Significant Wildlife Habitat, and habitat for Endangered and Threatened Species. As a result, sections 4.1.5(d) and 4.1.7 of the Provincial Planning Statement apply to this project. In this EIS report, Sections 5.4., 5.6 contain recommendations that would permit the proposed development to proceed in a manner consistent with the applicable sections of the Provincial Planning Statement (PPS). Consultation with the Municipality is recommended to obtain approval with respect to variable buffers and woodland removals.

6.2.3 Greenbelt Plan 2017

The Site is located within the Protected Countryside designation in the Greenbelt Plan. Although the Site falls within the Protected Countryside of the Greenbelt Plan, it is designated as 'Towns and Villages' and thus is subject to policies relating to settlement areas (Government of Ontario 2023). The Greenbelt Plan indicates that it does not typically apply to lands within the boundaries of Towns/Villages and Hamlets. Rather, Official plans will govern land use within these settlement areas based on policy direction provided by the Growth Plan. GHD has prepared this EIS report, including recommendations based on the requirements of the Township of Scugog Official Plan.

Discussion regarding key natural heritage features (significant woodlands) and key hydrologic features (watercourse habitat zones) has been included in the EIS. Compliance with those requirements includes buffers on the staked woodland driplines. There will be no negative impact on those features or their ecological function, provided our mitigation measures, recommendations and compensation measures are implemented.

6.3 Local and Other Regulatory Bodies

6.3.1 Township of Scugog Official Plan and Durham Region Official Plan

GHD has prepared this EIS in accordance with Policies in the Township of Scugog Official Plan and the Durham Region Official Plan. The location of key natural heritage and hydrologic features that were depicted on Schedule B – Map B1 were confirmed. The recommendations in Section 5.2 (Woodlands), in addition to **Table 3** and Section 7 (Recommendations) describe measures that would allow the proposed project to proceed while conforming to both of Official Plans listed above, including the Townships commitment to preserving Woodlands.

Section 3.7 EIS requirements

The EIS shall demonstrate that the use will:

a) Not have a negative impact on significant natural heritage features and related ecological functions;

The proposed development will not have a negative impact on any significant natural heritage features and their ecological functions.

b) Not discharge any substance that could have an adverse effect on air quality, groundwater, surface water and associated plant and animal life;

The development will not have an adverse effect on those features provided the stormwater facilities are constructed as per MECP standards.

c) Be serviced by an adequate supply of water and that the groundwater takings associated with the use will not have an adverse effect on existing water supplies, surface water features and associated plant and animal life;

Understanding that it will be serviced by municipal water supply.

d) Not cause erosion or siltation of watercourses or unacceptable changes to watercourse morphology;

The development will not result in erosion or siltation to watercourses provided our EIS recommendations are implemented, and an approved Erosion and Sediment Control Plan is in place.

e) Not interfere with groundwater recharge to the extent that it would adversely affect groundwater supply for any use;

f) Not cause an increase in flood potential on or off the site;

g) Maintain/enhance/restore/rehabilitate the natural condition of affected watercourses, and protect/enhance/restore/rehabilitate aquatic habitat;

Buffers from the creek on the Site will be planted and left as undisturbed habitats. No impacts predicted if our EIS recommendations are implemented.

h) Not encourage the demand for further development that would negatively affect wetland function or contiguous wetland areas;

No wetlands on Site or within Study area.

i) Enhance and restore endangered terrestrial and aquatic habitat where appropriate and feasible;

No endangered terrestrial or aquatic habitat is present within the Site or Study Area.

j) Not unduly interfere with the function of existing or potential natural corridors that are determined to be of significance;

There were no significant natural corridors identified on Site. The woodland compensation recommended will enhance a connection between the western rectangular woodland and fencerows to the south, providing opportunity for wildlife movement corridors to be maintained.

k) Not lead to a reduction to the extent of significant woodlands; and,

The western rectangular woodland will be maintained with some removal of young trees at the north end. A compensation plan has been recommended to replace the 0.23 ha of loss with an enhanced tree planting plan on the southern noise berm at a greater than 1:1 ratio and a new treed connection made between the retained woodland and the compensation area.

l) Not lead to species loss or negative impacts on endangered, threatened or special concern species and/or their habitat.

There were no SAR species identified on Site that would be impacted by the proposed development.

6.3.2 Kawartha Region Conservation Authority Regulations and Policies

Sections 5.5 and 5.6 and **Table 3** identify proposed mitigation measures that would allow the proposed development to proceed in a manner that complies with KRCA policies and Ontario Regulation 41/24. Section 7.0 includes both general and specific recommendations to be implemented during the site preparation, construction, and post-construction periods.

7. Summary of Recommendations

7.1 General

1. The construction envelope must be clearly defined and delineated, and a line be staked and clearly marked in the field prior to any construction activities occurring in the study area. Grading of the site and removal or addition of fill shall be restricted to the proposed work area.
2. Prior to any site preparation activities (e.g., grading, placement of fill) functioning erosion and sediment control measures shall be installed along the construction envelope to ensure sediment laden runoff does not enter interfere with adjacent natural heritage and hydrologic features. The silt fence should be inspected and maintained throughout the construction phase and remain in place until the soils are stabilized and re-vegetated.
3. The overall existing drainage patterns for the site will be maintained.
4. Any vegetation clearing required for site access prior to construction, or within the construction envelope shall be completed outside of the Breeding Bird timing window of April 1 to August 31 (as per Environment and Climate Change Canada regulations).
5. Tree and shrub removal within the development envelopes and/or along access routes/recreational trail shall be done outside of the bat active window (April 1 – November 30 of any given year).
6. Any areas outside of buildings and built infrastructure shall be vegetated as soon as possible after construction to stabilize the soils and re-establish vegetation cover.
7. Where feasible, self-sustaining trees, shrubs, grasses, and/or wildflower seed mixes native to the study area shall be used to re-establish vegetation cover.
8. The Project Manager and Contractor are obligated to ensure that all mitigation measures are strictly observed.
9. Construction should be undertaken during normal weather conditions, to the extent possible, and the project shall be designed to appropriate specifications to withstand variable weather conditions.
10. Client to obtain relevant permits from the Township of Scugog, Region of Durham, and Kawartha Region Conservation Authority.
11. A landscape plan be prepared that includes native trees, shrubs, and wildflower mixes to enhance the wetland buffer area.

7.2 Woodlands

1. A minimum of a 10-metre buffer (setback) will be established from the dripline of woodland communities in the Study Area as staked by agency.
2. Wherever possible, this setback (buffer) will be increased.
3. Grading to be limited within the buffer to protect the tree roots. No development, or building envelopes are to intrude into this buffer (setback), which shall consist of natural self-sustaining vegetation indigenous to the study area.

7.3 Species at Risk

1. Should any other Species At Risk (SAR) be encountered during work related activities, or if there is potential to negatively impact SAR, or wildlife more generally, contact MECP immediately for guidelines on how to proceed.

7.4 Groundwater Discharge and Recharge

1. Future proposed buildings shall be designed, if possible, to allow much of the precipitation captured by the roofs to be infiltrated back into the ground on-site to maintain the recharge and discharge functions of the area. For example, buildings could include downspouts that spill out onto grassed or gravel surfaces or soak away pits off the roofs. This would convey the rainfall captured by the roofs away from hard surfaces and permit on-site infiltration.

7.5 Sediment and Erosion Control

1. All sediment and erosion control products will be selected for the site based on the manufacturer's product specifications. Product installation and maintenance will follow the manufacturer's guidelines.
2. Where possible, all erosion and sediment control products should be biodegradable and not cause trapping or entangling of wildlife.
3. Sediment control measures shall be installed prior to the commencement of work and shall be maintained throughout the project to prevent the entry/outward flow of sediment into hydrologic features.
4. All sediment and erosion control measures shall be inspected regularly during the construction phase and periodically thereafter to ensure they are functioning properly, maintained, and upgraded as required. Sediment fence to be checked regularly to ensure they are maintained and working properly. Accumulated silt and debris will be removed from the fence and site after every precipitation event.
5. Construction will be undertaken during normal weather conditions, to the extent possible, and will avoid large precipitation events to minimize the risk of sedimentation off-site.
6. In the event that sediment and erosion control measures are not functioning, the construction supervisor shall order the work to be stopped. No further work shall be carried out until the construction methods and/or the sediment control plan is adjusted to address the sediment/erosion problem(s). Such occurrences should be document by the site inspector and provided to a qualified biologist.
7. Maintain vegetation cover as much as possible within the 30 m buffer by reducing the outfall infrastructure footprint, minimize non-essential clearing and grading, retaining existing vegetation.
8. Reduce duration of exposed soils by stabilizing within 30 days with native vegetation species suitable for the site.
9. All construction materials will be removed from site upon project completion.

8. Conclusion

GHD conducted an Environmental Impact Study to address potential environmental issues associated with the proposed development south of Reach Street on the Site. Within the study area GHD staff confirmed the boundaries of key natural features, verified their ecological functions, assessed SAR habitat and have recommended appropriate buffers (setbacks) and other mitigation measures to prevent impacts from the proposed development.

Based on our analysis, there will be no negative impacts on the natural heritage features, or their ecological functions, provided the mitigation measures and recommendations (as described in Sections 5 and 7 of this report) are implemented. Additionally, no impacts on Species at Risk or area sensitive species are anticipated. There will be no negative impacts on the Greenbelt Plan key natural heritage features or key hydrologic features from the proposed development.

A number of recommendations were made in order to mitigate impacts on the natural features and their ecological functions from the development. Recommendations were made to minimize potential impacts during the site preparation, construction, and post-construction period. Additional dialogue with the Region of Durham, Township of Scugog and Kawartha Conservation will need to occur so that the appropriate permitting processes are put in place.

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Appendices

Appendix A

Site Plan

DRAFT PLAN OF SUBDIVISION

Part of Lots 15 and 16
Concession 6
Geographic Township of Reach
Now in the
Township of Scugog
Regional Municipality of Durham

SCHEDULE OF LAND USE

BLOCK	LAND USE	UNITS Min.	UNITS Max.	AREA
1-28	Residential Low Density	375	575	14.83
29-30	Condominium Townhomes	250	320	7.41
31-33	RM4 (Mid-Rise / Mixed Use) (Max. 50uph)	150	235	2.72
34	RM4 (Long Term Care/Mid-Rise Mixed Use) (Max.5 Storeys)(Max. 50uph)	125	225	2.48
35	Park			2.38
36-37	SWM			4.58
38	Open Space - Berm			1.37
39-41	Natural Heritage System			3.08
42	Prestige Industrial			6.00
43	General Industrial			8.79
44	Possible Future Road Connection			0.07
St. A	20m Right of Way 561 m			1.24
Sts. B-L	20m Right of Way 4,272 m			8.54
Lane A-B	8.5m Laneway 323 m			0.26
	TOTAL 5,156 m	**900**	**1,355**	**63.75**

OWNER'S AUTHORIZATION

I hereby authorize Malone Given Parsons Ltd. to prepare and submit this Draft Plan of Subdivision to the Township of Scugog.

_____ Date

ADDITIONAL INFORMATION

AS REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT, CHAPTER P.13(R.S.O. 1990).

(a),(e),(f),(g),(j),(l) - As shown of the Draft Plan.

(b),(c) - As shown on the Draft and Key Plan.

(d) - Land to be used in accordance with the Schedule of Land Use.

(i) - Soil is silt and clay loam.

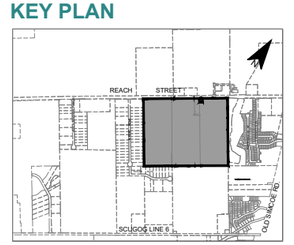
(h),(k) - Full municipal services to be provided.

SURVEYOR'S CERTIFICATE

I hereby certify that the boundaries of the lands to be subdivided as shown on this Plan and their relationship to the adjacent lands are accurately and correctly shown.

_____ Date

KEY PLAN



Date	Revision	By

Date: March 18, 2026
MGP File: 24-3401

Malone Given Parsons.
140 Renfrew Drive, Suite 201 | Markham, ON | L3R 6B3
905 513 0170 | mgp.ca

Appendix B

Plant List by Community

APPENDIX B Plant Species by Community

Families and genera for the plant species found in this appendix are listed in taxonomic order. The species are listed alphabetically by scientific name within each genus.

Three standard reference works were used for the botanical nomenclature and taxonomy (Newmaster et. al., 1998; Gleason and Cronquist 1991; Voss 1980; 1985). Other published works for botanical names included; ferns (Cody and Britton 1989); grasses (Dore and McNeill 1980); orchids (Whiting and Catling 1986); shrubs (Soper and Heimburger 1982) and trees (Farrar 1995).

Total: Number of communities where plant species was recorded
X : Plant species recorded

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
HORSETAIL FAMILY	*EQUISETACEAE*								
field horsetail	*Equisetum arvense*	3		X	X				X
wood horsetail	*Equisetum sylvaticum*	1							X
WOOD FERN FAMILY	*DRYOPTERIDACEAE*								
marginal wood-fern	*Dryopteris marginalis*	1			X				
ostrich fern	*Matteuccia struthiopteris*	1			X				
sensitive fern	*Onoclea sensibilis*	1			X				

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
PINE FAMILY	*PINACEAE*								
balsam fir	*Abies balsamea*	1			X				
Norway spruce	*Picea abies*	1		X					
white spruce	*Picea glauca*	1		X					
red pine	*Pinus resinosa*	1		X					
eastern white pine	*Pinus strobus*	1		X					
Scot's pine	*Pinus sylvestris*	1					X		
CYPRESS FAMILY	*CUPRESSACEAE*								
eastern white cedar	*Thuja occidentalis*	3		X	X		X		
BUTTERCUP FAMILY	*RANUNCULACEAE*								
red baneberry	*Actaea rubra*	1			X				
Canada anemone	*Anemone canadensis*	1							X
virgin's bower	*Clematis virginiana*	1		X					
tall buttercup	*Ranunculus acris*	3	X	X					X
creeping buttercup	*Ranunculus repens*	1	X						
ELM FAMILY	*ULMACEAE*								
American elm	*Ulmus americana*	2			X				X
WALNUT FAMILY	*JUGLANDACEAE*								
black walnut	*Juglans nigra*	2		X			X		
BEECH FAMILY	*FAGACEAE*								
American beech	*Fagus grandifolia*	1			X				
white oak	*Quercus alba*	1		X					
red oak	*Quercus rubra*	1		X					
BIRCH FAMILY	*BETULACEAE*								
white birch	*Betula papyrifera*	2			X				X
ironwood	*Ostrya virginiana*	1			X				
GOOSEFOOT FAMILY	*CHENOPODIACEAE*								
lamb's-quarters	*Chenopodium album*	2		X					X

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
PINK FAMILY	*CARYOPHYLLACEAE*								
mouse-eared chickweed	*Cerastium fontanum*	3	X	X					X
BUCKWHEAT FAMILY	*POLYGONACEAE*								
curled dock	*Rumex crispus*	1					X		
ST. JOHN'S-WORT FAMILY	*GUTTIFERAE*								
common St. John's-wort	*Hypericum perforatum*	2						X	X
LINDEN FAMILY	*TILIACEAE*								
American basswood	*Tilia americana*	3			X			X	X
GOURD FAMILY	*CUCURBITACEAE*								
wild cucumber	*Echinocystis lobata*	4	X	X	X				X
WILLOW FAMILY	*SALICACEAE*								
white poplar	*Populus alba*	1		X					
balsam poplar	*Populus balsamifera*	2	X						X
trembling aspen	*Populus tremuloides*	2		X	X				
weeping willow	*Salix babylonica*	2	X					X	
Bebb's willow	*Salix bebbiana*	2	X						X
pussy willow	*Salix discolor*	2	X						X
slender willow	*Salix petiolaris*	1	X						
MUSTARD FAMILY	*BRASSICACEAE*								
garlic mustard	*Alliaria petiolata*	1							X
shepherd's purse	*Capsella bursa-pastoris*	1		X					
wormseed mustard	*Erysimum cheiranthoides*	1		X					
dame's rocket	*Hesperis matronalis*	2					X		X
field penny-cress	*Thlapsi arvense*	1		X					
GOOSEBERRY FAMILY	*GROSSULARIACEAE*								
American black currant	*Ribes americanum*	1	X						
prickly gooseberry	*Ribes cynosbati*	1			X				

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
ROSE FAMILY	*ROSACEAE*								
woodland strawberry	*Fragaria vesca*	1			X				
common strawberry	*Fragaria virginiana*	2			X				X
yellow avens	*Geum aleppicum*	5	X		X		X	X	X
white avens	*Geum canadense*	1			X				
apple	*Malus domestica*	1			X				
sulfur cinquefoil	*Potentilla recta*	1					X		
old-field cinquefoil	*Potentilla simplex*	1			X				
black cherry	*Prunus serotina*	2			X				X
choke cherry	*Prunus virginiana*	1							X
multiflora rose	*Rosa multiflora*	1							X
rugosa rose	*Rosa rugosa*	1		X					
wild red raspberry	*Rubus idaeus*	5		X	X		X	X	X
purple-flowering raspberry	*Rubus odoratus*	1							X
European mountain ash	*Sorbus aucuparia*	2					X		X
PEA FAMILY	*FABACEAE*								
crown-vetch	*Coronilla varia*	1							X
black medick	*Medicago lupulina*	2		X					X
alsike clover	*Trifolium hybridum*	1		X					
white clover	*Trifolium repens*	2		X					X
cow vetch	*Vicia cracca*	3	X	X					X
LOOSESTRIFE FAMILY	*LYTHRACEAE*								
purple loosestrife	*Lythrum salicaria*	1	X						
EVENING PRIMROSE FAMILY	*ONAGRACEAE*								
common evening primrose	*Oenothera biennis*	1							X
DOGWOOD FAMILY	*CORNACEAE*								
red panicled dogwood	*Cornus foemina Miller ssp.racemosa*	3			X		X		X
red-osier dogwood	*Cornus stolonifera*	2	X						X

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
BUCKTHORN FAMILY	*RHAMNACEAE*								
European buckthorn	*Rhamnus cathartica*	5		X	X		X	X	X
GRAPE FAMILY	*VITACEAE*								
Virginia creeper	*Parthenocissus inserta*	5		X	X		X	X	X
wild grape	*Vitis riparia*	5		X	X		X	X	X
BUCKEYE FAMILY	*HIPPOCASTANACEAE*								
horse chestnut	*Aesculus hippocastanum*	1		X					
MAPLE FAMILY	*ACERACEAE*								
Manitoba maple	*Acer negundo*	4		X	X		X		X
red maple	*Acer rubrum*	1		X					
sugar maple	*Acer saccharum ssp.saccharum*	4		X	X			X	X
CASHEW FAMILY	*ANACARDIACEAE*								
staghorn sumac	*Rhus typhina*	6		X	X	X	X	X	X
WOOD-SORREL FAMILY	*OXALIDACEAE*								
common yellow wood-sorrel	*Oxalis dillenii*	2			X				X
GERANIUM FAMILY	*GERANIACEAE*								
herb Robert	*Geranium robertianum*	1			X				
CARROT FAMILY	*APIACEAE*								
Queen-Anne's lace	*Daucus carota*	4	X	X	X				X
DOGBANE FAMILY	*APOCYNACEAE*								
indian hemp	*Apocynum cannabinum var. cannabi*	1							X
MILKWEED FAMILY	*ASCLEPIADACEAE*								
swamp milkweed	*Asclepias incarnata*	1	X						
common milkweed	*Asclepias syriaca*	3		X				X	X
swallow-wort	*Cynanchum rossicum*	2		X					X
NIGHTSHADE FAMILY	*SOLANACEAE*								
bitter nightshade	*Solanum dulcamara*	1	X						
MORNING-GLORY FAMILY	*CONVOLVULACEAE*								
field bindweed	*Convolvulus arvensis*	1		X					

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
MINT FAMILY	*LAMIACEAE*								
ground ivy	*Glechoma hederacea*	1		X					
motherwort	*Leonurus cardiaca*	3		X				X	X
wild mint	*Mentha arvensis*	1	X						
PLANTAIN FAMILY	*PLANTAGINACEAE*								
narrow-leaved plantain	*Plantago lanceolata*	1		X					
broad-leaved plantain	*Plantago major*	1							X
OLIVE FAMILY	*OLEACEAE*								
white ash	*Fraxinus americana*	2			X				X
lilac	*Syringa vulgaris*	1		X					
FIGWORT FAMILY	*SCROPHULARIACEAE*								
common mullein	*Verbascum thapsus*	3		X	X				X
MADDER FAMILY	*RUBIACEAE*								
rough bedstraw	*Galium asprellum*	1						X	
white bedstraw	*Galium mollugo*	3	X	X					X
HONEYSUCKLE FAMILY	*CAPRIFOLIACEAE*								
tartarian honeysuckle	*Lonicera tatarica*	1							X
red-berried elderberry	*Sambucus racemosa*	2					X		X
Guelder rose	*Viburnum americanum*	1					X		

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
ASTER FAMILY	*ASTERACEAE*								
common yarrow	*Achillea millefolium*	4		X	X		X		X
common ragweed	*Ambrosia artemisiifolia L.*	3		X				X	X
stinking mayweed	*Anthemis cotula*	1		X					
common burdock	*Arctium minus*	3		X			X		X
common mugwort	*Artemisia vulgaris*	4		X	X		X		X
ox-eye daisy	*Chrysanthemum leucanthemum*	4		X	X		X		X
chicory	*Cichorium intybus*	2		X					X
Canada thistle	*Cirsium arvense*	2			X				X
bull thistle	*Cirsium vulgare*	2		X					X
daisy fleabane	*Erigeron annuus*	2					X		X
Philadelphia fleabane	*Erigeron philadelphicus ssp. philadel*	5	X	X	X			X	X
field hawkweed	*Hieracium caepitosum ssp.caespitos*	2		X					X
pineapple weed	*Matricaria matricarioides*	1		X					
black-eyed Susan	*Rudbeckia hirta*	1							X
tall goldenrod	*Solidago altissima*	1					X		
blue-stemmed goldenrod	*Solidago caesia*	1							X
Canada goldenrod	*Solidago canadensis*	4	X	X	X				X
zig-zag goldenrod	*Solidago flexicaulis*	1			X				
goldenrod species	*Solidago spp.*	2		X				X	
panicled aster	*Symphyotrichum lanceolatum ssp.he*	1		X					
common dandelion	*Taraxacum officinale*	5		X	X		X	X	X
coltsfoot	*Tussilago farfara*	1			X				
ARUM FAMILY	*ARACEAE*								
Jack-in-the-pulpit	*Arisaema triphyllum*	1			X				
RUSH FAMILY	*JUNCACEAE*								
path rush	*Juncus tenuis*	1	X						

Common Name	*Scientific Name*	Total	COMMUNITY NUMBER						
			1	2	3	4	5	6	7
GRASS FAMILY	*POACEAE*								
awnless brome grass	*Bromus inermis ssp.inermis*	4		X			X	X	X
Canada bluejoint grass	*Calamagrostis canadensis*	3	X		X				X
orchard grass	*Dactylis glomerata*	2		X					X
reed canary grass	*Phalaris arundinacea*	2						X	X
timothy	*Phleum pratense*	2		X					X
common reed	*Phragmites australis*	2	X						X
Kentucky blue grass	*Poa pratensis*	2		X					X
CATTAIL FAMILY	*TYPHACEAE*								
common cattail	*Typha latifolia*	2	X						X
LILY FAMILY	*LILIACEAE*								
Canada mayflower	*Maianthemum canadense*	1			X				
star-flowered Solomon's seal	*Smilacina stellata*	1			X				
white trillium	*Trillium grandiflorum*	1			X				
Total Number of Plant Species	132		25	62	49	1	25	19	72

Number of Plant Species Per Community

Appendix C

Photolog



Photo 1 **Community 1. Shallow marsh (MAS), facing southeast.**



Photo 1 **Community 2. Homestead and gardens (No ELC code), facing north.**

Site Photographs

Reach Street, Port Perry – Environmental Impact Study

Date of Photos: June 25, 2025



Photo 3 **Community 3. Dry- Fresh White Ash Deciduous Forest (FOD4-2), facing south.**



Photo 2 **Community 4. Sumac Cultural Thicket (CUT1-1), facing northwest.**

Site Photographs

Reach Street, Port Perry – Environmental Impact Study

Date of Photos: June 25, 2025



Photo 5 **Community 5. Coniferous forest (FOC), facing southeast.**



Photo 6 **Community 6. Deciduous forest (FOD), facing east.**



Photo 7 **Community 7. Fencerows (No ELC code), facing north.**



Photo 8 **Habitat Zone 1, facing southwest, June 25, 2025.**



Photo 9 **Habitat Zone 2, facing southwest, June 25, 2025.**

Appendix D

Bird Status Report

APPENDIX D Bird Status Report - Comprehensive

Bird species observed by GHD are listed in the order followed the American Ornithologists' Union (AOU) Check-list of North American birds (7th edition, 1999, 47th Supplement). Common and scientific nomenclature are based on those used by AOU. Breeding status and breeding evidence code are listed when observed. Any significant status for a species on national and provincial lists is displayed as well as those from relevant regional lists.

List Status :

END - endangered	A wildlife species facing imminent extirpation or extinction.
END-R -endangered regulated	A wildlife species facing imminent extirpation or extinction in Ontario which has been regulated under Ontario's Endangered Species Act (ESA).
THR - threatened	A wildlife species likely to become endangered if limiting factors are not reversed.
SC - special concern	A wildlife species that may become threatened or an endangered species because of a combination of biological characteristics and identified threats.
YES - Area Sensitive	A wildlife species that requires large areas of suitable habitat in order to sustain their population numbers.

*** Other status levels are not displayed**

List Sources:

COSEWIC	The Committee on the Status of Endangered Wildlife in Canada, 2024.
COSSARO	The Committee on the Status of Species at Risk in Ontario, 2023.
SARA	Species At Risk Act, Schedule 1, Government of Canada,2023.
Area Sensitive	Significant Wildlife Technical Guide, Appendix C, OMNR, Oct. 2000
Region 6	Southern Ontario Wetland Evaluation Appendix 11B, Version 3.2, March 2013

Breeding Status: (Observed By GHD)

B -species observed in breeding season in suitable habitat with some evidence of breeding (confirmed, probable or possible as per Ontario Breeding Bird Atlas, 2002).
F -species observed in breeding season but no evidence of breeding or suitable nest sites available on the study site (includes flyovers, migrants and foraging colonial breeders).
M -species observed outside of breeding season for that species and in area outside of the known breeding range for that species.

Breeding Evidence Code: (Observed By GHD)

OBSERVED
X -species observed in its breeding season (no evidence of breeding).

POSSIBLE BREEDING
H -species observed in its breeding season in suitable nesting habitat
S -singing male present, or breeding calls heard, in its breeding season in suitable nesting habitat

PROBABLE BREEDING
P -pair observed in their breeding season in suitable nesting habitat
T -permanent territory presumed through registration of territorial song on at least 2days, a week or more apart, at the same place
D -courtship or display between a male and a female or 2 males, including courtship feeding or copulation
V -visiting probable nest site
A -agitated behaviour or anxiety calls of an adult
B -brood patch on adult female or cloacal protuberance on adult male
N -nest-building or excavation of nest hole

CONFIRMED BREEDING
DD -distraction display or injury feigning
NU -used nest or egg shell found (occupied or laid within the period of study)
FY -recently fledged young or downy young, including young incapable of sustained flight
AE -adults leaving or entering nest site in circumstances indicating occupied nest
FS -adult carrying fecal sac
CF -adult carrying food for young
NE -nest containing eggs
NY -nest with young seen or heard

SOURCE: Ontario Breeding Bird Atlas March 2001

AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6		
CAGO	Canada Goose	*Branta canadensis*	B	H				No			
MALL	Mallard	*Anas platyrhynchos*	B	X				No			
KILL	Killdeer	*Charadrius vociferus*	B	H				No			
MODO	Mourning Dove	*Zenaida macroura*	B	S				No			
BEKI	Belted Kingfisher	*Megaceryle alcyon*	B	H				No			
WAVI	Warbling Vireo	*Vireo gilvus*	B	S				No			
REVI	Red-eyed Vireo	*Vireo olivaceus*	B	S				No			
BLJA	Blue Jay	*Cyanocitta cristata*	B	S				No			
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No			
CORA	Common Raven	*Corvus corax*	B	X				No			
BARS	Barn Swallow	*Hirundo rustica*	B	H	SC	SC	THR	No			
BCCH	Black-capped Chickadee	*Poecile atricapillus*	B	S				No			
AMRO	American Robin	*Turdus migratorius*	B	S				No			
GRCA	Gray Catbird	*Dumetella carolinensis*	B	S				No			
BRTH	Brown Thrasher	*Toxostoma rufum*	B	S				No			
EUST	European Starling	*Sturnus vulgaris*	B	S				No			
CEWX	Cedar Waxwing	*Bombycilla cedrorum*	B	S				No			
YEWA	Yellow Warbler	*Dendroica petechia*	B	S				No			
AMRE	American Redstart	*Setophaga ruticilla*	B	S				No			
COYE	Common Yellowthroat	*Geothlypis trichas*	B	S				No			
CHSP	Chipping Sparrow	*Spizella passerina*	B	S				No			
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No			
SWSP	Swamp Sparrow	*Melospiza georgiana*	B	S				No			
NOCA	Northern Cardinal	*Cardinalis cardinalis*	B	S				No			
INBU	Indigo Bunting	*Passerina cyanea*	B	S				No			
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No			

COGR	Common Grackle	*Quiscalus quiscula*	B	S				No				
BHCO	Brown-headed Cowbird	*Molothrus ater*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
HOSP	House Sparrow	*Passer domesticus*	B	P				No				
TOTAL SPECIES OBSERVED:	**30**	**BREEDING SPECIES OBSERVED:**	**30**		**1**	**1**	**1**	**0**	**0**	**0**	**0**	

Appendix E

Bird Status Report by Station

APPENDIX E Bird Status Report by Station

Bird species observed by GHD within each survey station are listed in the order followed the American Ornithologists' Union (AOU) Check-list of North American birds (7th edition, 1999, 47th Supplement). Common and scientific nomenclature are based on those used by AOU. Breeding status and breeding evidence code are listed when observed. Any significant status for a species on national and provincial lists is displayed as well as those from relevant regional lists.

List Status :	**END - endangered**	A wildlife species facing imminent extirpation or extinction.
	END-R -endangered regulated	A wildlife species facing imminent extirpation or extinction in Ontario which has been regulated under Ontario's Endangered Species Act (ESA).
	THR - threatened	A wildlife species likely to become endangered if limiting factors are not reversed.
	SC - special concern	A wildlife species that may become threatened or an endangered species because of a combination of biological characteristics and identified threats.
	YES - Area Sensitive	A wildlife species that requires large areas of suitable habitat in order to sustain their population numbers.

*** Other status levels are not displayed**

List Sources:	**COSEWIC**	The Committee on the Status of Endangered Wildlife in Canada, 2022.
	COSSARO	The Committee on the Status of Species at Risk in Ontario, 2023.
	SARA	Species At Risk Act, Schedule 1, Government of Canada, 2023.
	Area Sensitive	Significant Wildlife Technical Guide, Appendix C, OMNR, Oct. 2000
	Region 6	Southern Ontario Wetland Evaluation Appendix 11B, Version 3.2, March 2013

Breeding Status: (Observed By GHD)

B -species observed in breeding season in suitable habitat with some evidence of breeding (confirmed, probable or possible as per Ontario Breeding Bird Atlas, 2002).
F -species observed in breeding season but no evidence of breeding or suitable nest sites available on the study site (includes flyovers, migrants and foraging colonial breeders).
M -species observed outside of breeding season for that species and in area outside of the known breeding range for that species.

Breeding Evidence Code: (Observed By GHD)

OBSERVED
X -species observed in its breeding season (no evidence of breeding).

POSSIBLE BREEDING
H -species observed in its breeding season in suitable nesting habitat
S -singing male present, or breeding calls heard, in its breeding season in suitable nesting habitat

PROBABLE BREEDING
P -pair observed in their breeding season in suitable nesting habitat
T -permanent territory presumed through registration of territorial song on at least 2days, a week or more apart, at the same place
D -courtship or display between a male and a female or 2 males, including courtship feeding or copulation
V -visiting probable nest site
A -agitated behaviour or anxiety calls of an adult
B -brood patch on adult female or cloacal protuberance on adult male
N -nest-building or excavation of nest hole

CONFIRMED BREEDING
DD -distraction display or injury feigning
NU -used nest or egg shell found (occupied or laid within the period of study)
FY -recently fledged young or downy young, including young incapable of sustained flight
AE -adults leaving or entering nest site in circumstances indicating occupied nest
FS -adult carrying fecal sac
CF -adult carrying food for young
NE -nest containing eggs
NY -nest with young seen or heard

SOURCE: Ontario Breeding Bird Atlas March 2001

Station No.: BBS1												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
MODO	Mourning Dove	*Zenaida macroura*	B	S				No				
REVI	Red-eyed Vireo	*Vireo olivaceus*	B	S				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
GRCA	Gray Catbird	*Dumetella carolinensis*	B	S				No				
EUST	European Starling	*Sturnus vulgaris*	B	S				No				
CHSP	Chipping Sparrow	*Spizella passerina*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
COGR	Common Grackle	*Quiscalus quiscula*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
HOSP	House Sparrow	*Passer domesticus*	B	P				No				
No. of Species Observed in Station:	**11**	**No. of Breeding Species Observed in Station:**	**11**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS2												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
REVI	Red-eyed Vireo	*Vireo olivaceus*	B	S				No				
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
COGR	Common Grackle	*Quiscalus quiscula*	B	S				No				
No. of Species Observed in Station:	**5**	**No. of Breeding Species Observed in Station:**	**5**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS3												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
KILL	Killdeer	*Charadrius vociferus*	B	H				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
No. of Species Observed in Station:	**5**	**No. of Breeding Species Observed in Station:**	**5**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS4												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
KILL	Killdeer	*Charadrius vociferus*	B	H				No				
BLJA	Blue Jay	*Cyanocitta cristata*	B	S				No				
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
BARS	Barn Swallow	*Hirundo rustica*	B	H	SC	SC	THR	No				
BCCH	Black-capped Chickadee	*Poecile atricapillus*	B	S				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
BRTH	Brown Thrasher	*Toxostoma rufum*	B	S				No				
EUST	European Starling	*Sturnus vulgaris*	B	S				No				
CEWX	Cedar Waxwing	*Bombycilla cedrorum*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
INBU	Indigo Bunting	*Passerina cyanea*	B	S				No				
BHCO	Brown-headed Cowbird	*Molothrus ater*	B	S				No				
No. of Species Observed in Station:	**12**	**No. of Breeding Species Observed in Station:**	**12**		**1**	**1**	**1**	**0**	**0**	**0**	**0**	

Station No.: BBS5												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
MALL	Mallard	*Anas platyrhynchos*	B	X				No				
BLJA	Blue Jay	*Cyanocitta cristata*	B	H				No				
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
NOCA	Northern Cardinal	*Cardinalis cardinalis*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
No. of Species Observed in Station:	**7**	**No. of Breeding Species Observed in Station:**	**7**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS6												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
CAGO	Canada Goose	*Branta canadensis*	B	H				No				
BLJA	Blue Jay	*Cyanocitta cristata*	B	H				No				
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
EUST	European Starling	*Sturnus vulgaris*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
NOCA	Northern Cardinal	*Cardinalis cardinalis*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
No. of Species Observed in Station:	**9**	**No. of Breeding Species Observed in Station:**	**9**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS7												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
BLJA	Blue Jay	*Cyanocitta cristata*	B	H				No				
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
CEWX	Cedar Waxwing	*Bombycilla cedrorum*	B	S				No				
COYE	Common Yellowthroat	*Geothlypis trichas*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
HOSP	House Sparrow	*Passer domesticus*	B	S				No				
No. of Species Observed in Station:	**9**	**No. of Breeding Species Observed in Station:**	**9**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS8												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
CORA	Common Raven	*Corvus corax*	B	X				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
CEWX	Cedar Waxwing	*Bombycilla cedrorum*	B	S				No				
YEWA	Yellow Warbler	*Dendroica petechia*	B	S				No				
COYE	Common Yellowthroat	*Geothlypis trichas*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
INBU	Indigo Bunting	*Passerina cyanea*	B	S				No				
BHCO	Brown-headed Cowbird	*Molothrus ater*	B	S				No				
No. of Species Observed in Station:	**9**	**No. of Breeding Species Observed in Station:**	**9**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS9												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
AMCR	American Crow	*Corvus brachyrhynchos*	B	H				No				
BARS	Barn Swallow	*Hirundo rustica*	B	H	SC	SC	THR	No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
YEWA	Yellow Warbler	*Dendroica petechia*	B	S				No				
COYE	Common Yellowthroat	*Geothlypis trichas*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
NOCA	Northern Cardinal	*Cardinalis cardinalis*	B	S				No				
COGR	Common Grackle	*Quiscalus quiscula*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
No. of Species Observed in Station:	**9**	**No. of Breeding Species Observed in Station:**	**9**		**1**	**1**	**1**	**0**	**0**	**0**	**0**	

Station No.: BBS10												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
MODO	Mourning Dove	*Zenaida macroura*	B	X				No				
BLJA	Blue Jay	*Cyanocitta cristata*	B	S				No				
BCCH	Black-capped Chickadee	*Poecile atricapillus*	B	S				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
GRCA	Gray Catbird	*Dumetella carolinensis*	B	S				No				
YEWA	Yellow Warbler	*Dendroica petechia*	B	S				No				
COYE	Common Yellowthroat	*Geothlypis trichas*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
SWSP	Swamp Sparrow	*Melospiza georgiana*	B	S				No				
NOCA	Northern Cardinal	*Cardinalis cardinalis*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
No. of Species Observed in Station:	**12**	**No. of Breeding Species Observed in Station:**	**12**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS11												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
BEKI	Belted Kingfisher	*Megaceryle alcyon*	B	H				No				
REVI	Red-eyed Vireo	*Vireo olivaceus*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
COGR	Common Grackle	*Quiscalus quiscula*	B	S				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	S				No				
No. of Species Observed in Station:	**6**	**No. of Breeding Species Observed in Station:**	**6**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS12												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
GRCA	Gray Catbird	*Dumetella carolinensis*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
COGR	Common Grackle	*Quiscalus quiscula*	B	None				No				
AMGO	American Goldfinch	*Carduelis tristis*	B	None				No				
No. of Species Observed in Station:	**5**	**No. of Breeding Species Observed in Station:**	**5**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS13												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
REVI	Red-eyed Vireo	*Vireo olivaceus*	B	S				No				
AMRE	American Redstart	*Setophaga ruticilla*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
NOCA	Northern Cardinal	*Cardinalis cardinalis*	B	S				No				
No. of Species Observed in Station:	**4**	**No. of Breeding Species Observed in Station:**	**4**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Station No.: BBS14												
AOU Code	Common Name	Scientific Name	Observed Breeding Status	Breed Evidence Code	COSEWIC	COSSARO	SARA	Area Sensitive	Region 6			
KILL	Killdeer	*Charadrius vociferus*	B	H				No				
MODO	Mourning Dove	*Zenaida macroura*	B	S				No				
WAVI	Warbling Vireo	*Vireo gilvus*	B	S				No				
AMRO	American Robin	*Turdus migratorius*	B	S				No				
CEWX	Cedar Waxwing	*Bombycilla cedrorum*	B	S				No				
YEWA	Yellow Warbler	*Dendroica petechia*	B	S				No				
SOSP	Song Sparrow	*Melospiza melodia*	B	S				No				
RWBL	Red-winged Blackbird	*Agelaius phoeniceus*	B	S				No				
BHCO	Brown-headed Cowbird	*Molothrus ater*	B	S				No				
No. of Species Observed in Station:	**9**	**No. of Breeding Species Observed in Station:**	**9**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	

TOTAL BIRD SPECIES OBSERVED DURING STATION SURVEYS: 30

Appendix F

Aquatic Habitat Assessment

Appendix F Aquatic Habitat Data- Unnamed Tributaries of Oshawa Creek.

Habitat Zone	Feature Type	Flow Condition	Percent Substrate Composition	Percent Instream Cover	Percent Canopy Cover (%)	Overhead Cover (%)	Watercourse Hydrology	Average Water Depth (m)	Average Wetted Width (m)	Sediment Transportation	Bank Attributes	Zone Length (m)
1	Watercourse	Base flow	10% boulder 20% cobble 10% gravel 40% sand 20% silt	10% large wood debris 5% small wood debris 10% undercut bank 5% submergent veg	25-49	15% shrubs 10% trees 10% non-woody veg 2% bridges/ crossings	40% run 15% pool 20% riffle 20% flats 5% inside culvert	0.2	2	N/A	Height- 0.2-0.5 Cover- 25-75 Buffer Present- Yes	43
2	Pond	Base flow	10% sand 90% fine organics	10% large wood debris 5% small wood debris 20% submergent veg 10% emergent veg	0-24	10% trees	100% other (pond)	0.4-1.5	480m^2	N/A	N/A	N/A

Appendix G

Surface Water Quality Parameters

Appendix G Surface Water Quality Results

Water Quality Parameters	Sample 01	Parameter Range
Date (dd/mm/yy)	25/06/25	NA
Time (hh:mm)	11:00	NA
Weather conditions	Sunny, 15% cloud cover	NA
Sample Depth (m)	0.20	NA
Air Temperature (°C)	25	NA
Water Temperature (°C)	23.1	NA
Dissolved Oxygen (mg/L)[1]	7.5	5.5-9.5 mg/L
Total Dissolved Solids (mg/L)	1.06	NA
Conductivity (SPC·us/cm)	1.66	NA
Salinity (ppt)	0.8	NA
pH[2]	7.6	6.5-8.5
Turbidity (NTU)	13.6	Background NTU for comparison

Note: N/A no CCME or PWQO guidelines associated with water parameter.

[1] **Dissolved O2** (mg/L) Lowest acceptable dissolved oxygen concentrations. Warm water early life stages = 6mg/L. Warm water other life stages = 5.5 mg/L. Cold water early life stage 9.5mg/L. Cold water other life stage 6.5mg/L.

[2]**pH -** Acceptable pH range for aquatic life is 6.5-8.5 as outlined in the Provincial Water Quality Guidelines (PWQO).



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