# Environmental Impact Study

## Flato Ida, Dundalk, Ontario

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SLR Project No.: 209.30125.00001

May 30, 2024

Revision: 1

## Revision Record

| Revision | Date | Prepared By | Checked By | Authorized By |
|---|---|---|---|---|
| 0 | May 17, 2024 | Matthew Ross | Kim Logan | Kim Logan |
| 1 | May 30, 2024 | Matthew Ross | Kim Logan | Kim Logan |

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# 1.0 Introduction

SLR Consulting (Canada) was retained by Flato Ida Dundalk Inc. (Flato) to undertake environmental investigations at 752226, 752240, and 752242 Ida Street located in Dundalk, Ontario in support of proposals for residential development within these properties ("site", Figure 1). The southeast half of the subject lands fall under the jurisdiction of the Grand River Conservation Authority (GRCA) and the northwest half is under the jurisdiction of Saugeen Conservation (SVCA). GRCA indicated early in the process that they would take the lead in the review.

These lands fall within a larger area currently subject to an approved Ministerial Zoning Order (MZO). The development of these subject lands will be phased.

## 1.1 Goals and Objectives

The purpose of the environmental impact study (EIS) is to demonstrate that the proposed development conforms with the policies, guidelines, and regulations that apply to these lands in the Official Plans of the Township of Southgate and Grey County, *Provincial Policy Statement* under the *Planning Act, 1990*, and the GRCA (2005) *Environmental Impact Study Guidelines and Submission Standards for Wetlands*. The objectives of this study include the following:

- Characterize existing conditions
- Identify significant natural heritage features, functions, and sensitivities
- Assess potential effects associated with the proposed development
- Apply mitigation strategies and techniques to minimize potential effects and show consistency with the natural heritage policy and legislative framework that applies to these lands
- Recommend whether the proposed Draft Plan of Subdivision (DPOS) can proceed with appropriate mitigation and/or compensation if required

## 1.2 Planning Context

Development on the site is subject to federal, provincial and local environmental Acts, regulations and policies. These documents provide direction and guidance regarding proposed changes in land use and the protection of natural heritage features and functions.

The applicable natural heritage regulatory and policy framework that applies to the site includes:

- *Provincial Policy Statement, 2020* (PPS)
- Federal *Fisheries Act, 2019*
- *Migratory Birds Convention Act, 1994*
- *Endangered Species Act, 2007* (ESA)
- *Federal Species at Risk Act, 2002*
- *Conservation Authorities Act, R.SO. 1990, c. C27*
- Township of Southgate (2022) Official Plan
- Grey County (2019) Official Plan

- GRCA (2005) *Environmental Impact Study Guidelines and Submission Standards for Wetlands*
- *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (Toronto and Region Conservation Authority and Credit Valley Conservation, 2014)
- *Grey County Forest Management By-law 4341-06*

## 1.3 Site Location and Description

The site is approximately 35 ha and is located southwest of Ida Street and northwest of Highway 9. Natural features on the site include:

- An unevaluated wetland/significant woodland in the southwest end of the site
- Two smaller patches of woodland
- A tributary to the Grand River (headwater drainage feature [HDF]) and its associated floodplain

Development is proposed on approximately 25 ha of the site which includes the entire site except for the unevaluated wetland in the southwest end which will be maintained as an Environmental Protection Area. Please refer to Figure 1.

# 2.0 Methods

This EIS includes a summary of the existing conditions based on a review of secondary source material and preliminary field inventories including vegetation mapping, aquatic resource investigations, targeted wildlife surveys and feature staking exercises with representatives from the GRCA. Existing conditions within the site were evaluated through a review of secondary source material and site investigations by qualified SLR Ecologists between April 24 and September 20, 2022. Recent aerial photographs of the site were obtained and used to assist in field verification. Data collected were integrated to review the natural environment features and functions and identify environmental constraints to the DPOS application.

## 2.1 Desktop Analysis

A secondary source review was performed to characterize the natural environment of the site and identify known natural heritage features and functions within and adjacent to the site. The information presented in **Table 1** was reviewed and used to inform the need for additional field studies and avoid duplication of effort.

**Table 1: Information Source Summary and Description**

| Information Source | Data Description |
|---|---|
| Aerial Imagery | Google Earth<br>Ministry of Natural Resources and Forestry (MNRF) imagery from 1954 to 2021 |
| Ontario Geological Survey (OGS) Mapping (OGSEarth; NDMNRF, 2022) | Physiography, topography and soil characteristics of the site |

| Information Source | Data Description |
|---|---|
| GRCA (2022) Map Your Property Application | Policies in accordance with Ontario *Conservation Authorities Act, R.SO. 1990, c. C27* and regulation limits |
| Saugeen Conservation (2021) Approximate Regulated and Approximate Screening Areas Mapping Tool | Policies in accordance with Ontario *Conservation Authorities Act, R.SO. 1990, c. C27* and regulation limits |
| MNRF (2023) Natural Heritage Information Centre (NHIC) | Evaluated and unevaluated wetlands, watercourses, woodlands, greenlands, Areas of Natural and Scientific Interest (ANSI), rare species occurrences, plant communities, wetlands, and natural areas information |
| Bird Studies Canada et al. (2006) Ontario Breeding Bird Atlas (OBBA) | General Avian species and potential Species at Risk (SAR) |
| Fisheries and Oceans Canada (2022) Aquatic Species at Risk Interactive Map | Online mapping resource to identify potential species at risk occurrences and critical habitat |
| Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019) | Reptile and amphibian species potentially present in project area |
| Ontario Butterfly Atlas (Macnaughton et.al. 2021) | Butterfly species potentially present in project area |
| Ministry of Natural Resources and Forestry (2018) Ontario Species at Risk List (O. Reg. 230/08) | SAR list and current status ratings |
| Township of Southgate (2022) Official Plan | Environmental protection areas, Greenbelt, natural heritage system and schedules |
| Grey County (2019) Official Plan | Environmental protection areas, Greenbelt, natural heritage system and schedules |

## 2.2 Agency Correspondence

A Terms of Reference (ToR) was submitted to the GRCA and SVCA on June 8th, 2022 for review and comment. Comments were received on July 7th, 2022 and an updated ToR was submitted July 28th, 2022. The ToR and relevant correspondence can be found in **Appendix A**.

## 2.3 Field Studies

### 2.3.1 Terrain and Surficial Geology

To complement the review of OGS mapping, SLR is also completing hydrogeological investigations in support of the proposed project (Figure 2). These investigations are on-going, and findings are reported under separate cover.

### 2.3.2 Natural Environment

Additional information with respect to fisheries, wildlife and SAR were obtained through preliminary field reconnaissance and targeted field surveys. This information was used to develop the description of the natural environment and to identify potential impacts related to proposed land use changes. **Table 2** provides a summary of site visits and field tasks completed to date.

**Table 2: Summary of Field Surveys**

| Date | Task | Weather | Personnel |
|---|---|---|---|
| April 24, 2022 | Amphibian Surveys | Sky: light rain; Beaufort[1] wind: 0; Temperature: 19°C | Joelle Pecora, Megan Olson |
| May 2, 2022 | Amphibian Surveys | Sky: overcast; Beaufort wind: 2; Temperature: 9°C | Diane Francis, Megan Olson |
| | Headwater Drainage Feature Assessment | Sky: overcast; Beaufort wind: 2; Temperature: 8°C | Diane Francis |
| May 30, 2022 | Amphibian Surveys | Sky: partly cloudy; Beaufort wind: 2; Temperature: 23°C | Danielle Bourque, Fiona Shi |
| June 1, 2022 | Amphibian Surveys | Sky: clear; Beaufort wind: 2; Temperature: 12°C | Joelle Pecora, Fiona Shi |
| June 10, 2022 | Headwater Drainage Feature Assessment | Sky: clear ; Beaufort wind: 2; Temperature: 18°C | Danielle Bourque |
| June 16, 2021 | Breeding Bird Surveys | Sky: partly cloudy; Beaufort wind: 2; Temperature: 25°C | Jeremy Bensette |
| June 28, 2022 | Amphibian Surveys | Sky: partly cloudy; Beaufort wind: 2; Temperature: 20°C | Megan Olson, Jeremy Bensette |
| June 29, 2022 | Breeding Bird Surveys | Sky: overcast; Beaufort wind: 3; Temperature: 19°C | Jeremy Bensette |
| August 9, 2022 | Headwater Drainage Feature Assessment, Ecological Land Classification, Botanical Inventory, Feature Boundary Pre-staking | Sky: overcast and drizzle; Beaufort wind: 3; Temperature: 19°C | Fiona Shi, Diane Francis |
| August 10, 2022 | Ecological Land Classification and Botanical Inventory | Sky: partly cloudy, Beaufort Wind: 3; Temperature: 25°C | Matt Ross, Fiona Shi |

| Date | Task | Weather | Personnel |
|---|---|---|---|
| September 20, 2022 | Feature Boundary Confirmation with GRCA | Sky: partly cloudy, Beaufort Wind: 4; Temperature: 19°C | Matt Ross, Richard Baxter (GRCA) |

[1]The Beaufort Wind Scale is a tool used to estimate wind conditions. [0] Air calm, smoke rises vertically [1] Light air movement, smoke drifts, [2] Wind felt on face, leaves rustle [3] Leaves and small twigs in continual motion, wind extends light flags [4] Wind raises dust, loose paper, moves small branches [5] Small trees begin to sway, white crested wavelets form on inland waters [6] Large branches in motion

#### 2.3.2.1 Fish and Aquatic Habitat

The objective of field investigations was to identify, map, and describe the existing aquatic habitat present on the subject lands.

A review of current and historical aerial imagery of the subject lands identified the potential presence of HDF. Drainage features have undergone evaluation in May, June, and August 2022 using the Rapid Method provided in the Evaluation, Classification and Management of Headwater Drainage Features Guideline (Toronto and Region Conservation Authority and Credit Valley Conservation, 2014). This approach is appropriate for low-sensitivity sites and documents the HDF form and flow conditions, riparian vegetation, and site features that are important components of habitat. Recommended management options for drainage features derive from information collected according to the HDF guidelines.

#### 2.3.2.2 Vegetation Communities

Aerial photography and Land Information Ontario data were used to delineate vegetation communities according to principles of the Ecological Land Classification (ELC) for Southern Ontario: First Approximation and its Application (Lee et. al., 1998). Site investigations were undertaken in 2022 to collect vegetation data at the community level. A split-spoon soil auger was used to sample soil profiles to determine at what point they exhibit hydric properties, i.e., sufficiently saturated to support greater than 50% wetland species.

#### 2.3.2.3 Feature Staking

The pre-staking of features to delineate the boundaries of wetland features and tree dripline of woodland features within the Study Area was undertaken on August 9, 10 and 11, 2022. Feature Staking verification with GRCA was completed on September 20, 2022, however, the verified boundaries have not been surveyed by a land surveyor. The wetland boundary was determined where wetland vegetation dominates the community and the soils exhibit characteristics of at least seasonal saturation as per the definition of wetland in the PPS, 2020.

#### 2.3.2.4 Tree Inventory

An inventory of trees that could be injured or destroyed by the proposed DPOS is planned to assess trees that may be impacted. Trees not protected by a buffer but within 6 m of the property boundary will be included. An arborist report and Tree Inventory and Protection Plan (TIPP) will be prepared under separate cover.

#### 2.3.2.5 Breeding Bird Surveys

The OBBA (Bird Studies Canada et al., 2006) was reviewed to compile a master list of potential birds breeding at the site, which was subsequently analyzed against known available suitable supporting habitat to tailor findings specifically to the existing site conditions.

Breeding bird surveys were undertaken within the recognized surveying window in Ontario for breeding birds (typically June and early July) in 2022. Surveys followed standard methodologies and conditions established by the OBBA (Bird Studies Canada, 2001) (i.e., between 05:30 and 10:00, low winds, no precipitation, and suitable temperatures). Breeding evidence was recorded and classified as possible, probable, or confirmed (e.g., singing male, pair observed or adult carrying food) in accordance with the standard protocols. Where SAR birds were observed, information including sex, behaviour and interaction with other SAR and non-SAR birds were also recorded.

#### 2.3.2.6 Reptile and Amphibian Surveys

Secondary source literature was reviewed to identify known records of reptiles, amphibians, or both, potentially found within the site, including the NHIC database. Amphibian surveys were undertaken to understand the potential presence of breeding amphibians. Targeted surveys for reptiles were not undertaken by SLR as no preliminary triggers were identified.

Calling surveys followed the general methodology of the Bird Studies Canada (2009) Marsh Monitoring Program (MMP) (adapted to site conditions), during appropriate seasons and weather conditions. Established methods sponsored by Environment and Climate Change Canada (2017) for detecting Western Chorus Frog were also used (Blazing Star Environmental, 2020). These methods involved daytime surveys where calls of the Western Chorus Frog are more detectable and not drowned out by the loud calls of the Spring Peeper (*Pseudacris crucifer*) which typically call at night.

Survey times were coordinated with several other ecologists throughout Southern Ontario via email circulation to assist surveyors in targeting the prime breeding window for early and late breeders targeting Western Chorus Frog (*Pseudacris triseriata*). As climate change has the potential to shift the incidence of calling amphibians, it is increasingly important to coordinate surveys based on weather conditions and seasonal trends. The Beaufort Wind Scale was used to determine whether wind levels were too strong to hear an accurate representation of amphibians occupying the site. A reference site was used to ensure calling was conducted during appropriate weather conditions and served as a benchmark for amphibian activity (i.e. increase confidence in negative results if calls are not detected at test sites). Calling evidence was recorded on a scale of L0-L3 and interpreted as follows:

- L0 – No calling
- L1 – Individuals can be accurately counted; calls do not overlap
- L2 – Some calls simultaneous, number of individuals can be estimated
- L3 – Full chorus, calls overlap, individuals cannot be estimated

#### 2.3.2.7 Incidental Wildlife

All incidental observations were recorded while ecologists were onsite. Evidence of presence was recorded during various field investigations from direct sightings and indirectly from such indicators as calls, nests, tracks, scats, browse and burrows.

#### 2.3.2.8 Species of Conservation Concern

Aquatic and terrestrial species that are designated federally or provincially and are of regional or local interest (e.g. rare to the watershed or municipality) are collectively identified as Species of Conservation Concern. This category also includes species protected under the ESA, 2007. The NHIC Make-A-Map application (Ministry of Natural Resources and Forestry, 2023) and the Fisheries and Oceans Canada (DFO) Distribution Maps for Fish and Mussel Species at Risk (DFO, 2022) were consulted for element occurrences. A habitat-based approach was used to evaluate the potential for Species of Conservation Concern to occur within the site.

With the recent addition of several bat species to the ESA list, a cursory review of site conditions was completed to determine potential habitat. This review was scoped to provide information on possible use and presence within the general context of the site.

#### 2.3.2.9 Significant Wildlife Habitat

Using the criteria outlined in the Significant Wildlife Habitat (SWH) Technical Guide (Ministry of Natural Resources, 2000) and Ecoregion Criteria Schedules 6E (Ministry of Natural Resources and Forestry, 2015), SWH was evaluated as part of the field investigations to evaluate the potential to occur on or adjacent to the site. Under the SWH Criteria, constructed habitat is not to be considered as SWH.

# 3.0 Existing Conditions

The subject properties are characterized by a predominately agricultural landscape containing cultivated lands, with woodland, wetland, and hedgerow features. Three watercourses (HDFs) occur within the boundaries of the subject parcels, while one is present within the Study Area of the proposed DPOS (Figure 1). The following sections describe geological, aquatic, and terrestrial site characteristics.

## 3.1 Terrain and Surficial Geology

Based on a review of surficial geology maps from the Ontario Geological Survey (OGS), the overburden of the area is composed of the Elma Till which consists of sandy silt to silt deposits that are imperfectly drained.

The underlying bedrock is of the Guelph Formation which consists of Silurian fine to medium crystalline, medium to thick-bedded, porous dolostone of a thickness ranging from 4 to 100 m. The Guelph formation is mainly located in the subsurface of southwestern Ontario but is exposed south and west of the Niagara Escarpment from the Niagara River through the Bruce Peninsula (Jagger Hims Limited and Rowell, 2009). SLR is completing hydrogeological investigations in support of the proposed project, under a separate cover (Figure 2).

Groundwater monitoring results within the wetlands on the southwestern portion of the Site (SLR, 2024) suggest that high water levels are present during the spring, with the low permeable soils providing limited infiltration. During the warmer summer months, the water table drops and no groundwater input is provided to the wetland. However, within the larger wetland/woodland swamp, the soils consist of a more permeable sand and gravel pockets, which collect drainage from the Site (both surface water and groundwater). Due to the limited extent of the surficial sand and gravel zone, the water has no outlet to drain, and results in saturated conditions throughout the year. Additional details are provided in the Hydrogeological Investigation for the Site, provided under separate cover. Fish and Aquatic Habitat

Agricultural lands predominate on the subject properties. Three drainage features occur within the vicinity of the study area identified as permanent features by Land Information Ontario; site observations show that the features flow intermittently. Data supporting the Headwater Drainage Feature evaluation were completed in the spring and summer of 2022.

Observations made in May, June, and August 2022 to characterize potential headwater drainage features associated with the proposed DPOS are summarized in **Appended Table A**. Surface water was observed at segment locations 1-5 during the May visit, while water was observed at locations 1-3 during the June visit. All locations were dry during the August visit. Based on these observations the assessment of the headwater drainage features on the site of the proposed DPOS were classified according to the Headwater Features Guidelines (CVC and TRCA 2014) as follows (Refer to Figure 3):

- Segments 1-5  Mitigation
- Segment 6 - No Management Required
- Segment 7 - Maintain/Replicate .

## 3.2 Vegetation Communities

Preliminary mapping of the vegetation communities is provided on (Figure 5) classified using Ecological Land Classification (ELC) (Lee et al., 1998).  Each unit is named according to the soil and plant attributes and a code is assigned (e.g. Cultural Woodland, CUW).  Wetland is delineated by the survey limit staked in the field as determined by the dominance of wetland vegetation and hydric soils. There are agricultural, woodland and wetland communities located on site, the woodland community located on the north side and the wetland community located in the south portion of the property. Two wetland communities are situated along the south side of the property and another to the northeast of these, separated by a cultural meadow. Deciduous hedgerows occur along some field and site boundaries. A botanical inventory is provided in **Appended Table B**.

In addition to the agricultural fields, farm, and residence, the communities dominated by natural vegetation on and immediately surrounding the Study Area include:

- Dry-Fresh Sugar Maple Deciduous Forest (FOD5-1)
- Willow Mineral Thicket Swamp (SWT2-2)
- Poplar – Conifer Mineral Mixed Swamp (SWM3-2)
- Cultural Meadow (CUM 1-1)
- Reed-canary Grass Mineral Meadow Marsh (MAM2-2)
- Hedgerow (HR)

### 3.2.1 Dry-Fresh Sugar Maple Deciduous Forest (FOD5-1)

This community abuts the north side of the site located along the property boundary. Species include Sugar Maple (*Acer saccharum*), American Beech (*Fagus grandifolia*), Black Cherry (*Prunus serotina*), Apple species *(Malus spp.)*, Black Walnut *(Juglans nigra)*, Red Spruce *(Picea rubens)* with some Ironwood *(Ostrya virginiana)*, American Elm *(Ulmus americana)* and Scots Pine *(Pinus sylvestris)*.

### 3.2.2 Willow Mineral Thicket Swamp (SWT2-2)

This swamp community is situated in the southern portion of the site abutting the property boundary to the south and east, and agricultural lands and cultural meadow to the north and west, respectively. The canopy layer consists of Balsam Poplar (*Populus balsamifera*), White Birch, and Trembling Aspen *(Populus tremuloides)*, with Sand Dune Willow *(Salix cordata)*, Pussy Willow *(Salix discolor)* and Red-osier Dogwood *(Cornus sericea)* in the sub canopy. Ground cover includes Joe Pye Weed *(Eutrochium purpureum)*, Club Rushes *(Scirpus lacustris)*, Reed Canary Grass *(Phalaris arundinacea)*, Field Horsetail *(Equisetum arvense)*, Swamp Aster *(Symphyotrichum puniceum)*, Green Bulrush *(Scirpus atrovirens),* Bluestem Goldenrod *(Solidago arillaris)* and Purple Marshlock *(Comarum palustre).*

This community is predominantly fed by surface water as determined through the collection and interpretation of hydrogeological field data. No significant upward groundwater springs are present, likely because the whole Site sits on a major topographic divide and there is no way to generate upward groundwater pressures. A fluctuating groundwater table helps sustain the vegetation within the wetland, with the water levels within groundwater monitors located adjacent to the wetland near or above surface in the wetter spring months. As the water table drops in the summer months, there is no groundwater contributions to the wetland. However, more porous sand and gravel soils are present at surface within the larger wetland/significant woodland (southern wetland SWT2-2) and is connected at depth to the wetland thicket. Based on existing conditions on Site this feature is regularly impacted by agricultural activities (i.e. mowing/plowing within the feature).

### 3.2.3 Poplar-Conifer Mineral Mixed Swamp (SWM 3-2)

This large wetland community is located at the south end of the site and extends to the west beyond the property boundary. The canopy layer consists of Trembling Aspen, White Birch, Balsam Poplar, Green Ash (*Fraxinus pennsylvanica*), Black Ash (*Fraxinus nigra*), Tamarack (*Larix laricina*), Balsam Fir (*Abies balsamea*), White Spruce (*Picea glauca*), Eastern White Cedar (*Thuja occidentalis*); young ash, spruce, cedar and fir are present in the understory, and in the shrub layer along with Red-osier Dogwood and Alder-leaved Buckthorn (*Rhamnus alnifolia*). Herbaceous cover includes Fowl Mannagrass (*Glyceria striata*), Reed Canary Grass, Joe Pye Weed, Swamp Milkweed (*Asclepias incarnata*), Marsh Fern (*Thelypteris palustris*), Sensitive Fern (*Onoclea sensibilis*), Bladder Sedge (*Carex intumescens*), American Water-horehound (*Lycopus americanus*) and Bittersweet Nightshade (*Solanum dulcamara*).

This wetland community has a seasonally high groundwater table due to the presence of a sand and gravel substrate layer at surface that connects to the east (southern wetland SWT2-2). However, the proportion of groundwater from the eastern wetland is minimal in comparison to surface water contributions due to the lower permeable till soils surrounding this Mineral Mixed Swamp. The sand and gravel unit is a pocket surrounded by surficial sandy silt till, and therefore has limited capacity to drain. Therefore, water collects within the glaciofluvial pocket and causes saturated conditions within the woodlot for extended periods of time throughout the year.

### 3.2.4 Cultural Meadow (CUM 1-1)

This community type occurs near the north end of the site adjacent to the cemetery and private property, as well as in the south end adjacent to the wetland communities. Species presents are typical of this community type and include Goldenrod species (*Solidago spp.*), Reed Canary Grass, Wild Carrot (*Daucus carota*), Black-eyed Susan *(Rudbeckia hirta)*, Field Sow-thistle (*Sonchus* arvensis), Creeping Wildrye (*Elymus repens*), Bird's-foot Trefoil (*Lotus corniculatus*),

Timothy (*Phleum pratense*), Curly Dock (*Rumex crispus*), Common Milkweed *(Asclepias syriaca)* and Cow Vetch *(Vicia cracca).*

### 3.2.5 Reed Canary Grass Mineral Meadow Marsh (MAM2-2)

This community occurs adjacent to, as well as an inclusion within the large swamp community in the south end of the site. Species present include Reed Canary Grass, Spotted Joe Pye Weed, Field Horsetail (*Equisetum arvense*), Green Bulrush, Purple Loosestrife (*Lythrum salicaria*), Yellow Sedge (*Carex flava*), Red-osier Dogwood, Dudley's Rush (*Juncus dudleyi*), Grass-leaved Goldenrod (*Euthamia graminifolia*) and Swamp Aster.

### 3.2.6 Deciduous Hedgerow (HR-D)

These features are generally present at the borders of agricultural fields or along field access laneways and are comprised of a mix of deciduous and coniferous species including Sugar Maple, Apple, Norway Spruce (*Picea abies*), American Elm and Trembling Aspen.

## 3.3 Tree inventory

A tree inventory is planned to assess trees that may be impacted by the proposed DPOS. An arborist report and Tree Inventory and Protection Plan (TIPP) will be prepared under separate cover at a later stage of the application process and conform to the *Grey County Forest Management By-law 4341-06*.

## 3.4 Breeding Birds

A review of the OBBA map square 17NJ48 yielded 100 results of birds potentially breeding in the area: the map squares measure 10 km by 10 km, with many of the results unlikely to be present within the site due to a lack of suitable supporting habitat. Review of the NHIC online database yielded potential occurrences for two provincially rare species: Eastern Meadowlark (*Sturnella magna*) and Bobolink (*Dolichonyx oryzivorus*) are provincially ranked as Threatened.

Two breeding bird surveys were completed by SLR on June 16 and 29, 2022, within the designated window (Figure 4). The inventory of wildlife observed on the site is provided in **Appended Table C**. Most of the species recorded are rural/urban tolerant species, typical of cultural and agricultural landscapes and will breed in a variety of disturbed habitats. Observed species include Mourning Dove *(Zenadia macroura),* Northern Flicker *(Colaptes auratus),* Red-eyed Vireo *(Vireo olivaceus),* American Robin *(Turdus migratorius),* Song Sparrow (*Melospiza melodia*) and Red-winged Blackbird (*Agelaius phoeniceus*). American Woodcock (*Scolopax minor*) and Wilson's Snipe (*Gallinago delicata*) were heard on site incidentally during HDF surveys.

Eastern Wood-pewee were detected within the mixed swamp wetland habitat. Barn Swallow were observed visiting a likely nesting structure on the adjacent property. This species is known to use old buildings to support nesting behaviour, whereas foraging occurs with meadows, marshes, and open space areas. Barn Swallow are provincially designated as Special Concern. It is likely that the birds are foraging on the subject properties and returning to nests located offsite. Although it is not subject to provisions under the ESA, its habitat is protected as SWH under the PPS, 2020. Bobolink carrying fecal sac, and several individuals actively breeding in hayfields (agricultural) and cultural meadow were observed during both visits. Several individual Eastern Meadowlark carrying food were observed during both site visits. Both species are provincially Threatened.

## 3.5 Reptiles and Amphibians

Review of the NHIC online database yielded records of three species of concern: Midland Painted Turtle (*Chrysemys picta marginata*), Snapping Turtle (*Chelydra serpentina*) and Eastern Ribbonsnake *(Thamnophis sauritus)*.

Suitable habitat for amphibians is present on the subject lands, within wooded wetlands and marsh communities.

Amphibian surveys were conducted in April, May, and June 2022 at strategic locations on the site to provide suitable coverage for detection of calling individuals (Figure 4). SLR conducted separate surveys to capture potential Western Chorus Frog populations as well as a generalized survey to capture all amphibians active during the early and late spring timing windows.

Western Chorus Frog surveys completed detected the presence of the species within or around the property, particularly in association with the large wetland complex that bisects the site and occurs both to the north and south of the site. Species detected during surveys included Spring Peeper (*Pseudacris crucifer*), American Toad (*Anaxyrus americanus*), Gray Tree Frog (*Dryophytes versicolor*) and Green Frog (*Lithobates clamitans*), among others presented in Table 3.

**Table 3: 2021 Amphibian Survey Results**

| Common Name | Station A | | | Station B | | | Station C | | |
|---|---|---|---|---|---|---|---|---|---|
| **Survey Date** | **Apr-22** | **May-22** | **Jun-22** | **Apr-22** | **May-22** | **Jun-22** | **Apr-22** | **May-22** | **Jun-22** |
| Spring Peeper | 2[1] | - | - | - | 1 | - | 3 | 3 | - |
| American Toad | 1 | - | - | - | - | - | 1 | - | - |
| Green Frog | - | - | 1 | - | - | 1 | - | - | - |
| Wood Frog | - | - | - | - | - | - | - | 2 | - |
| Western Chorus Frog | - | - | - | - | - | - | - | 1 | - |

## 3.6 Other Wildlife

Wildlife observed on site by SLR during the 2020 and 2021 field visits were typical of locations in semi-urban environments and agricultural settings (**Appended Table C**). Evidence of Coyote (*Canis latrans*) and White-tailed Deer (*Odocoileus virginianus*) was observed within the site.

Other species of mammals and birds tolerant of urban environments are expected to occur as suitable habitats are present.

## 3.7 Species of Conservation Concern

The MNRF website provided the following Element Occurrence (EO) records* for 1km Squares (17NJ4890, 17NJ4889, 17NJ4689 in the vicinity of the site:

- Bobolink (Dolichonyx oryzivorus) provincially designated as Threatened
- Eastern Meadowlark (Sturnella magna) provincially designated as Threatened

Department of Fisheries and Oceans' (DFO) interactive Aquatic Habitat Mapping did not identify the presence of Species at Risk or Critical Habitat within or adjacent to the site.

While no additional element occurrences were recorded for the broad area search there are Species of Conservation Concern that may occur if suitable habitat is present. The species in **Appended Table D** have been identified as having potential habitat affinities within the site. To date, Bobolink, Eastern Meadowlark, Barn Swallow, Eastern Wood-pewee and Monarch have been observed on site, although breeding habitat for Barn Swallow is not present on site.

*Note: Species at Risk Information is accurate and up to date as of this report (April 2024). New species designations under Ontario Regulation 230/08 (Species at Risk in Ontario List) occur periodically. The owner is responsible to ensure that species and habitats regulated under

[1] Denotes amphibian call level

Endangered Species Act (2007) or those described under other policies (i.e. the Migratory Bird Convention Act, Fish and Wildlife Conservation Act) are protected.

## 3.8 Significant Wildlife Habitat

The significance of an area as wildlife habitat is often difficult to determine at the site-specific level, as the assessment must incorporate information from a wide geographic area and consider other factors such as regional resource patterns and landscape effects. Therefore, under the PPS, the planning authorities have the responsibility to identify and designate Significant Wildlife Habitat (SWH). Wildlife habitat significance includes:

- Seasonal concentration areas (e.g. conifer forests for deer wintering)
- Rare vegetation communities or specialized habitats for wildlife
- Habitats of species of conservation interest, excluding the habitats of endangered and threatened species which are protected under the 2020 PPS and 2007 ESA
- Animal movement corridors

To address this habitat function, criteria for evaluating significant wildlife habitat for Eco-region 6E have been provided by MNRF (2015), the results of which are presented in **Appended Table E**. Field investigations completed to date identified confirmed habitat for Special Concern and Rare Wildlife Species for eastern Wood-pewee and Monarch (Figure 6).

# 4.0 Description of Development

The proposed DPOS consists of single detached (266 units), townhouse (52 units), as well as parkland, open space, associated road and stormwater management facilities (see Appendix B). It should be noted that for the purposes of this application, the development and associated impacts are considered only for the areas associated Flato's development limit. The remainder of the lands (Township lands) will be considered as part of a separate application.

# 5.0 Impact Assessment

## 5.1 Direct Impacts

Direct impacts include those that have an immediate effect on natural features and are generally associated with site preparation and construction activities, such as vegetation clearing and grubbing, grading, excavation, paving and building of structures.

### 5.1.1 Environmental Constraints

The DPOS was overlaid on the features and constraints mapping to determine whether residual impacts remain (Figure 7). The figure presents natural features and the wetland boundaries have been verified by GRCA in the field but have not been surveyed. Recommended buffers to natural features are presented in Table 4. The areas of the proposed habitat removals are presented in Table 5.

**Table 4: Recommended Buffers to Natural Features and Structures**

| Policy | Woodland | Wetland | Watercourse | Top of Bank | Floodplain[1] | Hedgerow Trees |
|---|---|---|---|---|---|---|
| Grey County OP | Not specified | 30 m | 30 m (less with rationale/no negative impacts) | 30 m (less with rationale/no negative impacts) | Not identified in the OP | Not identified in the OP |
| Township of Southgate OP | Not identified in the OP | Not identified in the OP | 15 m or 30 m for coldwater stream | Defers to Conservation Authority | Not identified in the OP | Not identified in the OP |
| GRCA | Not specified | 30 m (less with rationale/no negative impacts) | 15 m (Superseded by floodplain) | 15 m | 15 m | GRCA does not regulate individual trees except within the regulatory limit |
| SVCA | Not specified | 30 m (less with rationale/no negative impacts) | 15 m (Superseded by floodplain) | 15 m | 15 m | SVCA does not regulate individual trees except within the regulatory limit |
| buffers recommended | Not specified | 30 m (less with rationale/no negative impacts) | Not represented because other buffers extend further | 15 m | 15 m | Dictated by tree preservation report |

[1] *A buffer would also be applied to the watercourse however the floodplain and wetland plus buffers far exceeds that constraint therefore it is not illustrated.*

Note: grading is generally not allowed within the buffers unless approved. Development is expected to meet existing grades at the limit of the buffer.

**Table 5: Areas of Proposed Natural Feature Removal**

| Natural Features | Within Development Limit (Flato) | Outside Development Limit (Others/Township) |
|---|---|---|
| | Area (ha) | |
| Dry-Fresh Sugar Maple Deciduous Forest | 0.59 | - |
| Willow Mineral Thicket Swamp | 1.28 | 0.85 |
| Cultural Meadow | 2.11 | 3.58 |
| Total | **3.98** | **4.43** |

### 5.1.2 Fish and Aquatic Habitat

The watercourses identified on site were assessed as HDFs. No fish were observed during field investigations and all the features were found to be dry during the August 2022 assessment. Due to either their contribution to downstream fish habitat through allochthonous transport, or their association with important riparian or terrestrial habitat (e.g. wetlands), appropriate management recommendations are applied to two of the three features to allow their primary functions to be maintained (see Figure 3). The proposed DPOS would remove the HDFs identified on site to accommodate development. The two features assessed as "maintain/replicate" and "mitigation" were identified as shallow swales with no defined channel that provide groundwater recharge or overland flow to offsite natural features. As such, flows and recharge to these features should be maintained through lot level conveyance, LIDs, or stormwater management facilities. With the implementation of appropriate quality control measures, impacts to fish and fish habitat are not expected.

### 5.1.3 Terrestrial Habitat

The DPOS is predominately situated within agricultural and rural residential lands, although removal of some natural features is anticipated to accommodate the plan. Within Flato's development limit the proposed development will result in the removal of 2.11 ha of Cultural Meadow, 1.28 ha of Willow Mineral Thicket Swamp, all 0.59 ha of Dry-Fresh Sugar Maple Deciduous Forest, and some of the hedgerow features as well as the HDFs located in the southeast and central portions of the site. The HDF assessment identified two of the three features as "maintain/replicate" and "mitigation" due to their contributions to offsite natural features. As such, the overall function of the HDFs should be maintained. As mitigation for the removal of HDFs is to be implemented, the function of offsite features will be maintained, provided appropriate pre and post quality controls are implemented.

The removal of vegetation for site preparation prior to construction should be completed outside of the sensitive timing window for birds and bats (April 1$^{st}$- September 30$^{th}$). Tree removals required for construction will occur in accordance with the *Grey County Forestry Management By-law #4341-06*, and restoration of disturbed areas are to be planted and seeded as per a future landscape restoration plan. A tree preservation plan will be prepared to the satisfaction of the appropriate authority to support the Site Plan Application.

#### 5.1.3.1 Wetlands

The removal of the Willow Mineral Thicket Swamp is proposed. This wetland is not identified on either the County or Township official plan schedules and has not been evaluated by the MNRF and is therefore identified as “other wetlands” under these plans; both OP’s state that no development or site alterations are permitted within other wetlands or their adjacent lands unless it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Under section 28.1.2 of the *Conservation Authorities Act (1990)*, a Conservation Authority is required to issue a permit with or without conditions for a development project authorized under section 34.1 or 47 of the *Planning Act*. These conditions can include those as indicated by subsection 28.1.2 (6) of the CAA “to mitigate:

a) any effects the development project is likely to have on the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;

b) any conditions or circumstances created by the development project that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; or

c) any other matters that may be prescribed by regulation.”

In addition to the above, subsection (17) states:

“An authority that issues a permit to carry out a development project under this section shall enter into an agreement with respect to the development project with the permit holder and the authority and the permit holder may add a municipality or such other person or entity as they consider appropriate as parties to the agreement…” with subsection (18) stating “An agreement under subsection (17) shall set out actions or requirements that the permit holder must complete or satisfy in order to compensate for ecological impacts and any other impacts that may result from the development project.”

Given the policy discussed above, there appears to be opportunity to propose, based on the outcomes of the EIS and Hydrogeological studies, appropriate mitigation measures for the removal of these wetland features, which will ensure there are no negative impacts.

The proposed water balance and Stormwater Management Report (provided under separate cover) indicate that the pre- to post- water balance of the Site and larger western wetland feature will generally be maintained through various controls and mitigation, including an additional outlet. Surface water volumes that would migrate west from the central wetland will be maintained to ensure that the inputs to the larger wetland continue post development. Provided these mitigation measures are in place there will be no anticipated negative impacts to the overall ecological function of the Site (a reduction of 1% is anticipated from pre-development conditions). The proposed Stormwater Management block adjacent to the Environmental Protection Area provides opportunity for enhancement of overall wetland function and creates a more contiguous scenario and transition toward the wetland on site. Removal of this wetland while still maintaining the overall site-wide water balance and feature based water balance to the western wetland allows for opportunities to increase the quality of the water on the Site where current practices include plowing/mowing in the wetland features. Surface water that is typically plowed through will now be directed as stormwater to the Stormwater Management Facility for polishing prior to infiltration into the wetland feature.

The stormwater management facility located adjacent to the Poplar-Conifer Mixed Swamp can be designed with consideration for both its intended function as well as the inclusion of wetland



natural feature elements to provide habitat and offset for the wetland removal. Associated plans including landscape and planting are to be provided at the detailed design stage of the application process.

A 15 m buffer has been proposed for the Poplar-Conifer Mixed Swamp and adjacent Reed Canary Grass Mineral Meadow Marsh. This setback and further details pertaining to mitigation of impacts on lands not part of Flato's development will be discussed in a separate application.

Engineering recommendations include the import of fill to keep the basements above the high-water table. Additionally, as a precaution, each basement should be surrounded by a foundation drain, which is considered normal practice within Township of Southgate. Typically, these are set to a minimum of 0.3 m above the measured high-water table, assuming water levels could rise at some point in the future. The imported fill should be of the same hydraulic conductivity, or greater, than the native soil to prevent "wicking" up the water table to a higher elevation.

### 5.1.4 Species of Conservation Concern

To date, five provincially listed SAR (Monarch, Eastern Wood-pewee, Barn Swallow, Bobolink and Eastern Meadowlark have been detected on site, and there is the likelihood for SAR bats to occur as well. Of the provincial SAR, both the species and habitat for Bobolink and Eastern Meadowlark are protected under the ESA, 2007, while protection for the remaining three species does not include their habitat as they are listed as Special Concern. Western Chorus Frog, a federally listed SAR was also detected at the site although protection provisions under the federal Species at Risk Act (SARA) do not apply to non-federal lands. Foraging habitat for Monarch is present in meadow and meadow marsh communities on site and any removals can be restored within the setbacks of protected natural features. The current DPOS does not propose the encroachment into or removal of habitat for Eastern Wood-pewee, and removal of the offsite outbuilding providing Barn Swallow nesting habitat is not proposed, therefore, impacts to these species are not anticipated. The removal of 10.4 ha meadow/agricultural field habitat that provides breeding habitat for Bobolink and Eastern Meadowlark will be avoided during the sensitive timing window for birds (April 1$^{st}$- August 31$^{st}$) and the appropriate ESA authorization process under *Ontario Regulation 830/21* will be followed. To avoid potential impacts to bats that may be utilizing trees on site, removal of trees should occur outside of the active season for bats which typically occurs between April 1$^{st}$ and September 30$^{th}$.

## 5.2 Indirect Impacts

Indirect impacts may occur from the residential occupation of the development and could include the dumping of refuse, encroachment of yards into natural features, and unsanctioned use of natural features for recreation (e.g., trails, parties, etc.). Off-leash or unconfined household pets may disturb the natural features and impact the natural function through disrupting sensitive breeding behaviours or predation of native fauna (e.g., cats hunting wild birds). Stormwater runoff from built-up impermeable areas including roads may contain sediments and pollutants such as oils and hydrocarbons. Overall, these indirect impacts could result in damage to the ecological functions of the natural features through the removal of native species, the introduction and spread of non-native or invasive flora or fauna, and degradation due to pollution.

To minimize the potential for these indirect impacts, mitigations can be implemented to provide physical barriers (i.e. fences), create awareness (education through interpretive signage), provide appropriate avenues for recreation (sanctioned trail system) and enforcement of applicable by-laws. Setbacks identified in the EIS should be restored to provide a buffer to the



existing natural features and ultimately result in an increase in natural area. The addition of an extra pond outlet will allow mitigation for erosion thresholds while still providing the required volumes of water to the wetland. Infiltration is less of a concern for mitigation based on the existing soil and groundwater conditions at the Site. The main mitigation required for function is the total volumes rather than individual runoff and infiltration amounts.

# 6.0 Policy Review and Conformity

The following section describes policies relevant to the natural environment and describes how the natural heritage features identified within this EIS have been addressed. Policy conformity is summarized in **Table 6.**

**Table 6: Summary of Policy Conformity**

| Policy | Conformity | Rationale |
|---|---|---|
| *Provincial Policy Statement* (PPS, 2020) | Conforms | • Although features of provincial interest are identified on the site (significant wildlife habitat) negative impacts to these features are not anticipated should mitigation recommendations be implemented (avoidance/setbacks/restoration) |
| *Grey County Official Plan (2019)* | In conformity with natural heritage policies | • EIS describes the features and functions of the subject lands and confirms there are no significant natural heritage features that will be negatively affected by the proposed DPOS<br>• DPOS overlies features identified in OP section 7.3 (wetlands). However, negative impacts are not anticipated should mitigation recommendations be implemented |
| *Township of Southgate Official Plan (2022)* | In conformity with natural heritage policies | • DPOS overlies features identified in OP section 6 (wetlands). However, negative impacts are not anticipated should mitigation recommendations be implemented<br>• Tree removals will be subject to the appropriate by-law |
| *Conservation Authorities Act (1990)* | In conformity based on policies of Section 28.1.2 | • Development approved under Section 47 of the *Planning Act* (MZO); therefore, the Conservation Authority is required to provide a permit with or without conditions |

| Policy | Conformity | Rationale |
|---|---|---|
| | | • An agreement is to be entered into with the authority outlining actions or requirements the permit holder must satisfy regarding compensation for ecological impacts |
| *Endangered Species Act*, 2007(ESA, 2007) | In conformity with the implementation of recommended mitigations | • Potential for SAR bats to occur<br>• Habitat for Bobolink and Eastern Meadowlark present on site<br>• The appropriate proponent led process to mitigate impacts and compensate for any habitat removed will be followed<br>• Under the ESA (Ontario Regulation 830/21) removal of habitat for Bobolink or Eastern Meadowlark must not occur between May 1st and July 31st of any year |
| *Migratory Birds Convention Act* (MBCA, 1994) | In conformity with the implementation of recommended mitigations | • Vegetation clearing will not occur within the breeding bird period provided under Environment Canada guidance for periods of highest nesting probability (i.e. cannot occur generally between April 1st and August 31st) |
| *Fisheries Act (2019)* | Conforms | • No fish habitat identified on site of proposed DPOS<br>• Flow/recharge input to downstream habitat to be maintained through lot level conveyance, LID and stormwater management facilities |

# 7.0 Conclusions and Recommendations

The following operational constraints and mitigation strategies are recommended for use during the construction phase of this project of the protection of natural heritage feature and functions on and adjacent to the subject lands:

- Tree Preservation Plan (TPP) will be completed to identify appropriate compensation for tree removals.
- Permanent post and page sire or chain-link fence is recommended along the limits of the blocks/lots that abut the wetland which provided adequate protection to the feature. This fencing should be sturdy beyond the typical rebar and sediment fabric fence. Prior to the commencement of construction, the limits of protection areas (buffers) are to be delineated and fenced to avoid inadvertent intrusion of people, machinery, or other activities such as stockpiling of material, dumping and encroachment. Temporary sediment control fencing can be attached to the fencing and must be maintained and remain in place until final grading and landscaping has been completed.
- Grading limits are to respect minimum root protection zones for trees along the woodland and in tree protection zones for trees to be retained beyond the buffers, to be determine in the TPP. Minimum protection of the root zone is measured from the base of the tree to the tree's dripline. Earthworks/grading, stockpiling of material etc. is to be directed away from protection areas. Final Study Area grading and design is to ensure these areas are not encroached upon unless approved by the municipality and/or GRCA where minor grading intrusions may be necessary (e.g. to match grades).
- Vegetation removals associated with construction related activities are to be minimized. Additional tree hording/fencing may be required in consultation with the municipality and/or GRCA to prevent intrusion and stockpiling of materials into the adjacent wetland. No fill should be placed in and around the wetland communities.
- Exposed soils should be re-vegetated as soon as possible with native seed mixes to reduce impact from the construction and invasive species spread.
- To protect Wildlife in general no animals are to be knowing harmed. If wildlife is encountered during construction, work must stop, and animals allowed to disperse on their own. If necessary, the MNRF/MECP or GRCA should be contacted for advice.
- It is the proponent's responsibility to ensure that the works conform to the Migratory Bird Convention Act and Endangered Species Act, 2007 in that no migratory bird(s) or SAR species will be harassed, harmed, killed nor will nests or habitats be destroyed by the proposed work. The recommended avoidance window which includes SAR bats is from April 1$^{st}$ to September 30$^{th}$. No avoidance window absolves the proponent or their contractors from contravening the MBCA or ESA. Contravention can occur if vegetation removal and construction activities take place during sensitive timing periods for wildlife. Vegetation removal in preparation for Site grading and construction should take place outside of sensitive timing windows for wildlife species:
    - Breeding bird season per Environment Canada and Climate Change's (ECCC) nesting periods for migratory birds: April 1st to August 31st

  - Bat maternity season: April 1st to September 30th
  - Under the ESA (Ontario Regulation 830/21) removal of habitat for Bobolink or Eastern Meadowlark must not occur between May 1st and July 31st of any year
- Avoidance windows simply highlight the most likely season when encounters are likely. If a nest egg, fledging or SAR species is encountered work must stop and the appropriate agency (e.g., Environment Canada (MBCA) or, MECP (SAR) consulted for advice.
- Restoration within and adjacent to natural heritage features is proposed. This can include areas seeded with native species meadow mix (suitable for this growing region and soils). Native Milkweed should be incorporated into buffer planting seed mix and where possible other natural areas on the property. Planting of species native to the region within locations of suitable ecological conditions, including the proposed stormwater management facilities, is also recommended to enhance existing natural features.
- Landscaping and planting plans to be provided at the detailed design stage of submission.
- The landscaping plan should include native plant species where possible to provide habitat for SAR insects.
- Construction monitoring by an ecologist/arborist is recommended as part of a monitoring program to be developed with the GRCA.
- All outdoor lighting (including any new street lighting and external lighting on buildings) should be directed toward the ground and away from the natural areas.

# 8.0 Closure

We trust this information will meet your current requirements. Please do not hesitate to contact the undersigned should you have any questions or require additional information.

Regards,

**SLR Consulting (Canada) Ltd.**

**Matthew Ross, B.Sc.**
Terrestrial Ecologist

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Senior Ecologist

Distribution: 1 electronic copy – Flato Ida Dundalk Inc.
1 electronic copy – SLR Consulting (Canada) Ltd.

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# Tables

## Environmental Impact Study

Flato Ida, Dundalk, Ontario

**Flato Ida Dundalk Inc.**

SLR Project No.: 209.30125.00001

May 30, 2024

**Table A: Headwater Drainage Feature Observations**

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **1** | Valued or Contributing<br>Some standing water<br>No Flow | No defined channel | Valued Function<br>Meadow | Contributing function<br>allochthonous transport | Contributing function<br>Movement corridor | Mitigation |  <br>  |

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **2** | Valued or Contributing<br>standing water<br>No Flow | No defined channel | Valued Function<br>Meadow | Contributing function<br>allochthonous transport | Contributing function<br>Movement corridor | Mitigation |  <br>  |

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **3** | Valued or Contributing<br>Standing water<br>Flow | Somewhat defined channel | Valued Function<br>Meadow | Contributing function<br>allochthonous transport | Contributing function<br>Movement corridor | Mitigation |  <br>  |

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **4** | Valued or Contributing<br>Dry | No defined channel | Valued Function<br>Meadow | Contributing function<br>allochthonous transport | Contributing function<br>Movement corridor | Mitigation |  <br>  |

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **5** | Valued or Contributing Flow | Defined Channel | Valued Function Meadow | Contributing function allochthonous transport | Contributing function Movement corridor | Mitigation |    |

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **6** | Valued or Contributing<br>Dry | Defined Channel (shallow ditch) | Valued Function<br>Meadow | Contributing function<br>allochthonous transport | Limited Function<br>Doesn't connect features | No management required |  <br>  |

| Drainage Feature Segment | Hydrology | Hydrology Modifiers | Riparian | Fish Habitat | Terrestrial Habitat | HDF Management Recommendations | Photos |
|---|---|---|---|---|---|---|---|
| **7** | Limited or Recharge<br>Dry | Tile Drainage | Valued Function<br>Meadow | Contributing function<br>allochthonous transport | Contributing function<br>Movement corridor | Maintain/Replicate |  <br>  |

**Table B: Botanical Inventory**

| IDA STREET, DUNDALK, ON | | |
|---|---|---|
| **Common Name** | **Scientific Name** | **Srank[1]** |
| Balsam Fir | *Abies balsamea* | S5 |
| Red Maple | *Acer rubrum* | S5 |
| Sugar Maple | *Acer saccharum* | S5 |
| Swamp Milkweed | *Asclepias incarnata* | S5 |
| Common Milkweed | *Asclepias syriaca* | S5 |
| Paper Birch | *Betula papyrifera* | S5 |
| Creeping Bellflower | *Campanula rapunculoides* | SNA |
| Yellow Sedge | *Carex flava* | S5 |
| Bladder Sedge | *Carex intumescens* | S5 |
| Canada Thistle | *Cirsium arvense* | SNA |
| Marsh Cinquefoil | *Comarum palustre* | S5 |
| Alternate-leaved Dogwood | *Cornus alternifolia* | S5 |
| Red-osier Dogwood | *Cornus sericea* | S5 |
| Wild Carrot | *Daucus carota* | SNA |
| Creeping Wildrye | *Elymus repens* | SNA |
| Field Horsetail | *Equisetum arvense* | S5 |

| IDA STREET, DUNDALK, ON | | |
|---|---|---|
| **Common Name** | **Scientific Name** | **Srank[1]** |
| Meadow Horsetail | *Equisetum pratense* | S5 |
| Woodland Horsetail | *Equisetum sylvaticum* | S5 |
| Grass-leaved Goldenrod | *Euthamia graminifolia* | S5 |
| Spotted Joe Pye Weed | *Eutrochium maculatum* | S5 |
| American Beech | *Fagus grandifolia* | S4 |
| Black Ash | *Fraxinus nigra* | S4 |
| Green Ash | *Fraxinus pennsylvanica* | S4 |
| Fowl Mannagrass | *Glyceria striata* | S5 |
| Black Walnut | *Juglans nigra* | S4? |
| Jointed Rush | *Juncus articulatus* | S5 |
| Dudley's Rush | *Juncus dudleyi* | S5 |
| American Larch | *Larix laricina* | S5 |
| Honeysuckle spp. | *Lonicera spp.* | |
| Garden Bird's-foot Trefoil | *Lotus corniculatus* | SNA |
| American Water-horehound | *Lycopus americanus* | S5 |
| Purple Loosestrife | *Lythrum salicaria* | SNA |
| Common Apple | *Malus pumila* | SNA |

| IDA STREET, DUNDALK, ON | | |
|---|---|---|
| **Common Name** | **Scientific Name** | **Srank[1]** |
| Sensitive Fern | *Onoclea sensibilis* | S5 |
| Eastern Hop-hornbeam | *Ostrya virginiana* | S5 |
| Virginia Creeper | *Parthenocissus quinquefolia* | S4? |
| Reed Canary Grass | *Phalaris arundinacea* | S5 |
| Common Timothy | *Phleum pratense* | SNA |
| White Spruce | *Picea glauca* | S5 |
| Blue Spruce | *Picea pungens* | SNA |
| Red Spruce | *Picea rubens* | S3 |
| Scots Pine | *Pinus sylvestris* | SNA |
| Balsam Poplar | *Populus balsamifera* | S5 |
| Trembling Aspen | *Populus tremuloides* | S5 |
| Silverweed | *Potentilla anserina* | S5 |
| Black Cherry | *Prunus serotina* | S5 |
| Alder-leaved Buckthorn | *Rhamnus alnifolia* | S5 |
| Common Red Raspberry | *Rubus idaeus* | S5 |
| Black-eyed Susan | *Rudbeckia hirta* | S5 |
| Curly Dock | *Rumex crispus* | SNA |

| IDA STREET, DUNDALK, ON | | |
|---|---|---|
| **Common Name** | **Scientific Name** | **Srank[1]** |
| Sand Dune Willow | *Salix cordata* | S4 |
| Pussy Willow | *Salix discolor* | S5 |
| Bulrush species | *Scirpus spp.* | |
| Dark-green Bulrush | *Scirpus atrovirens* | S5 |
| Cottongrass Bulrush | *Scirpus cyperinus* | S5 |
| Climbing Nightshade | *Solanum dulcamara* | SNA |
| Tall Goldenrod | *Solidago altissima* | S5 |
| Canada Goldenrod | *Solidago canadensis* | S5 |
| Rough-stemmed Goldenrod | *Solidago rugosa* | S5 |
| Field Sow-thistle | *Sonchus arvensis* | SNA |
| European Mountain-ash | *Sorbus aucuparia* | SNA |
| Aster species | *Symphyotrichum spp.* | |
| Panicled Aster | *Symphyotrichum lanceolatum* | S5 |
| New England Aster | *Symphyotrichum novae-angliae* | S5 |
| Swamp Aster | *Symphyotrichum puniceum* | S5 |
| Marsh Fern | *Thelypteris palustris* | S5 |
| Eastern White Cedar | *Thuja occidentalis* | S5 |

| IDA STREET, DUNDALK, ON | | |
|---|---|---|
| **Common Name** | **Scientific Name** | **Srank[1]** |
| American Elm | *Ulmus americana* | S5 |
| Stinging Nettle | *Urtica dioica* | S5 |
| Tufted Vetch | *Vicia cracca* | SNA |
| Riverbank Grape | *Vitis riparia* | S5 |

[1]**S-Ranks** - Provincial (or Subnational) ranks are used by the Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assignedin a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario. **S1** Critically Imperiled—Critically imperiled in the nation or state/province because of extreme rarity (often 5 or fewer occurrences) **S2** Imperiled—Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province. **S3** Vulnerable—Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation. **S4** Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors. **S5** Secure—Common, widespread, and abundant in the nation or state/province. **S#S#** Range Rank —A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4). **SX** Apparently extirpated from Ontario, with little likelihood of rediscovery. Typically not seen in the province for many decades, despite searches at known historic sites. **SNA** (Formally SE) Exotic; not believed to be a native component of Ontario's flora.

[2]**SARA** - Species at Risk Act (S.C. 2002, c. 29) Act current to 2022-02-23 and last amended on 2022-02-03.COSEWIC (Committee on the Status of Endangered Wildlife in Canada)

[3]**SARO** - ONTARIO REGULATION 230/08 under the Endangered Species Act, 2007 species at risk in Ontario list. Act current 2022-01-26.

**Table C: Wildlife Observations**

| Common Name | Scientific Name | SRank[1] | SARA[2] COSEWIC | SARO[3] | Highest Breeding Evidence Observed[4] | Comments |
|---|---|---|---|---|---|---|
| **Avifauna** | | | | | | |
| Alder Flycatcher | *Empidonax alnorum* | S5B | | | T | |
| American Crow | *Corvus brachyrhynchos* | S5B,SZN | | | H | |
| American Goldfinch | *Carduelis tristis* | S5B,SZN | | | S | |
| American Redstart | *Setophaga ruticilla* | S5B | | | T | |
| American Robin | *Turdus migratorius* | S5B,SZN | | | T | |
| American Woodcock | *Scolopax minor* | S4B | | | D | Heard during HDF surveys |
| **Barn Swallow** | ***Hirundo rustica*** | **S5B,SZN** | **THR SCH 1 THR** | **THR** | N | Only foraging in study area; nesting off site |
| Black-throated Green Warbler | *Setophaga virens* | S5B | | | S | |
| Blue Jay | *Cyanocitta cristata* | S5 | | | H | |
| **Bobolink** | ***Dolichonyx oryzivorus*** | **S4B,SZN** | **THR SCH 1 THR** | **THR** | FS | |
| Brown-headed Cowbird | *Molothrus ater* | S4B | | | H | |
| Cedar Waxwing | *Bombycilla cedrorum* | S5B,SZN | | | H | |
| Chestnut-sided Warbler | *Setophaga pensylvanica* | S5B | | | S | |
| Chipping Sparrow | *Spizella passerina* | S5B | | | T | |
| Common Grackle | *Quiscalus quiscula* | S5B,SZN | | | CF | |
| Common Yellowthroat | *Geothlypis trichas* | S5B | | | T | |
| **Eastern Meadowlark** | ***Sturnella magna*** | **S4B,S3N** | **THR SCH 1 THR** | **THR** | CF | |

| Common Name | Scientific Name | SRank[1] | SARA[2] COSEWIC | SARO[3] | Highest Breeding Evidence Observed[4] | Comments |
|---|---|---|---|---|---|---|
| **Eastern Wood-Pewee** | ***Contopus virens*** | **S4B** | **SC SCH 1 SC** | **SC** | T | |
| European Starling | *Sturnus vulgaris* | SNA | | | S | |
| Hairy Woodpecker | *Dryobates villosus* | S5 | | | H | |
| Indigo Bunting | *Passerina cyanea* | S4B | | | T | |
| Mourning Dove | *Zenaida macroura* | S5 | | | T | |
| Northern Cardinal | *Cardinalis cardinalis* | S5 | | | T | |
| Northern Flicker | *Colaptes auratus* | S4B | | | FL | |
| Red-eyed Vireo | *Vireo olivaceus* | S5B,SZN | | | T | |
| Red-winged Blackbird | *Agelaius phoeniceus* | S4 | | | CF | |
| Savannah Sparrow | *Passerculus sandwichensis* | S4B | | | CF | |
| Song Sparrow | *Melospiza melodia* | S5B,SZN | | | T | |
| Swamp Sparrow | *Melospiza georgiana* | S5B,S4N | | | T | |
| Tree Swallow | *Tachycineta bicolor* | S4B | | | H | |
| White-throated Sparrow | *Zonotrichia albicollis* | S5 | | | T | |
| Winter Wren | *Troglodytes hiemalis* | S5B,S4N | | | H | |
| Wilson's Snipe | *Gallinago delicata* | S5B | | | D | Heard during HDF surveys |
| Yellow Warbler | *Setophaga petechia* | S5B | | | T | |
| **Herptiles** | | | | | | |
| American Toad | *Anaxyrus americanus* | S5 | | | Calling | |
| Green Frog | *Lithobates clamitans* | S5 | | | Calling | |
| Northern Leopard Frog | *Lithobates pipiens* | S5 | | | Observed | |
| Spring Peeper | *Pseudacris crucifer* | S5 | | | Calling | |
| **Western Chorus Frog** | ***Pseudacris maculata pop. 1*** | **S4** | **THR SCH 1 THR** | **NAR** | **Calling** | in large wetland to west of site |
| Wood Frog | *Lithobates sylvaticus* | S5 | | | Calling | in large wetland to west of site |

| Common Name | Scientific Name | SRank[1] | SARA[2] COSEWIC | SARO[3] | Highest Breeding Evidence Observed[4] | Comments |
|---|---|---|---|---|---|---|
| **Mammals / Other** | | | | | | |
| Coyote | *Canis latrans* | S5 | | | Scat | |
| White-tailed Deer | *Odocoileus virginianus* | S5 | | | Tracks | |
| **Monarch** | ***Danaus plexippus*** | **S2N,S4B** | **END SCH 1 SC** | **SC** | Observed | |

[1]**S-Ranks** - Provincial (or Subnational) ranks are used by the Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario.

**S1** Critically Imperiled—Critically imperiled in the nation or state/province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province.

**S2** Imperiled—Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

**S3** Vulnerable—Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

**S4** Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.

**S5** Secure—Common, widespread, and abundant in the nation or state/province.

S#S# Range Rank —A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).

**SX** Apparently extirpated from Ontario, with little likelihood of rediscovery. Typically not seen in the province for many decades, despite searches at known historic sites.

**SNA** (Formally SE) Exotic; not believed to be a native component of Ontario's flora.

[2]**SARA** - Species at Risk Act (S.C. 2002, c. 29) Act current to 2018-07-05 and last amended on 2018-05-30.

[3]**SARO** - ONTARIO REGULATION 230/08 under the Endangered Species Act, 2007 species at risk in Ontario list. Act current to 2018-08-01. COSEWIC (Committee on the Status of Endangered Wildlife in Canada)

**EXT** Extinct - A species that no longer exists.

**EXP** Extirpated - A species no longer existing in the wild in Canada, but occurring elsewhere.

**END** Endangered - A species facing imminent extirpation or extinction.

**THR** Threatened - A species likely to become endangered if limiting factors are not reversed.

**SC** Special Concern (formerly vulnerable) - A species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.

**NAR** Not At Risk - A species that has been evaluated and found to be not at risk of extinction given the current circumstances.

**DD** Data Deficient (formerly Indeterminate) - Available information is insufficient to resolve a species' eligibility for assessment or to permit an assessment of the species' risk of extinction.

* - Species on Schedule 1 of Species At Risk Act (SARA)

[4]**Highest Breeding Evidence Ontario Breeding Bird Atlas: Breeding Evidence Codes**

**X -** Present **XX** - Heard but not expected to be breeding (e.g. using habitat - foraging)

***POSSIBLE***

***H*** *- Species observed in its breeding season in suitable nesting habitat.*

***S*** *- Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.*

***PROBABLE***

**P -** Pair observed in suitable nesting habitat in nesting season

**T -** Permanent terriroty presumed through registration of territorial behaviour (song, etc.) on at least two days, a week or more apart, at the same place

**D -** Courtship or display, including interaction between a male and a female or two males, including courtship feeding or copulations

**V -** Visiting probably nest site

**A** - Agitated behabiour or anxiety calls of an adult

**B -** Brood patch on adult female or cloacal protuberance on adult males

**N -** Nest building or excavation of nest hole

**CONFIRMED**

**DD -** Distraction display or injury feigning **CF -** Adult carrying food for young **NE -** Nest containing eggs

**NY -** Nest with young seen or heard **NU -** Used nest or egg shells found (occupied or laid within the period of the survey) **FY -** Recently fleged young (nidicolous species) or downy young (nidifugous species), including incapable of sustained flight

**AE -** Adult leaving or entering nest sites in circumstancing indicating occupied nest **FS -** Adult carrying fecal sac

**Table D: Species of Conservation Concern Screening Results**

| Common Name[1] | Scientific Name | Designation | Potential for Habitat Affinities to Occur within or Adjacent to the site |
|---|---|---|---|
| ***Mammals*** | | | |
| [1] Tri-colored Bat | *Perimyotis subflavus* | Endangered | Yes, suitable habitat in large, open canopied trees exhibiting decay.<br><br>Potential roosting and foraging (woodland features / hedgerows, trees generally). |
| [1] Little Brown Myotis | *Myotis lucifugus* | Endangered | Yes, suitable habitat in large, open canopied trees exhibiting decay.<br><br>Potential roosting and foraging (anthropogenic features, woodland features / hedgerows, trees generally). |
| [1] Northern Myotis | *Myotis septentrionalis* | Endangered | Yes, suitable habitat in large, open canopied trees exhibiting decay.<br>Potential roosting and foraging (woodland features). |
| ***Avifauna*** | | | |
| [1] Canada Warbler | *Cardellina canadensis* | Special Concern | Potential habitat in wooded wetland on and adjacent to the site.<br><br>Species not observed on site. |
| [1] Eastern Wood-pewee | *Contopus virens* | Special Concern | Yes, suitable habitat present in woodland features.<br>Species observed in mixed swamp wetland habitat on site |
| [1] Bobolink | *Dolichonyx oryzivorus* | Threatened | Yes, suitable habitat present In meadow and hayfields<br>Species observed meadow and hayfield habitat on site |

| Common Name[1] | Scientific Name | Designation | Potential for Habitat Affinities to Occur within or Adjacent to the site |
|---|---|---|---|
| [1, 2] Eastern Meadowlark | *Sturnella magna* | Threatened | Yes, suitable habitat present In meadow and hayfields<br>Species observed meadow and hayfield habitat on site |
| [1] Barn Swallow | *Hirundo rustica* | Special Concern | Suitable foraging habitat on site.<br>Species likely nesting on the adjacent property and foraging over study area. |
| [1] Grasshopper Sparrow | *Ammodramus savannarum* | Special Concern | Possible, cultural meadow and hayfields present on site.<br>Species not observed on site |
| ***Herptofauna*** | | | |
| [1] Snapping Turtle | *Chelydra serpentina* | Special Concern | Wetlands on and adjacent to the site provide potential habitat and movement corridors.<br>Species not observed on site |
| [1] Midland Painted Turtle | *Chrysemys picta marginata* | *Designated in 2018 by COSEWIC, not legally listed Provincially | Wetlands on and adjacent to the site provide potential habitat and movement corridors.<br>Species not observed on site |
| [1] Eastern Ribbonsnake | *Thamnophis sauritus* | Special Concern | Wetlands on and adjacent to the site provide potential habitat and movement corridors.<br>Species not observed on site |
| ***Vegetation*** | | | |
| [1] Butternut | *Juglans cinerea* | Endangered | Potential habitat present in wooded features, hedgerows<br>Species not observed on site. |
| [1]Black Ash | *Fraxinus nigra* | Endangered | Potential habitat present in swamp |

| Common Name[1] | Scientific Name | Designation | Potential for Habitat Affinities to Occur within or Adjacent to the site |
|---|---|---|---|
| | | | Species observed on site in large mixed swamp wetland at southwest end. |
| ***Other*** | | | |
| [1] Rusty-patched Bumble Bee (*Bombus affinis*) | | Endangered | Possible however degree of habitat alteration and ploughing makes occurrence unlikely. |
| [1] Gypsy Cuckoo Bumble Bee *(Bombus bohemicus*) | | | |
| [1] Nine-spotted Lady Beetle (*Coccinella novemnotata*) | | | Habitat generalists. Often overlooked. A range of habitats (meadow successional fields, forests, riparian areas, parks) |
| [1] Transverse Lady Beetle (*Coccinella transversoguttata*) | | | |
| [1] Yellow-banded Bumble Bee (*Bombus terricola*) | | Special Concern | |
| [1] Monarch | *Danaus plexippus* | Special Concern | Habitat present – meadows suitable for foraging, milkweed present<br>Species observed on site. |

Source: (1) MNRF, SARO List, SLR expertise; (2) NHIC (2024)

Designation Status

Provincial Status – Species at Risk in Ontario list maintained by the Ontario Ministry of Natural Resources and Forestry, O.Reg. 230/08. Endangered Species Act Regulation OMNR S.O. 2007, Chapter 6. Schedules 1 thru 5.4. O. Reg. 242/08.

Regional or Local

Provincial (or Subnational) ranks are used by the Natural Heritage Information Centre (NHIC). S3 [Vulnerable] Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

**Table E: Significant Wildlife Habitat Screening**

| Wildlife Habitat Category [1] | Candidate Habitat Identified Based on MNDMNRF Criteria for Ecoregion 6E | Confirmed Habitat Identified Based on MNDMNRF Criteria for Ecoregion 6E |
|---|---|---|
| **Seasonal Concentration Areas for Wildlife Species** | | |
| Waterfowl Stopover Staging Areas (Terrestrial) | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Waterfowl Stopover Staging Areas (Aquatic) | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Shorebird Migratory Stopover Area | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Raptor Wintering Area (i.e., used for feeding and /or roosting) | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Bat Hibernacula | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Bat Maternity Colonies (Non-SAR) | Yes. Suitable habitat present. | Unconfirmed. |
| Bat Migratory Stopover Area | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Turtle Wintering Areas | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Reptile Hibernaculum | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Colonially-Nesting Bird Breeding Habitat (Bank and Cliff) | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs) | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Colonially-Nesting Bird Breeding Habitat (Ground) | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Migratory Butterfly Stopover Areas | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Land bird Migratory Stopover Areas | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Deer Yarding Areas | No. Insufficient coniferous cover. | No. Not Identified by MNRF. |
| Deer Wintering and Congregation Areas | No. Insufficient coniferous cover. | No. Not Identified by MNRF. |
| **Rare Vegetation Communities** | | |
| Cliffs and Talus Slopes, Sand Barren Alvar, Tallgrass Prairie, Savannah | No. Communities not present. | No. Communities not present. |

| Wildlife Habitat Category [1] | Candidate Habitat Identified Based on MNDMNRF Criteria for Ecoregion 6E | Confirmed Habitat Identified Based on MNDMNRF Criteria for Ecoregion 6E |
|---|---|---|
| Old Growth Forest | No. Communities not present. | No. Communities not present. |
| Provincially Rare S1, S2 and S3 vegetation communities | No. Communities not present. | No. Communities not present. |
| Regionally or Locally Rare vegetation communities | No. Communities not present. | No. Communities not present. |
| **Specialized Habitats for Wildlife** | | |
| Waterfowl Nesting Area | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Bald Eagle and Osprey Nesting, Foraging and Perching Habitat | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Raptor Nesting – Woodland Habitat | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Turtle Nesting Areas | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Seeps and Springs | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Amphibian Breeding Habitat (Woodland) | Yes. Suitable habitat present. | No. Insufficient numbers of calling amphibians to qualify as SWH. |
| Amphibian Breeding Habitat (Wetland) | Yes. Suitable habitat present. | No. Insufficient numbers of calling amphibians to qualify as SWH. |
| Woodland Area-Sensitive Bird Breeding Habitat | No. Suitable habitat not present. | No. Suitable habitat not present. |
| **Habitats of Species of Conservation Concern** | | |
| Marsh Bird Breeding Habitat | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Open Country Bird Breeding Habitat | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Shrub/Early Successional Bird Breeding Habitat | No. Suitable habitat not present. | No. Suitable habitat not present. |
| Terrestrial Crayfish | Yes. Suitable habitat present. | A burrow observed on site, but on residential property (lawn) and not in suitable ecosite. Therefore, suitable ecosites identified as Candidate SWH |
| Special Concern and Rare Wildlife Species | Yes. Suitable habitat present. | Confirmed SWH for: Eastern Wood-pewee (SC) in large, wooded wetland; Monarch (SC) in Willow Mineral Thicket Swamp |

| Wildlife Habitat Category [1] | Candidate Habitat Identified Based on MNDMNRF Criteria for Ecoregion 6E | Confirmed Habitat Identified Based on MNDMNRF Criteria for Ecoregion 6E |
|---|---|---|
| **Animal Movement Corridors** | | |
| Amphibian Movement Corridors | No. Suitable habitat not present as breeding amphibian SWH not present based on survey results | No. SWH for breeding amphibians not present. |
| Deer Movement Corridors | No. Suitable habitat not present. | No. Not Identified by MNRF. |

[1] Ontario Ministry of Natural Resources. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.

# Figures

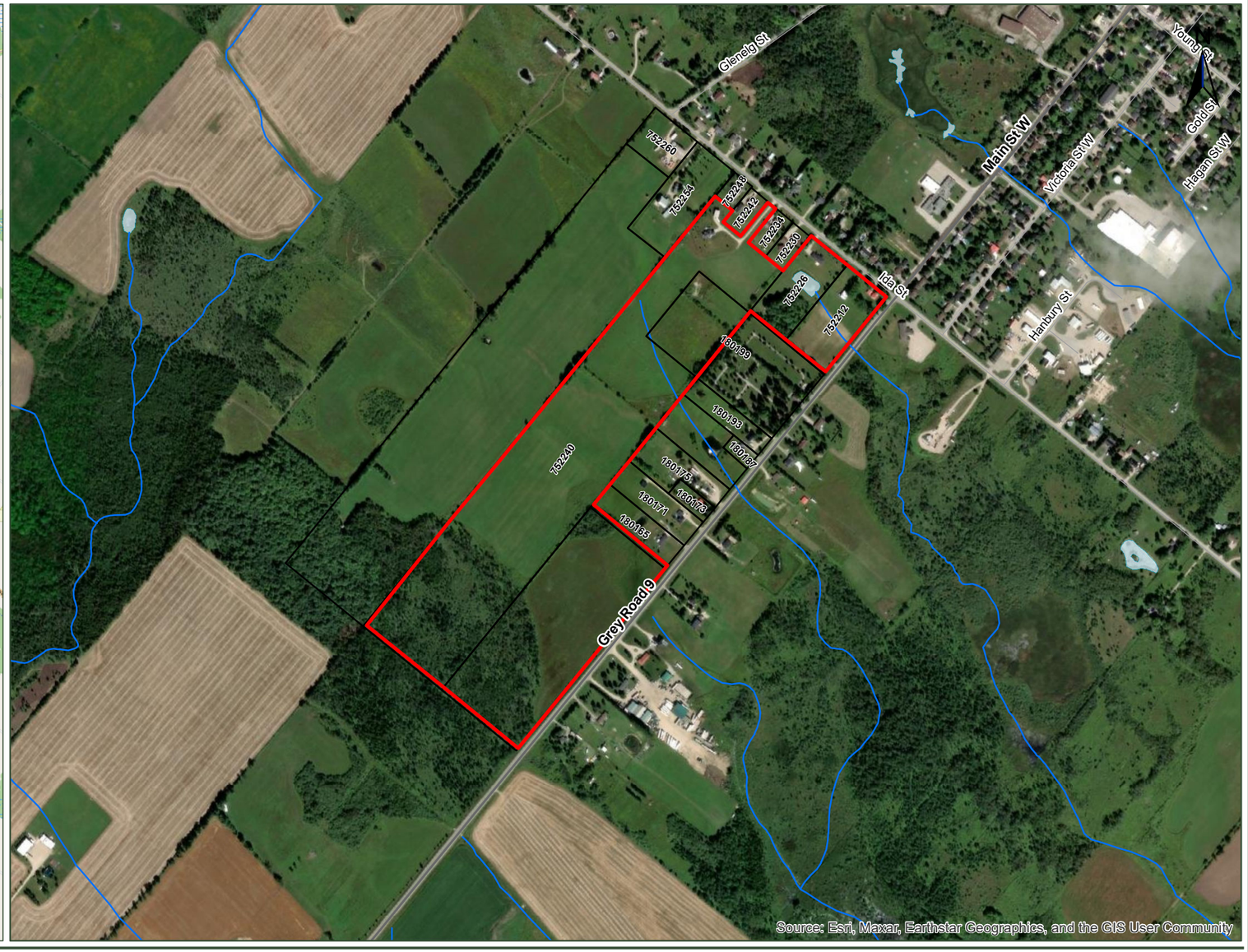
## Environmental Impact Study

Flato Ida, Dundalk, Ontario

**Flato Ida Dundalk Inc.**

SLR Project No.: 209.30125.00001

May 30, 2024



**NOTES:**
DATA SOURCE: LAND INFORMATION ONTARIO

**LEGEND:**

SITE BOUNDARY

PARCEL

0 50 100 200 300 m

SCALE 1:10,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY
AND SHOULD NOT BE USED FOR NAVIGATION

FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# SITE LOCATION

SLR

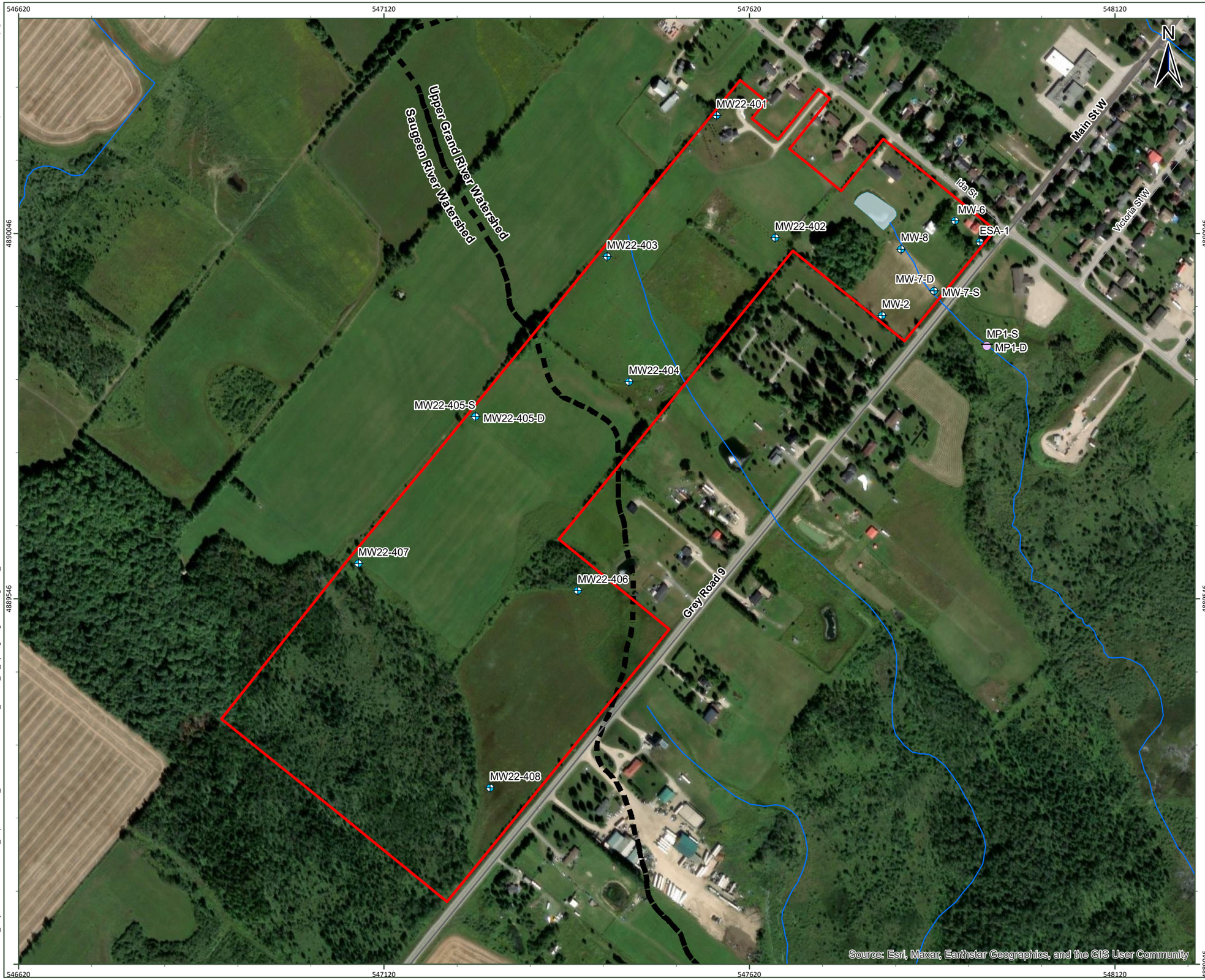
FIGURE NO:
**1**

DATE: April 23, 2024

PROJECT NO: 209.V30125.00001

Last Saved: April 23, 2024 9:10:17 AM by tgraham

GIS PATH: G:_Projects\FLATO\Dundalk\1_Maps\RPT\209_30125\Ida Street\EIS\209_V30125_01_SiteLocation_revB.mxd




**LEGEND:**

- SITE BOUNDARY
- MONITORING WELL
- MINI-PIEZOMETER
- PERMANENT WATERCOURSE
- DRAINAGE DIVIDE

**NOTES:**

BASEDATA:
ONTARIO MINISTRY OF NATURAL RESOURCES, LAND INFORMATION ONTARIO (LIO)

0 50 100 200 300 m

SCALE 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY
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FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# HYDROGEOLOGICAL INVESTIGATIONS

SLR

FIGURE NO:
**2**

DATE: April 23, 2024

PROJECT NO: 209.V30125.00001


**LEGEND:**

- SITE BOUNDARY
- UNEVALUATED WETLAND
- WATERBODIES
- PERMANENT WATERCOURSE

**HEADWATER DRAINAGE FEATURE**

- MAINTAIN/REPLICATE
- MITIGATION
- NO MANAGEMENT

**NOTES:**
BASEDATA:
ONTARIO MINISTRY OF NATURAL RESOURCES, LAND INFORMATION ONTARIO (LIO)

0 50 100 200 300 m

SCALE 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATION

FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# HEADWATER DRAINAGE FEATURES

SLR

FIGURE NO:
**3**

DATE: April 23, 2024

PROJECT NO: 209.V30125.00001

Last Saved: April 23, 2024 9:38:36 AM by tgraham

GIS PATH: G:_Projects\FLATO\Dundalk1_Maps\RPT\209_30125\Ida Street\EIS\209_V30125_03_HDF_revB.mxd

546620 547120 547620 548120

4890046 4889546


**LEGEND:**

- SITE BOUNDARY
- UNEVALUATED WETLAND
- WATERBODIES
- PERMANENT WATERCOURSE
- BREEDING BIRD SURVEYS (TRANSECT)
- AMPHIBIAN SURVEY LOCATION (2022)

**NOTES:**

BASEDATA:
ONTARIO MINISTRY OF NATURAL RESOURCES, LAND INFORMATION ONTARIO (LIO)

0 50 100 200 300 m

SCALE 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATION

FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# SURVEY LOCATIONS

SLR

FIGURE NO: **4**

DATE: April 23, 2024

PROJECT NO: 209.V30125.00001

546620 547120 547620 548120

4890046 4889546

Res
Ag
CUM1-1
FOD5-1
Inst-Cem
Ag
Res
SWT2-2
CUM1-1
SWM3-2
MAM2-2

Main St W
Ida St
Victoria St W
Grey Road 9

N

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

**LEGEND:**

- SITE BOUNDARY
- WATERBODIES
- PERMANENT WATERCOURSE
- ECOLOGICAL LAND CLASSIFICATION (SLR CONSULTING, 2022)

| ELC Code | ELC Description |
|---|---|
| Ag | Agriculture |
| CUM1-1 | Dry-Moist Old Field Meadow |
| FOD5-1 | Dry-Fresh Sugar Maple Deciduous Forest |
| Inst-Cem | Institutional - Cemetery |
| MAM2-2 | Reed Canary Grass Mineral Meadow Marsh |
| Res | Residential |
| SWM3-2 | Poplar - Conifer Mixed Swamp |
| SWT2-2 | Willow Mineral Thicket Swamp |

**NOTES:**
BASEDATA:
ONTARIO MINISTRY OF NATURAL RESOURCES, LAND INFORMATION ONTARIO (LIO)

0 50 100 200 300 m

SCALE 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATION

FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# ECOLOGICAL LAND CLASSIFICATION

SLR

FIGURE NO:
**5**

DATE: April 23, 2024

PROJECT NO: 209.V30125.00001


**LEGEND:**

- SITE BOUNDARY
- SITE PLAN (2024-04-30)
- WATERBODIES
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND

**CANDIDATE SIGNIFICANT WILDLIFE HABITAT**

- BAT MATERNITY COLONIES
- TERRESTRIAL CRAYFISH

**CONFIRMED SIGNIFICANT WILDLIFE HABITAT**

- EASTERN WOOD-PEWEE
- MONARCH

**NOTES:**
BASEDATA:
ONTARIO MINISTRY OF NATURAL RESOURCES, LAND INFORMATION ONTARIO (LIO)

0 50 100 200 300 m

SCALE 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY
AND SHOULD NOT BE USED FOR NAVIGATION

FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# SIGNIFICANT WILDLIFE HABITAT

SLR

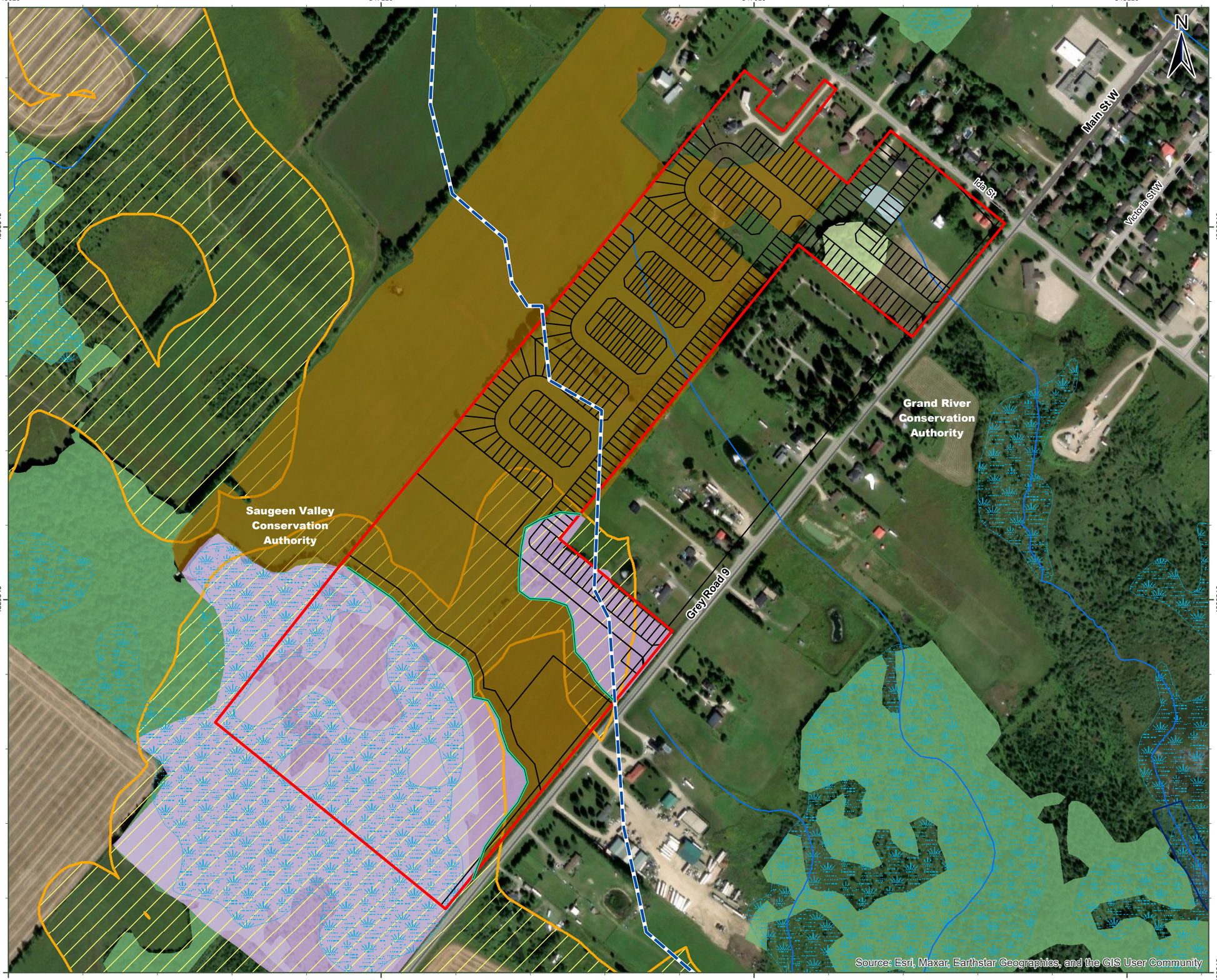
FIGURE NO:
**6**

DATE: April 30, 2024

PROJECT NO: 209.V30125.00001

546620 547120 547620 548120

4890046 4889546




**LEGEND:**

- SITE BOUNDARY
- SITE PLAN (2024-04-30)
- CONSERVATION AUTHORITY ADMIN AREA
- APPROXIMATE SCREENING AREA (SVCA)
- WATERBODIES
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- SIGNIFICANT WOODLANDS (GREY COUNTY OFFICIAL PLAN (2018))
- WOODED ECOLOGICAL LAND CLASSIFICATION
- WETLAND ECOLOGICAL LAND CLASSIFICATION
- GRCA STAKED WETLAND BOUNDARY (NOT SURVEYED)
- BOBOLINK AND EASTERN MEADOWLARK HABITAT

**NOTES:**
BASEDATA:
ONTARIO MINISTRY OF NATURAL RESOURCES, LAND INFORMATION ONTARIO (LIO)

0 50 100 200 300 m

SCALE 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N
THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATION

FLATO IDA DUNDALK INC.
FLATO IDA
DUNDALK, ONTARIO, CANADA

ENVIRONMENTAL IMPACT STUDY

# ENVIRONMENTAL CONSTRAINTS AND SITE PLAN

SLR

FIGURE NO: **7**

DATE: April 30, 2024

PROJECT NO: 209.V30125.00001

# Appendix A Correspondence and Terms of Reference

## Environmental Impact Study

Flato Ida, Dundalk, Ontario

**Flato Ida Dundalk Inc.**

SLR Project No.: 209.30125.00001

May 30, 2024

SLR Consulting (Canada) Ltd.
300 Town Centre Boulevard, Suite 200, Markham, ON L3R 5Z6

~~June 7, 2022~~July 27, 2022

~~Laura Warner~~Chris Lorenz, Resource Planner
Grand River Conservation Authority
400 Clyde Road, Box 729
Cambridge, ON N1R 5W6

~~Brandi Walter~~Michael Oberle, Environmental Planning Coordinator
Saugeen Conservation
261123 Grey Road 28 RR1
Hanover, ON N4N 3B8

SLR Project No.: 209.30125.00001

**RE: Terms of Reference - Scoped Environmental Impact Study**
**752226, 752240, and 752242 Ida Street, Dundalk, Ontario**

SLR Consulting (Canada) Ltd. (SLR) is pleased to submit this Terms of Reference (ToR) on behalf of Flato Developments Inc. outlining the tasks required to complete a Scoped Environmental Impact Study (EIS) and Tree Inventory and Preservation Plan (TIPP) for 752226, 752240, and 752242 Ida Street in Dundalk, Ontario (Site). The northeast half of the Site falls under the jurisdiction of the Grand River Conservation Authority (GRCA) and the southwest half of the Site is under the jurisdiction of Saugeen Conservation (SVCA).

## Project Understanding

SLR understands that the Site is proposed for development into a residential subdivision and is subject to a Ministerial Zoning Order (MZO). An unevaluated wetland at the southwest end of the Site falls within SVCA regulated lands. A very small (0.03 ha) area associated with a headwater drainage feature (HDF) in the northeast end of the Site falls within GRCA regulated lands. Permits under *Ontario Regulations (O. Reg.) 150/06 (GRCA) and 169/06 (SVCA): Development, Interference with Wetlands and Alterations to Shorelines and Watercourses* are required for any development within regulated areas. The unevaluated wetland at the southwest end of the Site is also identified as significant woodland in the Township of Southgate (2022) Draft Official Plan – Schedule C and the Grey County (2019) Official Plan – Appendix B, Map 2.

The GRCA (2015) *Policies for the Administration of O. Reg. 150/06* and the SVCA (2017) *Environmental Planning and Regulations Policies Manual* state that any development within 30 m of unevaluated or locally significant wetlands (also known as the area of interference) requires permission from the appropriate conservation authority. Setback distances for development near regulated areas surrounding HDF typically require in-field assessment to determine riverine flooding and erosion hazard allowances and valley slopes or meander belt allowance. Staking of the unevaluated wetlands is also typically required.

## Terms of Reference

This ToR has been prepared to frame the study requirements for review by the Township of Southgate, Grey County, SVCA, and GRCA. The ToR was prepared in the context of the following:

- *Provincial Policy Statement, 2020*
- Federal *Fisheries Act, 2019*
- *Migratory Birds Convention Act, 1994*
- *Endangered Species Act, 2007*
- Federal *Species at Risk Act, 2002*
- *Greenbelt Plan, 2017*
- *O. Regs. 150/06 and 169/06*
- GRCA Planning and Permitting Policies, including GRCA (2015) *Policies for the Administration of O. Reg. 150/06*
- SVCA (2017) *Environmental Planning and Regulations Policies Manual*
- Township of Southgate and Grey County Official Plans
- GRCA (2005) *Environmental Impact Study Guidelines and Submission Standards for Wetlands*
- *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (Toronto and Region Conservation Authority and Credit Valley Conservation, 2014)

Specifically, the tasks to be included within the ToR are:

1. Prepare and attend a site meeting with representatives from the Township of Southgate, Grey County, SVCA, and GRCA (if necessary) and stake the major features of the Site (e.g., wetland limits and woodland dripline). Water depths and vegetation species in the pond at the north corner of the Site will be assessed to determine if the pond should be classified as a wetland. If wetlands are determined to be present, their boundaries will be delineated, verified by GRCA, and clearly illustrated in the EIS report. A minimum buffer width and supporting rationale will also be included in the EIS report.
2. Compile and synthesize information for the property from existing background documents, studies, and provincial databases including a gap analysis review.
3. Undertake scoped seasonal inventories for amphibians, vegetation, and breeding birds (including Species at Risk [SAR]) in accordance with widely accepted provincial standards, review and update vegetation communities in accordance with the provincial Ecological Land Classification system and existing available data, and screen lands for the presence of Butternut (*Juglans cinerea*) trees and other SAR as well as SAR habitat potential.
4. We do not anticipate the need for aquatic or fisheries investigations in support of the applications.
5. Aerial photography indicates potential drainage across the Site, as well as from the pond in the north corner of the Site to Grey Road 9. The Rapid Method provided in the *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (Toronto and Region Conservation Authority and Credit Valley Conservation, 2014) will be applied to assess Headwater Drainage Features (HDF) where appropriate.~~An early spring visit will confirm whether *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (Toronto and Region Conservation Authority and Credit Valley Conservation, 2014) apply to this Site.~~

6. Synthesize the above information and analyze the findings to determine the presence of features and attributes of local and provincial interest under the *Planning Act, 1990* and to the Township of Southgate, Grey County, SVCA, and GRCA.
7. Establish appropriate buffers and setbacks for features of significance with reference to the policies and standards of the Township of Southgate, Grey County, SVCA, and GRCA.
8. Prepare an EIS report, including GIS generated figures for submission to the Township of Southgate, Grey County, SVCA, and GRCA in support of a final version of the Site Plan application. This report will discuss key conclusions and recommendations from~~rely on input from~~ the Hydrogeology Report, the Functional Servicing Report (prepared by Crozier and Associates), and other submission materials. Crozier and Associates is completing a pre- and post-development wetland water balance assessment to demonstrate that wetland hydroperiods will be maintained, restored, or enhanced and that development will not negatively impact the hydrological or ecological functions of the wetlands within the Saugeen River watershed. The EIS will include a discussion of findings by Crozier and Associates.

### *Species at Risk*

SLR will complete a desktop analysis to review potential for SAR and SAR habitat including species that may be of regional or local significance in accordance with Provincial regulations. This analysis will include accessing the Ministry of Northern Development, Mines, Natural Resources and Forestry's (NDMNRF) digital Land Information Ontario and Natural Heritage Information Centre databases to obtain a list of SAR known to occur in or near the Site and refining the list to relevant species potentially occurring within the Site.

In addition to the desktop screening, SLR will complete targeted SAR surveys for Western Chorus Frog (*Pseudacris triseriata*), bats, and Butternut to inform consultation with the Ministry of the Environment, Conservation and Parks (MECP). The need for additional targeted SAR surveys will be determined in consultation with MECP.

### *Staking of Natural Features*

In collaboration with the GRCA, SVCA, and Township of Southgate staff, SLR will confirm and stake the appropriate natural feature boundaries that are present on the Site (HDF if present, wetland limits, and woodland dripline). SLR will coordinate with GRCA, SVCA, and Township staff to confirm and agree to the staked limits. GRCA and SVCA regulation and floodplain limits will be included on a figure but will be delineated through air photo interpretation and online sources.

### *Arborist Study*

The TIPP will conform to the standards and specifications defined under the Township of Southgate Fill/Site Alteration By-law No. 2017-049. The purpose of the TIPP is to provide an inventory and assessment of the trees within the Site, positioned outside of the staked features to be preserved in accordance with applicable procedures and guidelines. SLR will conduct the arborist work in two phases to support preliminary and detailed design work. Phase 1 will include a preliminary investigation to identify potential heritage trees or trees which may be required to be considered for preservation. Preliminary results will be presented in a memorandum. Phase 2 will consist of consultation with the Township (and SVCA/GRCA, if necessary) to refine the area of the detailed arborist work, scope areas of concern to the Township only, and completion of a Buffer Restoration Plan, if required. Once an approved method is confirmed with the Township, an

International Society of Arboriculture (ISA) certified arborist will complete the evaluation under Phase 2 for trees that are recommended for removal or retention within the Site Plan.

### *Scoped Environmental Impact Study*

The draft Scoped EIS report will include a description of the ecological features and functions that occur on and adjacent to the Site, information on proposed development conditions, constraint mapping (including maximum limits for building envelopes), impact analysis, and potential monitoring requirements. The Scoped EIS will also include recommendations for additional measures (next steps) required to achieve policy conformity and recommended restoration and/or enhancement measures, including thermal mitigation measures and enhanced quality control. The Scoped EIS will be prepared in accordance with the policies outlined in the GRCA (2005) *Environmental Impact Study Guidelines and Submission Standards for Wetlands* and the SVCA (2017) *Environmental Planning and Regulations Policies Manual*.

## Closure

Please confirm that these Terms of Reference for a Scoped EIS meet the intent of the information and study requirements for the subject property as referenced above. If you have any further questions or comments, we look forward to discussing them with you at your earliest convenience.

Yours sincerely,

SLR Consulting (Canada) Ltd.

**Megan Olson, M.Sc.**
Ecologist
416-333-8279
molson@slrconsulting.com

**Kim Logan, B.Sc., P.Geo. (Limited), P.Biol.**
Senior Ecologist
226-203-7214
klogan@slrconsulting.com

## Matthew Ross

**From:** Megan Olson
**Sent:** June 08, 2022 1:37 PM
**To:** planning@svca.on.ca
**Cc:** Kim Logan
**Subject:** FW: Terms of Reference for Scoped EIS - Dundalk, Ontario
**Attachments:** 209.30125.00001_Dundalk-Northwest_Terms-of-Reference_2022-06-07.pdf; 209.30125.00003_Dundalk-Northeast_Terms-of-Reference_2022-06-07.pdf

Good afternoon,
I previously sent the below email to Brandi Walter but received an automatic reply that she will be on leave until August 2022. Please direct these attachments to the appropriate SVCA contact.

Thanks,
Megan Olson

SLR

Megan Olson, M.Sc.
Ecologist

C +1 416 333 8279
E molson@slrconsulting.com

SLR Consulting (Canada) Ltd.
300 Town Centre Blvd, Suite 200, Markham, ON L3R 5Z6



**From:** Megan Olson <molson@slrconsulting.com>
**Sent:** June 08, 2022 11:57 AM
**To:** lwarner@grandriver.ca; b.walter@svca.on.ca
**Cc:** Kim Logan <klogan@slrconsulting.com>
**Subject:** Terms of Reference for Scoped EIS - Dundalk, Ontario

Hi Laura and Brandi,
Attached are Terms of Reference for two Scoped Environmental Impact Studies at the following locations:

- 752226, 752240, and 752242 Ida Street, Dundalk, Ontario
- Lots 223, 224, 225, and 226, Concessions 1 and 2 W, Dundalk, Ontario

Both sites fall under the jurisdiction of both GRCA and Saugeen Conservation. Please let me know if you have any questions or concerns with the TOR at this time.

Thanks,
Megan Olson

Megan Olson, M.Sc.
Ecologist

**C** +1 416 333 8279
**E** molson@slrconsulting.com

SLR Consulting (Canada) Ltd.
300 Town Centre Blvd, Suite 200, Markham, ON L3R 5Z6

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Winners: RoSPA President's Award 2020

## Matthew Ross

**From:** Chris Lorenz <clorenz@grandriver.ca>
**Sent:** August 04, 2022 9:09 AM
**To:** Megan Olson
**Cc:** Kim Logan
**Subject:** RE: Terms of Reference for Scoped EIS - Dundalk, Ontario

Thank you Megan. GRCA has no further comment.

**Chris Lorenz, M.Sc.**
Resource Planner
Grand River Conservation Authority
519-621-2763 ext. 2236

---

**From:** Megan Olson <molson@slrconsulting.com>
**Sent:** July 28, 2022 12:05 PM
**To:** Chris Lorenz <clorenz@grandriver.ca>
**Cc:** Kim Logan <klogan@slrconsulting.com>
**Subject:** RE: Terms of Reference for Scoped EIS - Dundalk, Ontario

Hi Chris,
Thank you for your review and comments – I have addressed your comments in red below and provided an updated version of the Terms of Reference with the requested edits in Track Changes.

Thanks,
Megan

SLR

Megan Olson, M.Sc.
Ecologist

C +1 416 333 8279
E molson@slrconsulting.com

SLR Consulting (Canada) Ltd.
300 Town Centre Blvd, Suite 200, Markham, ON L3R 5Z6



---

**From:** Chris Lorenz <clorenz@grandriver.ca>
**Sent:** July 07, 2022 9:38 AM
**To:** Megan Olson <molson@slrconsulting.com>

**Cc:** Kim Logan <klogan@slrconsulting.com>
**Subject:** RE: Terms of Reference for Scoped EIS - Dundalk, Ontario

Hi Megan,

Apologies for the delay. Please find below GRCA comments for the proposed Terms of Reference for the Ida Street sites:

1. The terms of reference state that the proposed subdivision development is subject to a Minister's Zoning Order. This should be clarified in the EIS report. Noted – this will be stated in the EIS.

2. According to the existing map layer, no regulated features are present within the Grand River portion of the study area. However, a pond and headwater drainage feature (HDF) appear to be present at #752212 Ida Street. We agree that the HDF should be assessed using accepted guidelines developed by Credit Valley Conservation (CVC) and Toronto and Region Conservation Authority (TRCA). Agreed – this pond and HDF (as well as regulated features indicated on SVCA regulation mapping) are already captured in our HDF program. Item 5 in the TOR has been updated to include this.

3. Water depths and vegetation species in the pond should be assessed to determine if this feature is a wetland. If a wetland is determined to be present, it is requested that the boundary be delineated, verified by the GRCA and clearly illustrated in the EIS report. A minimum buffer width and supporting rationale should also be included in the EIS report. Item 1 in the TOR has been updated to include this comment.

4. It is requested that the key conclusions and recommendations of related hydrogeological assessments, stormwater management plans, and functional servicing plans be discussed in the EIS report. Item 8 in the TOR has been updated to address this comment more directly.

5. The EIS report will need to clearly demonstrate that wetland hydroperiods are maintained, restored, or enhanced. A pre- and post-development wetland water balance assessment will be required to demonstrate that the development will not negatively impact the hydrologic or ecological functions of the wetlands located within the Saugeen River watershed. Item 8 in the TOR has been expanded upon to address this comment.

6. The need for thermal mitigation measures and enhanced quality control should be discussed in the EIS. The Scoped Environmental Impact Study section has been updated to include this comment.

7. We recommend that all biological surveys (e.g. breeding amphibians, breeding birds, vegetation) be conducted in accordance with widely accepted provincial standards. The need for targeted surveys of species at risk should be determined in consultation with the Ministry of the Environment, Conservation, and Parks. Item 3 and the Species at Risk section of the TOR have been expanded upon to more directly address this comment.

8. According to mapping information obtained from the Ministry of Northern Development, Mines, Natural Resources, and Forestry (MNDMNRF), the following fish species have been recorded in the unnamed watercourse:

    - Blacknose Dace, Brassy Minnow, Brook Stickleback, Brown Bullhead, Central Mudminnow, Central Stoneroller, Common Shiner, Creek Chub, Emerald Shiner, Fathead Minnow, Golden Shiner, Iowa Darter, Johnny Darter, Least Darter, Northern Pike, Northern Redbelly Dace, Pumpkinseed, Rainbow Darter, White Sucker
    - Thank you – we will include this data in the EIS.

Thanks Megan. Any questions please let me know.

**Chris Lorenz, M.Sc.**
Resource Planner
Grand River Conservation Authority

Office: 519-621-2763 ext. 2236
Email: clorenz@grandriver.ca
www.grandriver.ca | Connect with us on social

---

**From:** Megan Olson <molson@slrconsulting.com>
**Sent:** June 20, 2022 3:00 PM
**To:** Chris Lorenz <clorenz@grandriver.ca>
**Cc:** Kim Logan <klogan@slrconsulting.com>
**Subject:** RE: Terms of Reference for Scoped EIS - Dundalk, Ontario

Hi Chris,
Apologies for the delay! I have attached maps for two of the three sites for your reference. The third map will follow in a separate email as I received an undeliverable message from GRCA trying to send all three at once.

Thanks!
Megan

SLR

Megan Olson, M.Sc.
Ecologist

C +1 416 333 8279
E molson@slrconsulting.com

SLR Consulting (Canada) Ltd.
300 Town Centre Blvd, Suite 200, Markham, ON L3R 5Z6



---

**From:** Chris Lorenz <clorenz@grandriver.ca>
**Sent:** June 14, 2022 10:16 AM
**To:** Megan Olson <molson@slrconsulting.com>
**Subject:** RE: Terms of Reference for Scoped EIS - Dundalk, Ontario

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

Hi Megan,

I have taken over as resource planner for the north of the watershed and will look after these TORs. I'm hoping you can provide mapping for all three of the TORs you recently provided (2 in Dundalk, 1 in Melancthon) so I can confirm study boundaries.

Thanks,

**Chris Lorenz, M.Sc.**
Resource Planner
Grand River Conservation Authority

Office: 519-621-2763 ext. 2236
Email: clorenz@grandriver.ca
www.grandriver.ca | Connect with us on social

---

**From:** Megan Olson <molson@slrconsulting.com>
**Sent:** Wednesday, June 8, 2022 11:57 AM
**To:** Laura Warner <lwarner@grandriver.ca>; b.walter@svca.on.ca
**Cc:** Kim Logan <klogan@slrconsulting.com>
**Subject:** Terms of Reference for Scoped EIS - Dundalk, Ontario

Hi Laura and Brandi,
Attached are Terms of Reference for two Scoped Environmental Impact Studies at the following locations:

- 752226, 752240, and 752242 Ida Street, Dundalk, Ontario
- Lots 223, 224, 225, and 226, Concessions 1 and 2 W, Dundalk, Ontario

Both sites fall under the jurisdiction of both GRCA and Saugeen Conservation. Please let me know if you have any questions or concerns with the TOR at this time.

Thanks,
Megan Olson

SLR

Megan Olson, M.Sc.
Ecologist

C +1 416 333 8279
E molson@slrconsulting.com

SLR Consulting (Canada) Ltd.
300 Town Centre Blvd, Suite 200, Markham, ON L3R 5Z6

## Matthew Ross

**From:** Megan Olson
**Sent:** June 08, 2022 11:57 AM
**To:** lwarner@grandriver.ca; b.walter@svca.on.ca
**Cc:** Kim Logan
**Subject:** Terms of Reference for Scoped EIS - Dundalk, Ontario
**Attachments:** 209.30125.00001_Dundalk-Northwest_Terms-of-Reference_2022-06-07.pdf; 209.30125.00003_Dundalk-Northeast_Terms-of-Reference_2022-06-07.pdf

Hi Laura and Brandi,
Attached are Terms of Reference for two Scoped Environmental Impact Studies at the following locations:

- 752226, 752240, and 752242 Ida Street, Dundalk, Ontario
- Lots 223, 224, 225, and 226, Concessions 1 and 2 W, Dundalk, Ontario

Both sites fall under the jurisdiction of both GRCA and Saugeen Conservation. Please let me know if you have any questions or concerns with the TOR at this time.

Thanks,
Megan Olson

SLR

Megan Olson, M.Sc.
Ecologist

C +1 416 333 8279
E molson@slrconsulting.com

SLR Consulting (Canada) Ltd.
300 Town Centre Blvd, Suite 200, Markham, ON L3R 5Z6

# Appendix B Concept Site Plan and Draft Plan

## Environmental Impact Study

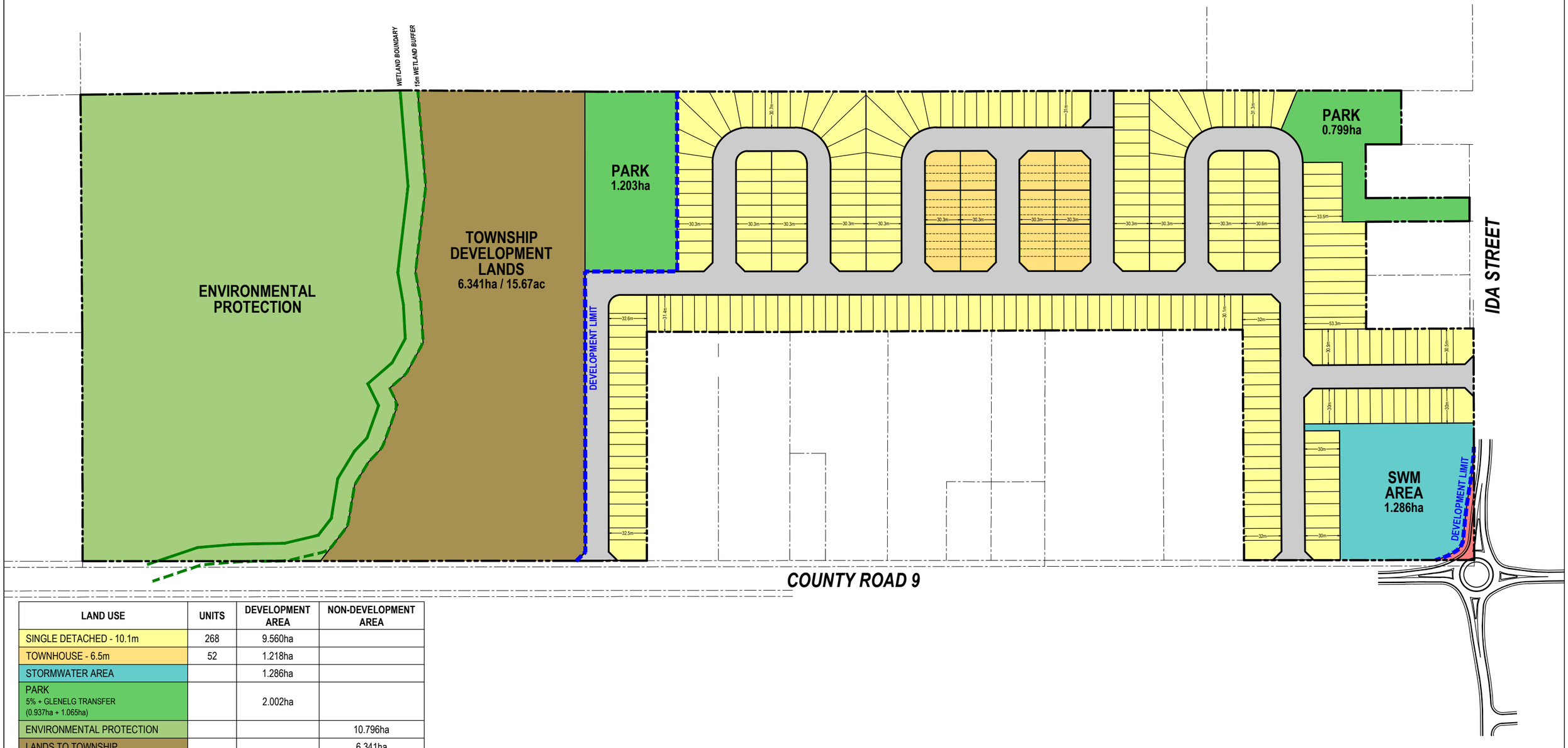
Flato Ida, Dundalk, Ontario

**Flato Ida Dundalk Inc.**

SLR Project No.: 209.30125.00001

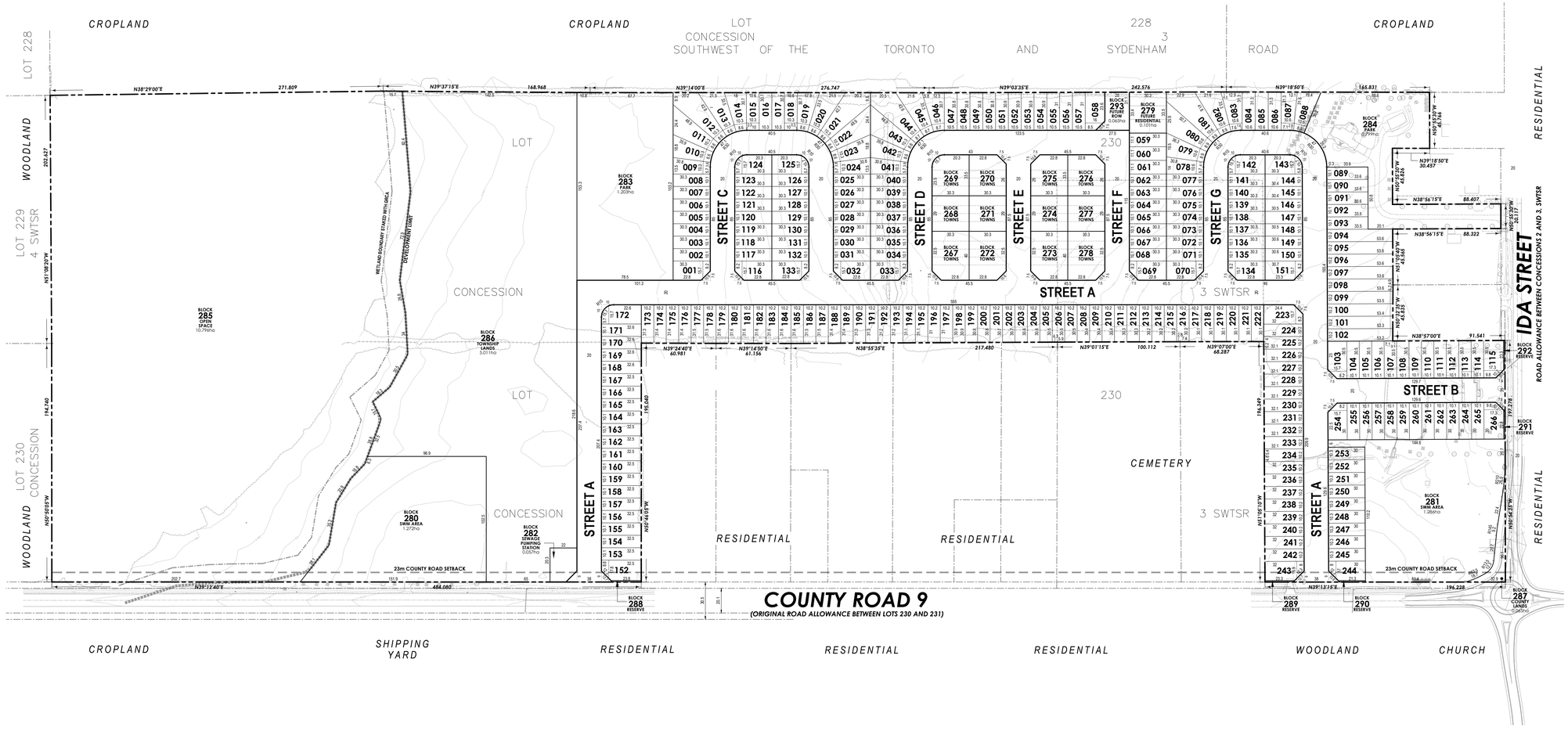
May 30, 2024

# FLATO IDA STREET, DUNDALK
# CONCEPT PLAN




| LAND USE | UNITS | DEVELOPMENT AREA | NON-DEVELOPMENT AREA |
|---|---|---|---|
| SINGLE DETACHED - 10.1m | 268 | 9.560ha | |
| TOWNHOUSE - 6.5m | 52 | 1.218ha | |
| STORMWATER AREA | | 1.286ha | |
| PARK<br>5% + GLENELG TRANSFER<br>(0.937ha + 1.065ha) | | 2.002ha | |
| ENVIRONMENTAL PROTECTION | | | 10.796ha |
| LANDS TO TOWNSHIP | | | 6.341ha |
| LANDS TO COUNTY | | | 0.065ha |
| 0.3m RESERVE | | 0.004ha | |
| RIGHT OF WAY (2,342m) | | 4.668ha | |
| TOTALS | 317 | 18.738ha | 17.202ha |

MARCH 20, 2024




## LAND USE SUMMARY

| LAND USE | LOT / BLOCK # | UNITS | AREA |
|---|---|---|---|
| SINGLE DETACHED - 10.1m LOTS | 001-266 | 266 | 9.454ha |
| TOWNHOUSE - 6.5m UNITS | 267-278 | 52 | 1.218ha |
| FUTURE RESIDENTIAL | 279 | 3 | 0.101ha |
| STORMWATER MANAGEMENT AREA | 280, 281 | | 2.558ha |
| SEWAGE PUMPING STATION | 282 | | 0.057ha |
| PARK | 283, 284 | | 2.002ha |
| OPEN SPACE | 285 | | 10.796ha |
| TOWNSHIP LANDS | 286 | | 5.011ha |
| COUNTY LANDS | 287 | | 0.065ha |
| 0.3m RESERVE | 288-292 | | 0.003ha |
| FUTURE RIGHT OF WAY | 293 | | 0.065ha |
| RIGHT OF WAY | A, B, C, D, E, F, G | | 4.610ha |
| TOTALS | | 321 | 35.940ha |

**LEGAL DESCRIPTION**

PART OF LOTS 229 AND 230
CONCESSION 3, SOUTHWEST OF THE TORONTO AND SYDENHAM ROAD
GEOGRAPHIC TOWNSHIP OF PROTON
TOWNSHIP OF SOUTHGATE
COUNTY OF GREY

**OWNER'S CERTIFICATE**

I HEREBY AUTHORIZE MACNAUGHTON HERMSEN BRITTON CLARKSON PLANNING LIMITED TO SUBMIT THIS PLAN FOR APPROVAL.

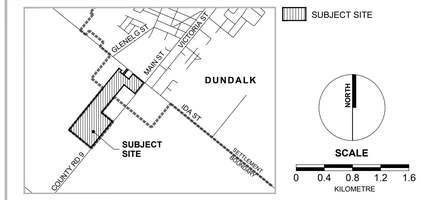
DATE: _____ _____

**SURVEYOR'S CERTIFICATE**

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE: _____ _____

**KEY PLAN**




**LEGEND**

- PROJECT BOUNDARY LINE
- RIGHT OF WAY LINE
- BLOCK LINE
- LOT LINE
- PARCEL FABRIC

| REVISION No. | DATE | ISSUED / REVISION | BY |
|---|---|---|---|

**ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT R.S.O. 1990 C.P.13 AS AMENDED**

- **A.** AS SHOWN
- **B.** AS SHOWN
- **C.** AS SHOWN
- **D.** 321 SINGLE RESIDENTIAL LOTS
- **E.** AS SHOWN
- **F.** AS SHOWN
- **G.** AS SHOWN
- **H.** MUNICIPAL WATER SUPPLY
- **I.** SANDY SILT/SILTY SAND DEPOSITS WITH LOCALIZED SAND LAYERS
- **J.** AS SHOWN
- **K.** ALL SERVICES AS REQUIRED (WATER, SANITARY, STORMWATER, HYDRO)
- **L.** AS SHOWN

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
113 COLLIER STREET, BARRIE, ON, L4M 1H2 | P: 705.728.0045 | WWW.MHBCPLAN.COM

**STAMP**

| | |
|---|---|
| DATE | APR. 30, 2024 |
| FILE No. | 15184AC |
| SCALE | 1:1,800 (ARCH D) |
| DRAWN BY | M.M. |
| CHECKED BY | K.C. |
| OTHER | |

**PROJECT**

**FLATO IDA**
FLATO IDA DUNDALK INC.
3621 HIGHWAY 7 EAST, SUITE 503
MARKHAM, ON L3R 0G6
P:(905) 479-9292 F:(905) 429-9165
WWW.FLATOGROUP.COM

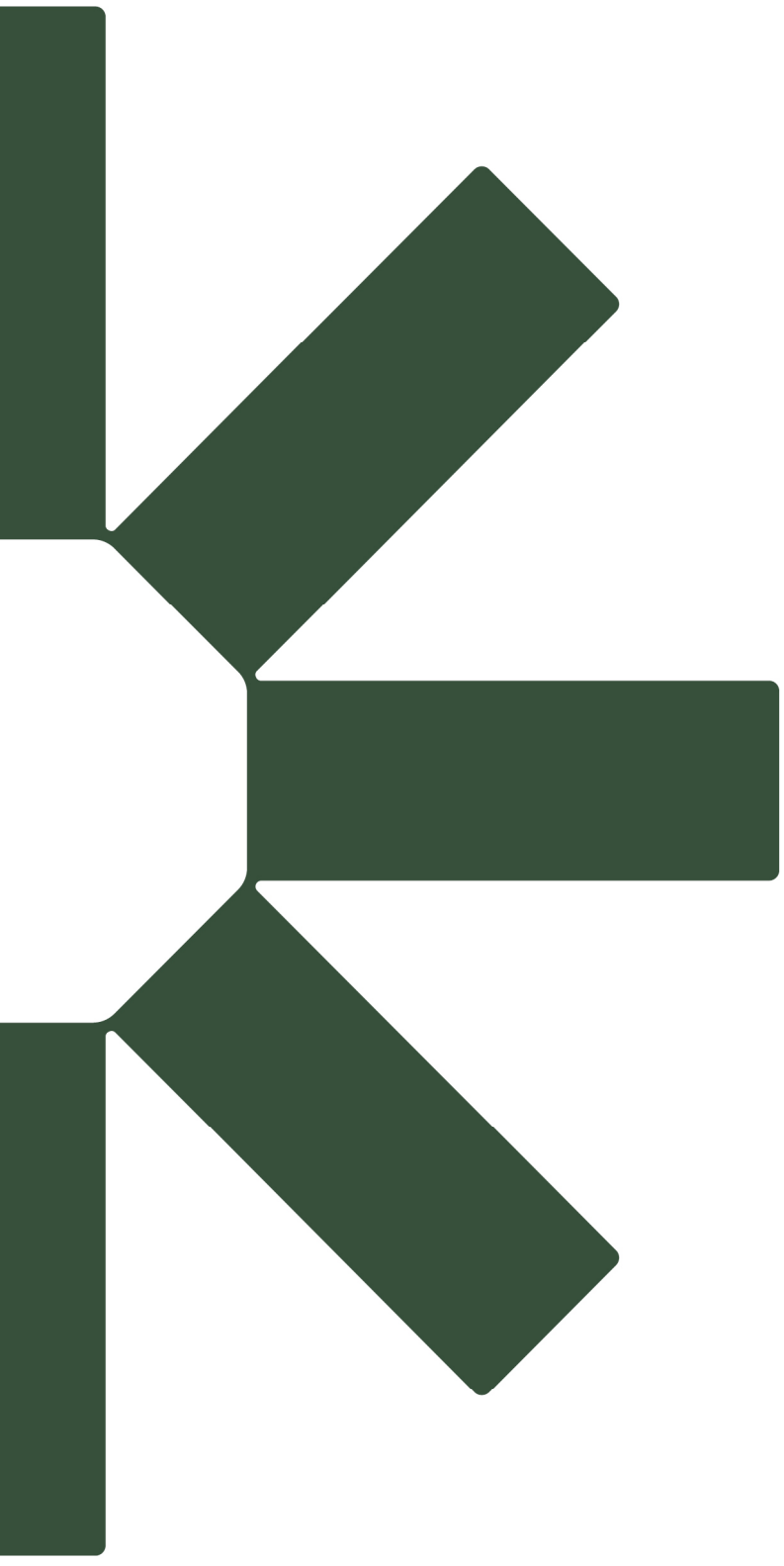
NORTH

**FILE NAME**
DRAFT
PLAN OF SUBDIVISION

**DWG No.** 1 of 1

**SCALE BAR**
0 9 18 27 36 45 60 90 135 180m
MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

N:\Southgate\752212 Ida Street, Dundalk – 15184AC\Drawings\Draft Plan\CAD\15184AC – Draft Plan – 2024-04-30.dwg



Making Sustainability Happen