Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon ON. Issued for SPA Resubmission

Prologis Property

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Prepared by:

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SLR Project No.: 243.V24265.00000

August 11, 2025

Revision: 1

Revision Record

Revision	Date	Prepared By	Checked By	Authorized By
0	November, 22, 2024	Hayley Brown, Rosalind Chaundy, Joel Davey	Rosalind Chaundy	Jason Cole
1	August 11, 2025	Rosalind Chaundy, Joel Davey	Rosalind Chaundy, Joel Davey	Jason Cole

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Acronyms and Abbreviations

COSSARO	Committee on the Status of Species at Risk in Ontario
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
ESA	*Endangered Species Act (2007)*
GEI	GEI Consultants Ltd.
HDF	Headwater Drainage Feature
LIO	Land Information Ontario
MBCA	*Migratory Birds Convention Act (1994)*
MBR	Migratory Birds Regulations
MECP	Ministry of Environment, Conservation and Parks
MNRF	Ministry of Natural Resources and Forestry
NHIC	Natural Heritage Information Centre
O. Reg.	Ontario Regulation
PPS	Provincial Policy Statement
SAR	Species at Risk
SARO	Species at Risk Ontario
SLR	SLR Consulting (Canada) Ltd.
SWM	Stormwater Management
TRCA	Toronto and Region Conservation Authority

1.0 Introduction

SLR (formerly Palmer Environmental Consulting Group Inc) has been retained by Prologis Property c/o Mainline Planning Services Inc. to complete an Environmental Impact Study (EIS) as part of an application for the proposed development of a property at 12519 & 12713 Humber Station Road in the Town of Caledon, Peel Region (the Subject Property – **Figure 1**).
The approximately 78 ha Subject Property is situated northeast of Humber Station Road on the west side of the town of Bolton.

The property primarily consists of large agricultural fields, with the addition of small natural areas (wetlands and woodland) and drainage features. A creek named the Clarkway Drive Tributary lies to the east of the property. Buildings associated with former farmsteads were removed in 2017 and 2018. The Subject Lands are mostly surrounded by rural agricultural lands, although developed Bolton is on the east side of the Clarkway Drive Tributary and the closest properties contain large distribution centres. The Subject Property is partially regulated by the Toronto and Region Conservation Authority (TRCA).

The intent of this EIS is to delineate, inventory and evaluate the sensitivity and significance of the existing natural heritage features and ecological functions associated with the Subject Lands and assess the impacts of the proposed development. For the natural heritage features requiring protection, avoidance and mitigation measures are recommended where appropriate, to address potential impacts resulting form the proposed development. The proposed Phase 1 development consists of a single large distribution centre, with some land works to prepare for subsequent phases. The impacts of this phase only are discussed in this report.

Note that Palmer became fully amalgamated with SLR Consulting in July 2024 and is now part of that company. Thus, all references to Palmer have been changed to SLR, even though the company was operating under the name of Palmer when some of the work was undertaken.

1.1 Background

Prior to and at the same time as the preparation of this EIS, a Humber Station - Comprehensive Environmental Impact Study and Management Plan (CEISMP) report was prepared by GEI Consultants Ltd. (GEI), in collaboration with Schaeffers Consulting Engineers (SCE), and Arcadis IBI Group as part of the Secondary Plan for the Humber Station Landowners Group that covers a larger area which includes the Subject Property (October 2023, CEISMP, *Phase 1 – Characterization/Existing Conditions and Baseline Inventory*) (GEI Consultants Ltd. 2023). That larger area is called the Humber Station Employment Area and is encompassed by Humber Station Road to the west, Mayfield Road to the south, Healey Road to the north and the Coleraine West Employment Area Secondary Plan Area boundary to the east.

In October 2024 the Draft CEISMP Phases 2 (Phase 2: Analysis, Impact Assessment, and Mitigation) and 3 (Comprehensive Implementation Plan, Monitoring Plan, and Adaptive Management Plan) were prepared. These documents were finalized and submitted to the Town of Caledon and TRCA for their review.

Based on agency comments, revised CEISMP Phases 1, 2 and 3 were submitted to the Town in July of 2025.

In previous Town of Caledon planning documents, these lands were in a Prime Agricultural Area designation, as well as Environmental Policy Area land use category, but they are in the process of being changed, as the current draft Town of Caledon Official Plan designates the Subject Property as Employment Area, within the Urban Area Boundary
(Town of Caledon 2024).

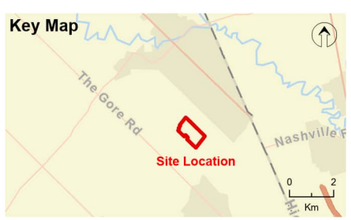
The Peel Region Official Plan was recently updated to identify the lands as part of the Urban System, within the Bolton Residential Settlement Area (Region of Peel 2022). This OP designates the Subject Property as an Employment Area.

As GEI has undertaken extensive surveys for the Humber Station Employment Area lands, this EIS makes reference to some of that work, while at the same time providing additional data from SLR field investigations. SLR and GEI consulted together to come to an come to an understanding regarding the status of ecological features.

LEGEND

- Watercourse [1]
- Waterbody [1]
- Subject Property

1 - Geospatial Ontario



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Universal Transverse Mercator Projection Zone 17

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Checked: HB
Date: Jul 24, 2025

NORTH

Source Notes: Imagery (2024) provided by ESRI Map Services. Contains information licensed under the Open Government License – Ontario.

CLIENT
Prologis

PROJECT
12519 and 12713 Humber Station Road

TITLE
Site Location

SLR

REF. NO. 2008102-1-2

Figure 1

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2.0 Study Approach

2.1 Background Review

SLR has reviewed relevant background material to provide a focus on field investigations and ensure compliance with applicable regulations and policy. Background information collection is guided by the *Natural Heritage Information Request Guide* (Ministry of Natural Resources and Forestry 2018). Current direction from the Ministry of Natural Resources and Forestry (MNRF) and Ministry of Environment, Conservation and Parks (MECP) is to gather natural heritage information and species occurrence records from available sources; the NHIC Make Make-a-Map application being the main source of information and records from the Ministry itself (Ministry of Natural Resources and Forestry 2024). Information gathered is recommended to be balanced and supplemented by professional ecological review of potential habitats and characteristics of a project site.

Background review for the Subject Property included the collection and review of relevant mapping and reports, including regulations and policies, and Official Plans; and the NHIC Make-a-Map application for species occurrences and designated area mapping. In addition to these sources, the following data sources were reviewed for the project:

- Natural Heritage Information Centre (NHIC) database (Ministry of Natural Resources and Forestry 2024);
- Land Information Ontario (LIO) database (Government of Ontario 2024);
- Ontario Breeding Bird Atlas (Bird Studies Canada 2024);
- Reptile and Amphibian Atlas (Ontario Nature 2024);
- Ontario Butterfly Atlas (Toronto Entomologists Association 2022); and
- Aquatic Species at Risk Mapping (Fisheries and Oceans Canada 2024).

Other sources of information, such as aerial photography and topographic maps, were also consulted prior to commencing field assessments. Following the *Information Request Guide*, MECP advice and direction should be solicited should any SAR interactions or potential interactions be identified via field investigations and analysis.

As mentioned previously, some discussions were undertaken with GEI regarding the significance of features, before and after the November 2024 EIS was prepared.

No Terms of Reference document was prepared for any agency due to the nature of this study; i.e. initially we were engaged to undertake selective studies and consult with GEI. Since that time SLR has considered that comments from the Town and TRCA (or MECP regarding Species at Risk) would provide direction should any additional items be required.

Discussions regarding Redside Dace potential habitat and Species at Risk bat habitat occurred between November 2024 and July 2025. These are described in later sections of this report.

2.2 Field Investigations

SLR ecologists undertook field investigations to assess physical terrain characteristics, and to provide an assessment of the ecological features and functions within the Subject Property. Specifically, ecological surveys included in-field data collection for breeding bird surveys, amphibian surveys, aquatic habitat assessment and general wildlife observations.

A SAR habitat screening and Significant Wildlife Habitat (SWH) assessments were undertaken which were supplemented with field observations. Further to GEI's field investigations conducted in 2017, 2018, 2021-2023, SLR conducted field investigations in 2023 (**Table 1**). Detailed methods are given below for SLR surveys. GEI methods are summarized in Section 2.10.

Table 1: Summary of Field Investigations (2017 - 2025)

Company	Field Investigation(s)	Dates	Weather Conditions
GEI	Ecological Land Classification & Flora	June 14, August 15 & October 4, 2017	N/A
GEI	Breeding Bird Surveys	June 12, 17 & 28, 2017	N/A
GEI	Amphibian Breeding Surveys	April 24, May 17 & June 21, 2017	N/A
GEI	Aquatic Habitat Assessment	July 19, 2017	N/A
GEI	Headwater drainage Feature Assessment	2017, 2018 & 2023	N/A
GEI	Acoustic Bat Surveys	June 8, 21 & 26, 2017	N/A
GEI	Bat snag survey	April 21, 2017	N/A
GEI	Turtle Nesting & Basking surveys	2017, 2018	N/A
GEI	Insect survey	June 12, 28, July 26, 2017	N/A
GEI	Fish Community Survey	July 17, 2017	N/A
GEI	Reptile Surveys	2017, 2018	N/A
GEI	Snake Transect Surveys	May 16 & 17, 2018	N/A
GEI	Terrestrial Crayfish Survey	November 1, 2021	N/A
GEI	Bat Habitat Structure Assessment	August 22, 2022	N/A
SLR	Aquatic Habitat Assessment	May 18, 2023	Not recorded
SLR	Breeding Bird Surveys	June 30, 2022, May 26, June 19, 2023	17°C, 30% cloud cover and 10 km/hr winds 6°C, no cloud cover and 6 km winds 13°C, no cloud cover and 10 km winds
SLR	Amphibian Breeding Surveys	May 24, June 20 & June 29, 2023	15°C, 75% cloud cover and no wind 22°C, 20% cloud cover and no wind 21°C, 30% cloud cover and 10 km/hr winds
SLR	General Site Visit	June 29, 2023	Hot, mainly clear

Company	Field Investigation(s)	Dates	Weather Conditions
SLR	Woodland Observations	November 27, 2024	Sunny (5% cloud cover), cold (0°C), low winds.
SLR	Bat Habitat Survey ('snag survey') (former farmstead area)	April 15,2025	7°C, 60% cloud cover and 31 km/hr wind
SLR	Bat Acoustic Survey (former farmstead area)	June 13-23, 2025	NA

2.3 Aquatic Habitat Assessment

An aquatic assessment was conducted for the drainage swale/watercourse and associated pools located in the centre of the Subject Property (**Table 1**). Data recorded includes estimated channel size, substrate type, presence of bank undercuts and other observations that indicate the quality of the habitat such as entrenchment, erosion, degradation, riparian cover, and shading.

2.4 Breeding Bird Surveys

Breeding bird surveys were conducted using a roving survey method whereby the entirety of the site is covered. The site was walked such that the observer was within about 50 m or less of all parts of the site (with the exception of row-crop agricultural fields). SLR conducted three breeding bird surveys more than one week apart within the peak breeding season, on June 30, 2022, May 26, 2023, and June 19, 2023. Surveys were conducted between 5:30 and 10:00 a.m. to coincide with the dawn chorus. Surveys were conducted under suitable weather conditions when wind speeds were less than 20 km/h and there was no precipitation. The surveyor used a site map to record all bird species and individuals seen and heard in the approximate location observed.

Breeding bird data was combined in the following manner. Because the data was collected in two close years (2022 and 2023) they were treated as if the same year. For example, if a given habitat three Song Sparrows were recorded in 2022 and two during each of the 2023 surveys, then the number entered was three territories (i.e., maximum number of that species in an area/habitat). Similarly, if a single individual of a species was recorded in 2022 in a given habitat, but not recorded in 2023, then one territory of that species was tabulated. The tabulation separates out the observations from different habitats as well as giving a combined total. GEI observations were discussed where different species were observed.

2.5 Breeding Amphibian Surveys

A breeding amphibian survey was completed at two stations targeting the Thicket Swamp (SWT) in the southwestern portion of the Subject Property. The amphibian breeding survey was completed on May 31, 2021, following the Environment Canada's Marsh Monitoring Program protocol for surveying amphibians (Bird Studies Canada, 2009). The survey method provides an indication of amphibian abundance during the breeding season. Species were identified by call, and an abundance code for each species heard calling was assessed by the following the Amphibian Monitoring protocol:

- Code 0: No calls heard.

- Code 1: Calls not overlapping or simultaneous, number of individual frogs can be counted
- Code 2: Calls overlapping or simultaneous, number of individuals can still be distinguished, number of individual frogs cannot be counted, but a reliable estimate of numbers can be made based on location and call voices
- Code 3: Full chorus, calls simultaneous and overlapping, numbers of calling males cannot be reasonably counted or estimate

2.6 General Ecological Site Visit

A site visit was conducted on June 29, 2023 to complete a general ecological overview survey of the Site. The survey was used to record natural features, watercourse/drainage features, wildlife observations and dominant vegetation cover within the Subject Property, as well as to meet with GEI to focus on wetland areas.

2.7 Incidental Wildlife Observations

Incidental observations of wildlife were made during all field investigations. SLR ecologists traversed the site, noting any evidence of wildlife or sensitive habitat features (e.g., potential amphibian breeding habitat, stick nests) as well as gaining a general characterization of available habitat.

2.8 Species at Risk

For the purposes of this report, SAR include species listed as Endangered, Threatened or Special Concern under Ontario's ESA. Prior to field work, existing SAR records were queried through the NHIC database. Habitat opportunities for SAR on the site were then assessed by comparing habitat preferences of species deemed to have potential to occur to current site conditions. The species noted during the NHIC search and others known through professional experience to have potential to occur were considered in the assessment.

2.8.1 Bat Habitat

Based on correspondence with MECP and in the interests of being conservative, SLR conducted 'snag surveys' and bat acoustic surveys in the 'Former Farmstead area'. This is an area of scattered trees and former garden/now meadow beside to Humber Station Road.

In April, SLR undertook a 'snag survey' during leaf-off conditions to determine if potential bat maternity roosting habitat was present. Based on MNR guideline, *Maternity Roost Surveys (Forests/Woodlands)*, Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) may establish maternity roosts in any coniferous, deciduous or mixed wooded ecosite that includes trees at least 25 cm diameter-at-breast height (DBH) and should be considered suitable maternity roost habitat (MNR, 2022). On January 28, 2025, three migratory bat species were listed as Endangered under the *Endangered Species Act* (ESA): Eastern Red Bat (*Lasiurus borealis*), Hoary Bat (*Lasiurus cinereus*) and Silver-haired Bat (*Lasionycteris noctivagans*). Based on communications with MECP there is no formal guidance on these three bat species. Therefore, survey methods proceeded with the MNR 2022 protocol.

Acoustic surveys consisted of one acoustic detector deployed within 20 m of a candidate roost tree.

Acoustic monitoring methods were based on the *Maternity Roost Surveys (Forests/Woodlands)* (MNR, 2022). One Song Meter SM4BAT FS Ultrasonic Detectors with one microphone each was deployed adjacent to an identified potential maternity roost tree proposed to be removed (**Figure 2**). The microphone was positioned off the ground and angled upwards to maximize bat detection and reduce noise (**Photo 1**). The microphone was strategically placed near potential snag trees to maximize potential for high-quality bat calls. The detector was programmed to record for approximately 8 hours starting at sunset and ending at sunrise, from June 13 to June 23, 2025 (10 evenings) with recordings triggered when ultrasonic signals from the bats were detected in the vicinity.

All recordings were processed using SonoBat 4.0 (SonoBat, Arcata, California, USA). The automatic classification feature in SonoBat 4.0 assisted with bat call identification.

There is considerable variation among echolocation calls resulting from individual variation, variation within a population, variation among populations, and variation among recording devices (Barclay et al. 1999). Success in automatic detection depends on the software's reference calls and information used to build the decision criteria.

Because of the limitations of automatic classifiers and potential for misclassifications, all files were visually inspected to confirm or reject the software's decision. Biologists trained in the identification of bat echolocation calls conducted this manual vetting. References used to assist in visual inspection included Fenton and Bell (1981), Murray et al. (2001), Gannon et al. (2004), Humboldt State University Bat Lab (2011), Maxell et al. (2015), Chenger et al. (2016). Manual inspection attempted to identify bat recordings to species where possible. However, good quality recordings with harmonics and key characteristics are required to differentiate species with overlapping call parameters. Such recordings are difficult to obtain, particularly where noise and wind reduces call quality. Because of the significant overlap in calls, differentiation of some species (e.g., silver-haired bat and big brown bat or among Myotis spp.) can be difficult.

2.8.2 Redside Dace

Memos were prepared for MECP regarding the potential for Redside Dace habitat on the Subject Property. This is discussed later in the report.

2.9 Significant Wildlife Assessment

The criteria for the identification of SWH features are provided in the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (Ontario Ministry of Natural Resources and Forestry 2015). Note that the Subject Property is wholly within Ecoregion 6E, while the GEI CEISMP Study Area also touches Ecoregion 7E. These criteria were used to screen wildlife habitat within the Subject Property for potential SWH types. Along with field observations and geographical analysis, these criteria were used to provide an assessment and screening of wildlife habitat within the Subject Property for potential SWH types within and immediately adjacent to the Subject Property. There is also a *Peel-Caledon Significand Woodlands and Significant Wildlife Habitat Study* (North South Environmental et. al 2009). As the provincial Ecoregion Criteria is more recent, and the Peel-Caledon study was not formally adopted into the Region of Peel's policies, we have emphasized the MNRF criteria and have also reviewed the Peel-Caledon study.

2.10 GEI Field Methodologies

2.10.1 Headwater Drainage Feature Assessment

Following the requirements of the Headwater Drainage Feature (HDF) Assessment Guidelines (Toronto and Region Conservation Authority and Credit Valley Conservation 2014), GEI completed three rounds of surveys to assess HDFs on the Subject Property. HDFs were completed on April 5, 12, June 12 and August 29, 2017. April 27 and June 13, 2018 and April 13, May 18 and August 11, 2023 (GEI Consultants 2023).

2.10.2 Acoustic Bat Surveys

To assess bat occurrence within the Subject Property, an acoustic monitoring station was selected based on results from the bat habitat assessment survey. An Acoustics Song Meter SM3BAT was deployed for 6 nights in June 2017.

In addition, EchoMeter Touch recording devices were utilized for transect and point count surveys for three nights in June around areas with buildings (in the Former Farmstead area). Point count surveys were completed by two individuals standing on opposite sides of the structure with the detector held above their heads for 10 minutes (GEI Consultants 2023). Follow-up bat surveys for these buildings were recommended by GEI, but our understanding is that these buildings were removed (before Prologis owned the property) and are no longer present on the Subject Lands.

2.10.3 Bat Habitat Structure Assessment

Surveys were completed following MNRF survey guidelines as outlined in Bats and Bat Habitats: Guidelines for Wind Power Projects (Ontario Ministry of Natural Resources 2011), consultation with the MNRF, and professional experience. Bat habitat surveys occurred on April 21, 2017 and August 22, 2022.

2.10.4 Turtle Nesting and Emergence Surveys

Species-specific habitat preferences (COSEWIC 2008) and the survey methods of the MNRF (2015) and Toronto Zoo (Caverhill, et al. 2011) (Caverhill et al. 2011; Kula. 2011) were considered in the formulation of this survey protocol. Turtle nesting and emergence surveys occurred on June 8 and 14, 2017. May 2 and 16, 2018 (GEI Consultants 2023).

2.10.5 Insect Surveys

Insect surveys do not currently have a set protocol in Ontario. Species detection is dependent on repeated visits during the appropriate flight times for a given species in suitable habitat. Dragonflies and butterflies are conspicuous, easily observed and have plentiful resources to aid in identification of Ontario species and as a result, focus was on these groups during surveying (GEI Consultants 2023). Insect surveys occurred on June 12, 28 and July 26, 2017.

2.10.6 Fish Community Surveys

Fish community sampling was completed to confirm the distribution and extent of direct fish habitat within watercourses and headwater drainage features on the Subject Property, while also identifying species diversity and relative abundance (GEI Consultants 2023).

Sampling methodology was based off the Ontario Stream Assessment Protocol standard single pass survey method (Stanfield, et al. 2013). Fish community surveys occurred on July 4, 2017.

2.10.7 Snake Transect Surveys

Survey methods are based on the MNRF (2016) and Toronto Zoo (Caverhill, et al. 2011) snake survey protocols and are also informed by specifies-specific habitat preferences. Snake transect surveys occurred on September 20, 2017, May 16, 17 and 23, 2018.

2.10.8 Terrestrial Crayfish Surveys

Evidence of the presence of terrestrial crayfish (i.e., chimneys) were recorded incidentally during other wildlife surveys in 2017 and 2018. An additional survey, specifically targeting terrestrial crayfish was undertaken in November 2021. Records of their chimneys and/or burrows were noted to confirm the presence or absence of terrestrial crayfish within the Subject Property (GEI Consultants 2023).

3.0 Policy

3.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) provides direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features and resources (Ontario Ministry of Municipal Affairs and Housing 2020). The PPS defines eight types of Natural Heritage Features (NHF) and adjacent areas and provides planning policies for each. Of these NHF, development is not permitted in:

- Significant Coastal Wetlands;
- Significant Wetlands in Ecoregions 5E, 6E and 7E;
- Fish Habitat, except in accordance with provincial and federal requirements; or
- Habitat of species designated as Endangered and Threatened, except in accordance with provincial and federal requirements.

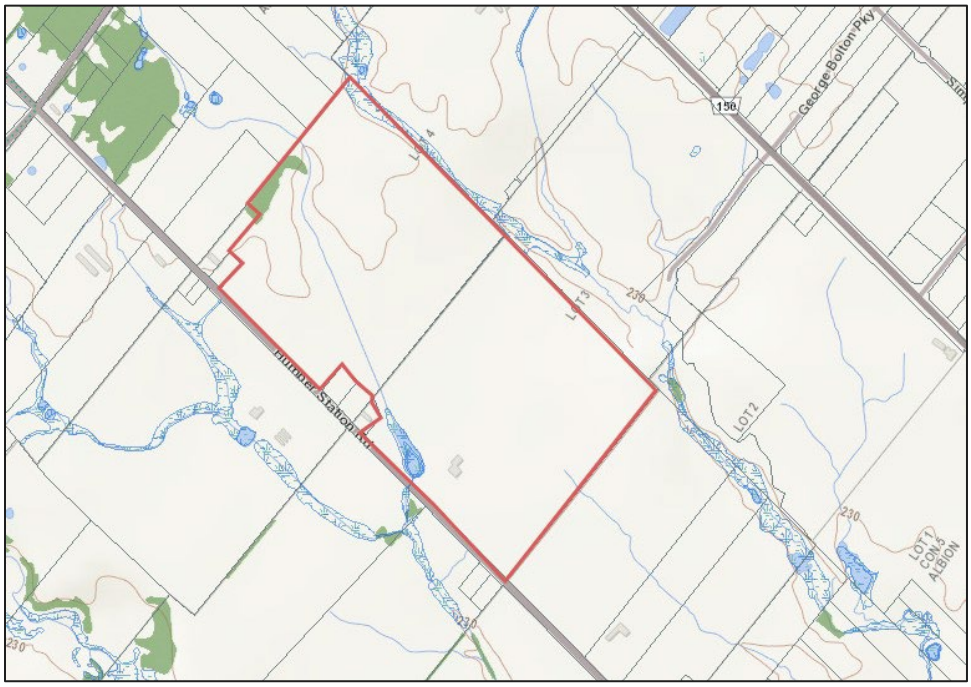
Additionally, unless it can be demonstrated through an Environmental Impact Study (EIS) that there will be no negative impacts on the natural features or their ecological functions, development and site alteration are also not permitted in:

- Significant Wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
- Significant Woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River);
- Significant Valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River);
- Significant Wildlife Habitat;
- Significant Areas of Natural and Scientific Interest (ANSI);
- Other Coastal Wetlands in Ecoregions 5E, 6E and 7E; and
- Lands defined as Adjacent Lands to all the above natural heritage features.

Each of these natural heritage features is afforded varying levels of protection subject to guidelines, and in some cases, regulations.

As depicted on the MNRF's NHIC mapping (**Map A**), the Subject Property includes areas of woodland, unevaluated wetlands and watercourses. The watercourse appears connected/adjacent to the West Humber River Main Branch.

Map A: NHIC mapping depicts the Subject Property (red) which includes woodland (green), unevaluated wetland (hollow wetland symbol) and waterbodies (blue) within and adjacent to the Subject Property



3.2 Peel Official Plan

The Region of Peel Official Plan (OP) was adopted by Regional Council on July 11, 1996. It was approved with modification by the Ontario Ministry of Municipal Affairs and Housing (OMMAH) in 1996. Portions of the plan are under appeal at the Ontario Municipal Board (OMB). The latest office consolidation was undertaken in April 2022 (Region of Peel 2022).

Outside of other provincial plan areas, natural heritage features in Peel Region are protected by its Greenlands System, which consists of Core Areas, Natural Areas, and Corridors (NAC), and Potential Natural Areas and Corridors. Core Areas are designated on Schedule C-2 (Core Areas of the Greenlands System of Peel) of the Official Plan, and are intended to represent the most important natural features in Peel; providing the best uninterrupted natural systems and highest biodiversity as identified through the OP. Natural Areas and Corridors and Potential Natural Areas and Corridors are to be identified and protected in lower tier municipal official plans in accordance with the policies outlined in the Peel Official Plan.

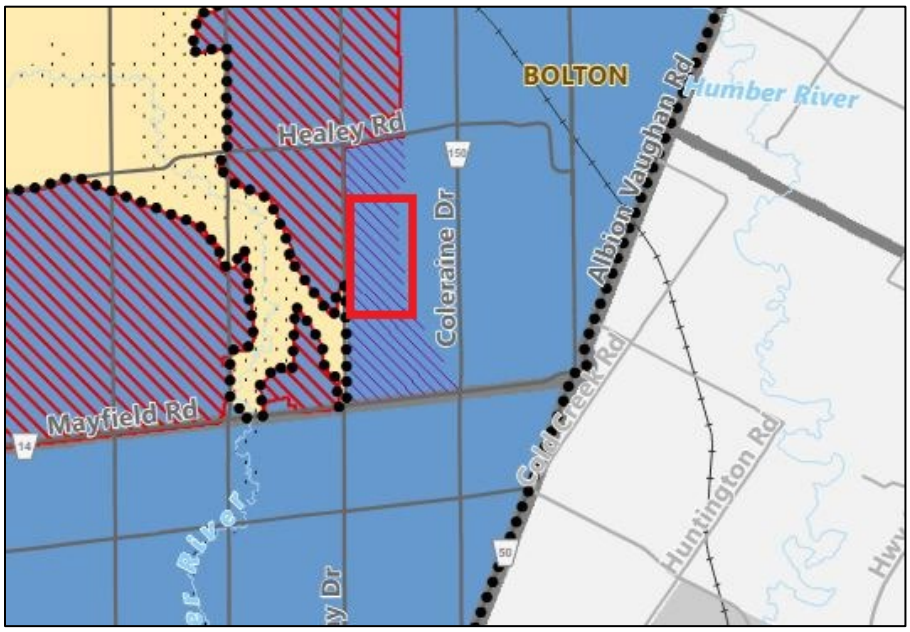
Core Areas include significant wetlands, Significant Woodlands (criteria provided), Other Woodlands, Environmentally Sensitive Areas, ANSI's, significant habitats of threatened and endangered species, and core valley and stream corridors (criteria provided). Development is generally prohibited within Core Areas.

The Region's OP does not prescribe minimum buffer or setback standards for Core Areas but does provide direction to area municipalities to provide such standards.

Natural Areas and Corridors (NAC) include evaluated non-provincially significant wetlands, NAC woodlands (criteria provided), significant wildlife habitat, fish habitat, other valley and stream corridors not meeting criteria as Core Areas, headwater source and discharge areas, and others. Regional policies encourage municipalities to incorporate policies for the identification and appropriate protection of these features as well as for Potential Natural Areas and Corridors.

According to the Region's OP Schedule E-1 (Regional Structure), the Subject Property is entirely within the Urban System and Bolton Residential Expansion Settlement Area (**Map B**). However, the Region's OP Schedule C-2 (Core Areas of the Greenlands System in Peel), shows that the Subject Property includes areas within the Region of Peel Greenlands System (**Map C**). These features are associated with the West Humber River, including watercourses, wetlands and drainage features. Based on the woodland and wetland definitions and assessment criteria, the significance of features within the Subject Property will be determined and applicable buffers identified.

Map B: Region of Peel OP Schedule E-1 depicts the Subject Property (red outline) as within the Urban System (dark blue) and Bolton Residential Expansion Settlement Area (cross hatching)



Map C: The Region of Peel OP Schedule C-2 depicts the Subject Property (red outline) as partially within the Core Areas of the Greenlands System (green polygon)

3.3 Town of Caledon

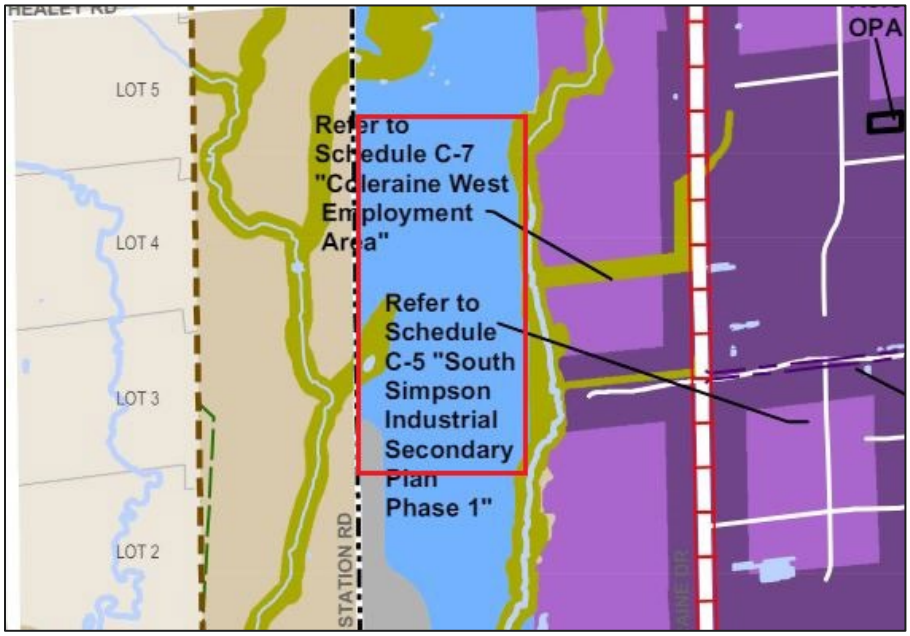
The Town of Caledon Official Plan (OP) underwent office consolidation in March 2024. The OP's Environmental Policy Area (EPA) designation includes all Natural Core Areas and Natural Corridors. As stated in the OP's Section 5.7.3.1.1, new development is prohibited within areas designated EPA on the OP Land Use Schedules, with the exception of the permitted uses specified in Section 5.7.3.1.2 of the OP.

Schedule C of the Town of Caledon Official Plan designates Environmental Policy Area (EPA) through the watercourses and wetlands onsite (**Map D**). EPAs within the Site are protected and appropriate buffers have been proposed through the EIS that consider the ecological functions.

3.3.1 Other Wetlands

Beyond EPA areas, there are other wetlands on the Subject Property. OP Policy 3.2.5.4.2 states that "*New development will not be permitted in Other Wetlands unless it can be demonstrated that such development will not result in the degradation of ecosystem integrity, to the satisfaction of the Town, the Conservation Authority, the Ministry of Natural Resources and Forestry, or other delegated authority".*

Map D: The Town's OP Schedule C depicts the Study Area (red outline) as within the New Employment Area (blue layer), Environmental Policy Area (olive layer) and Highway 413 Transportation Corridor (grey layer)



3.3.2 Woodlands

Core Woodlands in the Town Of Caledon are those that: *South and East of the Niagara Escarpment and Oak Ridges Moraine Conservation Plan Areas, (*are*) areas meeting one or more of the criteria for Core and Natural Areas and Corridors Woodlands in Table 1 of the Region of Peel Official Plan*.

Within the OP Section 3.2.5.3.1 states that: *New development within Woodland Core Areas is prohibited in accordance with Section 5.7, with the exception of the permitted uses as specified in policy 5.7.3.1.2.*

In the Phase 2 CEISMP report, GEI proposes an amendment to the OP to address proposed encroachments into a woodland feature at the north end of Subject Property. The text below is from the GEI CEISMP.

> Through the Phase 2 CEISMP report, the above impacts were contemplated and assessed in alignment with relevant legislation, policies and regulations. To ensure alignment with the Town of Caledon Official Plan (2018) the Phase 2 CEISMP was prepared in conjunction with the Humber Station Employment Area Secondary Plan policies, which were revised to address specific environmental conditions for the preliminary NHS. This includes a proposed amendment to the Town of Caledon's Official Plan (2018) to modify how Core Woodland Areas can be addressed during planning applications as follows:
>
> > *7.16.7.3. The limits of wetlands, woodlands, and stream corridors within the Secondary Plan Area are established through the recommendations of the CEISMP and form the basis for the Environmental Policy Area designation.*
> > *The recommendations of the CEISMP may include minor modifications (i.e. encroachment/removal and appropriate compensation) of Woodland Core Areas, which may be permitted through an approved Environmental Management*

Plan (in accordance with 5.7.3.1.2). Development and site alteration will not be permitted within this designation except as set out in the CEISMP.

It is assumed that upon approval of the secondary plan policies submitted as part of the OPA for this Secondary Plan area, that the preliminary NHS will proceed to include minor compensation and enhancement of the Core Areas; the details of this compensation are included in this report and will be further detailed through an Environmental Management Plan (EMP) as required.

3.4 Humber Station Employment Area - Secondary Plan

The Humber Station Employment Area Secondary Plan (OPA287) was adopted by Council on July 8, 2025. This Secondary Plan conforms to the Region of Peel Official Plan and is based on the principles and policies as established in Section 23.6 of the Official Plan. The following *sections from the Plan in italics are relevant to this study.*

The Humber Station Employment Area Secondary Plan covers approximately 236 gross hectares in Bolton, within the Town of Caledon. The Secondary Plan Area is bounded by Humber Station Road to the west, Mayfield Road to the south, Healy Road to the north and the Coleraine West Employment Area Secondary Plan Area boundary to the east.

The 2022 Peel Regional Official Plan identifies the Secondary Plan Area as part of the Urban System and Bolton Residential Expansion Settlement Area (Schedule E1) and designates it Employment Area (Schedule E4).

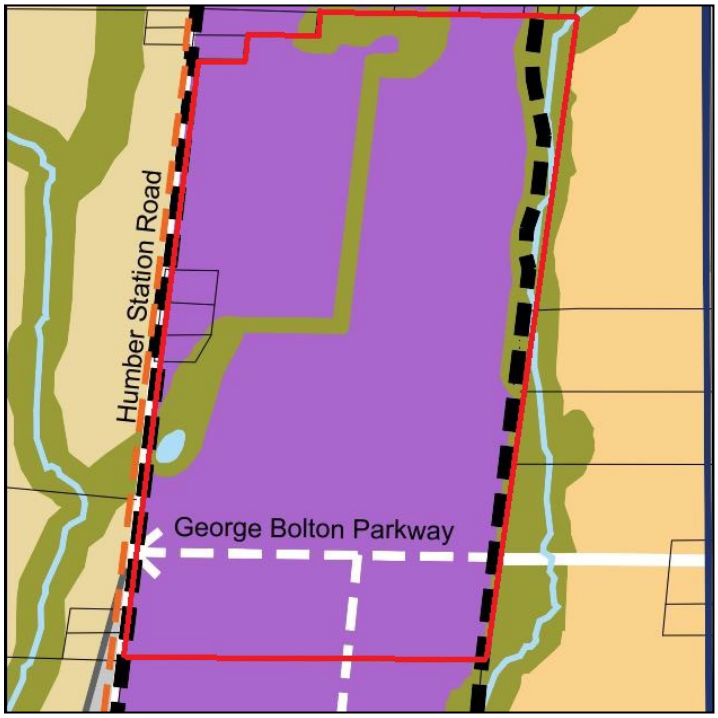
As per section 8.1: *The Natural Heritage System lands within the Humber Station Employment Area are designated as Natural Features and Areas on Schedule XX. Lands designated Natural Features and Areas shall be in accordance with the policies of Section 13 of this Plan as well as the following specific policies. The Subject Property is located within the General Employment Area and Natural Features and Areas (Map E).*

According to Section 8.2: *The refined development limit will be set through the completion of an EIS to the satisfaction of the Town of Caledon and based on the current planning policies of this Plan, relevant Region of Peel, Provincial and Conservation Authority policies.*

Section 8.3 of the secondary plan states*: Where appropriate and as permitted in accordance with applicable Provincial policies, the refined development limit may result in alterations, additions, eliminations or relocations of the Natural Features and Areas, which will not require amendment to this Plan. Exact limits will be implemented through zoning.*

As per section 8.4: *The Natural Features and Areas designation within the Secondary Plan Area includes a conceptual drainage realignment in the central portion of the plan and will require an EIS to the satisfaction of the Town prior to consideration of its refinement and/or relocation.*

Map E: The Humber Station Employment Area Draft Secondary Plan Land Use Plan Schedule depicts the Subject Property (red boundary) within the General Employment Lands (purple layer) and Natural Features and Areas (green layer)



3.5 Toronto and Region Conservation Authority

The Subject Property falls within the jurisdiction of the TRCA (**Map F**). Under the newly updated and consolidated Conservation Authorities Act (Government of Ontario 2023), and its associated Ontario Regulation 41/24 (*Prohibited Activities, Exemptions and Permits*), TRCA regulates activities in natural and hazardous areas (i.e. watercourses, flood plains, steep slopes, valley lands, meander belts, shoreline of Lake Ontario, wetlands and hazardous land).

Map F: TRCA Regulated Area mapping depicts the Subject Property (approximately boundaries in red) within TRCA regulated lands (yellow layer)

Under section 28 of the Conservation Authorities Act (2024). The following activities are not permitted within the area of jurisdiction of an authority:

1 Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.

2 Development activities in areas that are within the authority's area of jurisdiction and are:

i. hazardous lands,

ii. wetlands,

iii. river or stream valleys the limits of which shall be determined in accordance with the regulations,

iv. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations, or

v. other areas in which development should be prohibited or regulated, as may be determined by the regulations. 2017, c. 23, Sched. 4, s. 25; 2022, c. 21, Sched. 2, s. 7 (1).

Under section 28.1 (1)**:**

An authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority,

i. the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;

ii. the activity is not likely to create conditions or circumstances 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; and

iii. any other requirements that may be prescribed by the regulations are met. 2017, c. 23, Sched. 4, s. 25; 2022, c. 21, Sched. 2, s. 9 (1).

TRCA Regulated Area lands exist within the limits of the Site, in association with watercourse and wetlands. Development within these areas will be subject to approvals and permitting from the TRCA.

3.6 Endangered Species Act

Species designated as Endangered or Threatened by the Committee on the Status of Species at Risk in Ontario (COSSARO) are listed as Species at Risk (SAR) in Ontario (Government of Ontario 2007). These SAR and their habitats (e.g., areas essential for breeding, rearing, feeding, hibernation, and migration) are afforded legal protection under the *Endangered Species Act, 2007* (ESA). This *Act* is administered by the Ministry of Environment, Conservation and Parks (MECP).

The protection provisions for species and their habitat within the ESA apply only to those species listed as Endangered or Threatened on the SARO list, being *Ontario Regulation 230/08* of the ESA. Species listed as Special Concern may be afforded protection through policy instruments respecting significant wildlife habitat (e.g., the PPS) as defined by the Province, other relevant authority, or other protections contained in Official Plans.

4.0 Existing Conditions

4.1 Aquatic Assessment

Building off of the aquatic habitat information collected by GEI as part of the 2023 CEISMP report, the aquatic habitat conditions within the Subject Property were surveyed on April 13 and May 18, 2023 by SLR staff. Both site visits were completed alongside GEI technical staff members.

The aquatic environment within the Subject Property is divided between two subwatersheds, both located within the larger West Humber River watershed. The western portion of the property drains westwards towards the Gore Road Tributary located on the west side of Humber Station Road, and the eastern portion of the Subject Property drains east and southeast towards the Clarkway Drive Tributary. The Clarkway Drive Tributary straddles the eastern limit of the Subject Property, overlapping with the northern-most property edge before meandering offsite.

Through background review, the Gore Road Tributary arises from headwater areas located north of Healey Road, within a predominantly agricultural setting with commercial and industrial land uses to the east. From its headwaters, the Gore Road Tributary traverses an agricultural mosaic, and intersects with Humber Station Road and Gore Road before finally emptying into the West Humber River just north of the Highway 407 corridor. At Castlemore Road, land use abruptly changes from an agriculturally-dominated landscape to urbanized residential. Immediately upstream (~500 m) of its confluence with the West Humber River, the Gore Road Tributary confluences with the Clarkway Drive Tributary (Aquafor Beech Limited. 2016)

Differing from the Gore Road Tributary, the headwaters of the Clarkway Drive Tributary arise in an area entirely positioned within existing development; mostly commercial and industrial land uses centred around the Coleraine Drive and Healey Road intersection. From there, the Clarkway Drive Tributary runs somewhat parallel to the Goreway Drive Tributary, traversing an agricultural mosaic, until Castlemore Road, where the predominant land-use transitions to urbanized residential. North of the Highway 407 corridor, the Clarkway Drive Tributary confluences with the Gore Road Tributary before emptying into the main branch of the West Humber River, upstream of the Claireville Reservoir (Aquafor Beech Limited. 2016) .

4.1.1 Headwater Drainage Features

Within the Subject Property, the aquatic habitat is composed predominantly of Headwater Drainage Features (HDFs). Following feature labels provided in GEI's Humber Station CEISMP, features segments HDF-1b (partly), HDF-2a, HDF-2-1a, HDF-2-2a, HDF-3a, HDF-3-1a, HFD-3b, HDF-3c, HDF-3d, HDF-3e, HDF-3-2a, HDF-6a, HDF-7a, HDF-7-1a, HDF-8c (partly), HDF-8d, HDF-8c-2a-2, and HDF14a are located within the Subject Property **(Figure 2**). The various HDF feature segments, and their respective management recommendations assigned by GEI, are provided in **Table 2**. Within the HDF-3b feature is an elongated pond feature which provides more extensive aquatic habitat potential, as well as other ecological habitat functions. Besides the aquatic habitat provided along HDF features, a portion of the main stem of the Clarkway Drive Tributary also straddles the eastern property limit.

Table 2: HDF Segments within the Subject Property and GEI Assigned Management Recommendations

HDF Segment	Management Recommendation (as assigned by GEI in the 2023 CEISMP)
HDF-1b (partly)	Mitigation
HDF-2a	Mitigation
HDF-2-1a	No Management
HDF-2-2a	No Management
HDF-3a	Conservation
HDF-3-1a	No Management
HFD-3b	Protection
HDF-3c	Protection
HDF-3d	Conservation
HDF-3e	Protection
HDF-3-2a	No Management
HDF-6a	No Management
HDF-7a	Mitigation
HDF-7-1a	No Management
HDF-8c (partly)	Mitigation
HDF-8d	Mitigation
HDF-8c-2	Mitigation
HDF-14a	No Management

As outlined in Section 5, development is proposed to be situated in proximity, or overlap, with portions of HDF3 and HDF8. As a result, the focus of SLR's 2023 field investigations were focused along these HDF segments. For the remainder of HDF segments that are located outside of the main HDF-3 and HDF-8 drainage segments, HDF information documented by GEI from 2017 to 2020 has been brought forward into this EIS. No Conservation or Protection segments were identified as part of the segments associated with HDF-1, HDF-2, HDF-6, HDF-7 or HDF-14, nor the smaller drainage segments of HDF-3 and HDF-8, including segments HDF-3a, HDF-3-1a, and HDF-3-2a, as captured by GEI and outlined in **Table 2** above. Results of the 2023 SLR site surveys for the main HDF-3 and HDF-8 drainage networks are outlined in **Table 3** below. Results of SLR site surveys are then compared alongside GEI's 2017-2023 site information, and a final management recommendation is then assigned.

The main segments of the HDF-3 and HDF-8 drainage areas were surveyed by SLR staff on April 13, and May 18, 2023 alongside GEI technical staff members.

Table 3: HDF Segments within the Subject Property and GEI and SLR-Assigned Management Recommendations

HDF Segment	Hydrologic Function	Riparian Function	Fish and Fish Habitat Function	Terrestrial Function	Management Recommendation (as assigned by GEI in the 2023 CEISMP from 2020 Data)	Management Recommendation (as assigned by SLR in the 2024 EIS from 2023 Data)
HDF-3a	Valued, FC-4 (First Visit), FC-4 (Second Visit)	Valued (Meadow ditch)	Contributing	Valued	Conservation	Conservation
HDF-3b	Valued (Ponded area), FC-2 for both visits	Important (Wetland)	Important	Important	Protection	Protection
HDF-3c	Valued, FC-4 (First Visit), FC-2 (Second Visit)	Valued (Meadow)	Valued	Important	Protection	Protection
HDF-3d	Contributing, FC-4 (First Visit), FC-1 (Second Visit)	Limited (Cropland)	Valued	Contributing	Conservation	Conservation
HDF-3e	Valued, FC-4 (First Visit), FC-2 (Second Visit)	Important (Wetland)	Valued	Important	Protection	Protection
HDF-8c (partly)	Limited, FC-1 (First Visit), FC-1 (Second Visit)	Limited (Cropland)	Contributing	Limited	Mitigation	No Management Required

HDF Segment	Hydrologic Function	Riparian Function	Fish and Fish Habitat Function	Terrestrial Function	Management Recommendation (as assigned by GEI in the 2023 CEISMP from 2020 Data)	Management Recommendation (as assigned by SLR in the 2024 EIS from 2023 Data)
HDF-8d	Limited, FC-1 (First Visit), FC-1 (Second Visit)	Limited (Cropland)	Contributing	Limited	Mitigation	No Management Required
HDF-8c-2	Limited, FC-1 (First Visit), FC-1 (Second Visit)	Limited (Cropland)	Contributing	Limited	Mitigation	No Management Required

For the most part, SLR's onsite review of the HDF features were interpreted similarly to results previously collected by GEI, with minor differences being identified for certain HDF segment function classifications. In terms of overall management recommendations, SLR and GEI identified similar management recommendations for HDF-3 but determined slightly different management recommendations for HDF-8, within the Subject Property. Through discussions with GEI, it was identified that potential Redside Dace habitat may exist within the Subject Property and would require consultation with MECP to verify the habitat's provincial designation. Following formal consultation with MECP staff in early 2025, and subsequent email correspondence (see later sections), it was determined, in MECP's opinion, that HDF-8 was not considered Redside Dace habitat (contributing habitat). Following this formal update from MECP, and factoring in the limited riparian, fish and terrestrial habitat functions of the HDF-8 segments, a management recommendation of No Management was agreed upon with GEI. HDF feature locations with their associated management recommendations are outlined in **Table 3** and shown on **Figure 2**.

4.1.2 Other Aquatic Features

4.1.2.1 HDF-3b Pond

Besides HDFs, two other aquatic habitat features are located within the Subject Property. The first exists along the HDF-3b segment, and includes a small, elongated pond feature which appears to be the result of backwatering from a small beaver dam, constructed just east of the Humber Station Road corridor (**Photo 1**). Later, in June of the same year (2023), the dam was broken and although the wetland likely had lower water levels it was still a feature with notable ponded standing water. Evidence of a concrete flow management structure was observed next to the beaver dam but did not appear to be functioning in any capacity during the 2023 site visits. From onsite review, the ponded area appeared to be fairly shallow (<2 m in most locations) with well-vegetated banks on all sides. During the May 2023 site visit, the pond was being utilized by various wildlife, including beaver and birds, and provides suitable habitat for amphibians and turtles (as confirmed by surveys). The upstream portion of the ponded area included submerged terrestrial vegetation including Reed-Canary grass.

Photo 1: Beaver dam (>1m in height) at the downstream extent of HDF segment HDF-3b

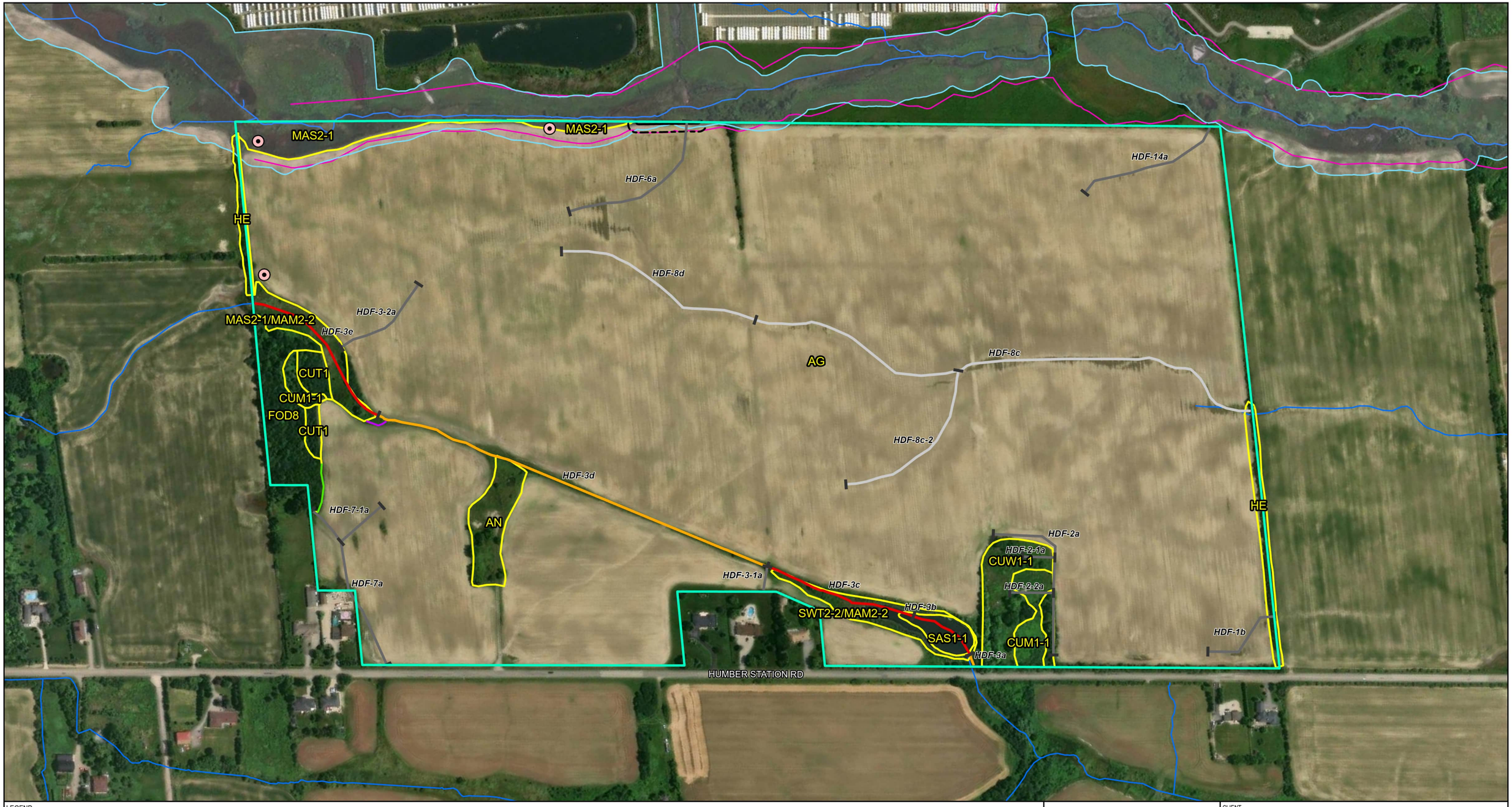
4.1.2.2 Clarkway Drive Tributary

Besides the ponded area, the other aquatic habitat feature within the Subject Property was a portion of the Clarkway Drive Tributary which overlaps the northern-most portion of the property parcel. As outlined in the 2023 CEISMP, the Clarkway Drive Tributary is approximately 1.35 m in wetted width, with an average wetted depth of 0.1 m. Bankfull measurements are approximately 3.46 m in width and 0.56 m in depth. The riparian area is composed of predominantly Reed Canary Grass with bulrushes (*Scirpus sp.*) and cattails (*Typha sp.*) scattered throughout. Generally, the channel morphology is straight with occasional tight meanders, and instream habitat includes runs and riffles. Channel substrates are primarily silt and clay with gravel (GEI Consultants Ltd. 2023).

Photo 2: The general riparian corridor area of the Clarkway Drive Tributary

4.1.3 Aquatic Species at Risk

It should be noted that GEI, as illustrated in their CEISMP reporting, identified the Clarkway Drive Tributary, its associated riparian wetland communities, and HDF-8, as being Contributing Redside Dace habitat. GEI noted that from DFO's aquatic habitat mapping, Occupied Redside Dace habitat is mapped for a tributary to the West Humber River approximately 4.9 km downstream of the CEISMP Study Area (GEI Consultants Ltd. 2023). The CEISMP Study Area, and thus the Subject Property of this report, are located within TRCA's Fish Management Zone 7, which includes target species of Redside Dace, Rainbow Darter and Smallmouth Bass. SLR/SLR plans to contact MECP to further discuss the status of this Species at Risk on the property.



LEGEND

- Terrestrial Crayfish Chimney (GEI 2023)
- Watercourse [1]
- Top of Bank [2]
- Dripline [2]
- Creek Bank [2]
- LTSTOS (PNJ) + 10m

HDF Management Recommendations

- Conservation
- Protection
- No Management
- Assessed as part of the 2023 GEI CEISMP

- Regional Floodline + 10m
- Ecological Land Classification (ELC)
- Subject Property

1 - Geospatial Ontario
2 - Staked on October 19, 2021 by Toronto Region Conservation Authority (TRCA) and GEI Consultants

Note - Existing floodline for HDF3 system not available

ELC DESCRIPTIONS

AG – Active agricultural
AN – Anthropogenic (former garden)
CUM1-1 – Dry-Moist Old Field Meadow
CUT1 – Mineral Cultural Thicket (Buckthorn)
CUW1 – Mineral Cultural Woodland
FOD8 – Fresh-Moist Deciduous Forest (Basswood)
HE – Hedgerow
MAS2-1 – Cattail Mineral Shallow Marsh
MAM2-2 – Reed -canary Grass Mineral Meadow Marsh
SAS1-1 – Pondweed Submerged Shallow Aquatic
SWT2-2 – Willow Mineral Thicket Swamp

Key Map

0 50 100 150
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 17

Scale: 1:4,500
Page Size: Tabloid (11 x 17 inches)

Drawn: RS
Checked: RC
Date: Aug 8, 2025

NORTH

Source Notes: Imagery (2024) provided by ESRI Map Services. Contains information licensed under the Open Government License – Ontario.

CLIENT: Prologis

PROJECT: 12519 and 12713 Humber Station Road

TITLE: **Existing Environmental Conditions**

SLR

REF. NO. 2008102-2-7

Figure 2

Document Path: G:_Projects\243\243_024265_HumberStnRd\1_Workspace\1_Maps\202507_EISFigures_xx\202507_EISFigures_xx.aprx

4.2 Ecological Land Classification and Flora

The Subject Property is dominated by actively cultivated fields (**Photo 3**), with row crops of soybean and corn. Natural areas are generally small and often disturbed by cultural use. There is a linear system of marsh, meadow marsh, and upland meadows along the drainage feature that is just east of the subject property (i.e. Clarkway Tributary). There are also three small wetlands, including a pond with border of natural vegetation on the subject property.

Photo 3: The majority of the Subject Property is agricultural row crop (June 2022).

The following vegetation community descriptions are from the GEI CEISMP (2023) with some SLR additions and edits.

ELC Type	Community Description
Forest	
Deciduous Forest	
FOD8 Fresh-Moist Basswood Deciduous Forest	• A young regenerating community of Basswood (*Tilia americana*), and other deciduous trees which together form a minority of the canopy originating mostly from stump resprouts. • Thick tall shrub layer of Common Buckthorn (*Rhamnus cathartica*), which forms more than half of the canopy, with the occasional Choke Cherry (*Prunus virginiana*). • Moderately developed herb layer, which includes Virginia Strawberry (*Fragaria virginiana*). Much of the ground layer is composed of Buckthorn seedlings.

ELC Type	Community Description
Cultural	
CUM1-1 Dry-Moist Old Field Meadow	• A relatively diverse community of native species and exotics consisting of herbaceous plants and grasses. • The species include: Smooth Brome (*Bromus inermis*), Tall Goldenrod (*Solidago altissima*), Common Milkweed (*Asclepias syriaca*). • Canada Thistle (*Cirsium arvense*), Quack Grass (*Elymus repens*), New England Aster (*Symphyotrichum novae-angliae*), Chickory (*Cichorium intybus*), Orchard Grass (*Dactylis glomerata*), are likely also present along with other species.
CUT1 Buckthorn Cultural Thicket	• Open to dense community of Common Buckthorn, with occasional presence of young Green Ash (*Fraxinus pennsylvanica*) and Basswood. • Much of the ground layer is composed of Buckthorn seedlings but old field meadow grasses and forbs are also present.
CUW1 Mineral Cultural Woodland	• Former farmstead area (together with an old field community). Trees include Norway Maple (*Acer platanoides*), Manitoba Maple (*Acer negundo*), Honey Locust (*Gleditsia triacanthos*) and Poplar sp. (*Populus* sp.) (SLR, EIS and MHBC Tree Inventory, Protection and Removal, in progress). It is likely that many of these were planted, especially the Norway Maple and Honey Locust, whereas others may be natural regeneration
AG Agricultural	• Row crops of soybean and corn
HR Hedgerow	• Woody hedgerows are present along some subject property boundaries. Woody species include Common Buckthorn and other deciduous species.
AN Anthropogenic	• This small area was a former farm or residence and consists of a few trees and a meadow area.
Wetlands and Shallow Water	
MAM2-2 Reed-canary Grass Mineral Meadow Marsh	• These communities are dominated by Reed-canary Grass (*Phalaris arundinacea*), but other species are also present, such as Narrow Leaved Cattail (*Typha angustifolia*), Panicled Aster (*Symphyotrichum lanceolatum*) and others. (**Photo 4 and 5**). This community is present in two of the three wetlands on-site.
MAS2-1 Cattail Mineral Shallow Marsh	• The tall herb layer is dominated by Glaucous Cattail (*Typha x glauca*) and Narrow-leaved Cattail (*Typha angustifolia*). It is present along the Clarkway Tributary, and intermixed with meadow marsh in the north wetland (**Photo 5**).
SAS1-1 Pondweed Submerged Shallow Aquatic	• This pond community is dominated by Sago Pondweed (*Stuckenia pectinata*), with additional occurrences of Small Pondweed (*Potamogeton pusillus*), and Lesser Duckweed (*Lemna minor*), and is present in the wetland close to Humber Station Road (**Photo 4**).
SWT2-2 Willow Mineral Thicket Swamp	• Shrub thicket bordering a shallow aquatic community, composed primarily of Sandbar Willow (*Salix interior*), and Peach-leaved Willow (*Salix amygdaloides*) • Herbaceous species consisted primarily of Reed Canary Grass, Purple Loosestrife (*Lythrum salicaria*), Narrow-leaved Cattail, Red-stemmed Spikerush (*Eleocharis erythropoda*), and Panicled Aster.

Photo 4: Wetland pond (SAS1-1) surrounded by Reed-canary Grass Meadow Marsh (MAM2-2) (June 2023)

Photo 5: Marsh wetland (MAS2-1/MAM2-2) at north end with Buckthorn Thicket (CUT1) on left side (June 2023)

Several floral species were noted by SLR when on the property for other purposes (**Appendix A**). Additionally, GEI recorded all floral species in the larger Secondary Plan Study Area (**Appendix B**). Our observations were that the property contained a typical mixture of species for such a disturbed site. Some species were native, while others were non-native; in the larger GEI Study Area 52% were non-native. A similar percentage would be expected on the Subject Property.

None of the species observed by SLR nor GEI were Species at Risk, nor were any provincially rare (S1 to S3). In the GEI Study Area only two species were S4 (apparently secure in Ontario) with the remainder S5 (secure in Ontario). No species in the GEI Study Area had a coefficient of conservatism value above 6. 'Higher values of the coefficients of conservatism, on the scale of 1–10 (10 high), indicate species that are more "conservative" (or ecologically sensitive), including those least associated with anthropogenic disturbance, least aggressive, least able to spread, and most confined to particular natural habitat' (Catling 2013).

Locally rare species recorded by GEI on the subject property included:

- Pennsylvania Smartweed (Persicaria pensylvanica) – occasional on the shore of SAS1-1;
- Catchweed Bedstraw (Galium aparine) – occasional in FOD8;
- Peach-leaved Willow (Salix amygdaloides) – in SWT2-2;
- Sandbar Willow (Salix interior) – in SWT2-2;
- Small Pondweed (Potamogeton pusillus) – common in SAS1-1.

4.3 Breeding Amphibians

SLR conducted three amphibian surveys during the spring months (April, May, June) of 2023, targeting the wetland communities located within the Subject Property. A summary of the surveys is provided in **Table 4** and monitoring station locations are shown on **Figure 2**. Amphibian activity was not recorded during the first round of amphibian surveys. During the remainder of surveys, the 'pond' wetland (SWT2-2/MAM2-2/SAS1-1) near Humber Station Road, and the marsh associated with Clarkway Tributary had low amounts of amphibian activity. The former community had the highest diversity of species recorded in May, with three different species recorded. Low numbers of all species were recorded. The Subject Property does not support breeding amphibian habitat SWH. Amphibian activity and diversity recorded are too low to meet the threshold for this.

Table 4: Breeding Amphibian Survey Results (2023)

Community Type	Station Number	April 27, 2023	May 24, 2023	June 23, 2023
Weather Conditions:		7°C, Cloud cover <10%, Beauford Wind Scale No.1	15°C, Cloud cover 75%, Beauford Wind Scale No.0	22°C, Cloud cover 20%, Beauford Wind Scale No.0
SWT2-2/MAM2-2/SAS1-1 Wetland 'Pond' near Humber Station Road	**Station 1**	No calls	American Toad, Code: 1[2] Gray Treefrog, Code: 1[1]	Green Frog, Code: 1[1]

Community Type	Station Number	April 27, 2023	May 24, 2023	June 23, 2023
MAS2-1/MAM2-2 Wetland Adjacent to Woodlot (FOD8)	**Station 2**	No calls	No calls	No calls
MAS2-1 Wetland associated with Clarkway Tributary (north)	**Station 3**	No calls	American Toad, Code: 1[1]	No calls
MAS2-1 Wetland associated with Clarkway Tributary (central)	**Station 4**	No calls (dry, no water present)	No calls	No calls

Notes:

The calling codes are designated according to the Amphibian Road Call Counts (Gartshore *et al.* 2004).

They are as follows:

1 – Individuals of one species can be counted, calls are not overlapping; second number denotes number of individuals.

2 – Calls of one species are overlapping; second number denotes estimated number of individuals.

3 – Full chorus of one species, calls continuous and overlapping, individuals not distinguishable.

4.3.1 GEI Observations

GEI consultants conducted three amphibian surveys during the spring months (April, May, June) of 2017, targeting the wetland communities located within the Subject Property. A summary of the surveys is provided in **Table 5** and monitoring station locations are shown in the 2023 CEISMP report (GEI Consultants 2023). Note that the first column refers to the type of habitat the survey station is within and not the calling amphibians; we have extrapolated to determine the latter. Low levels of amphibian calling were recorded in the 'pond' wetland near Humber Station Road (Station 15 in Table 5) a well as the wetland beside the woodlot (SLR MAS2-1/MAM2-2 and GEI station 10). No calling amphibians were recorded at other locations on site. The 'pond' wetland had the highest diversity of species recorded with three species present. No early species were recorded during the surveys and American Toad was the most widespread species recorded. With, regard to SWH, the Subject Property does not support breeding amphibian habitat. Based on GEI data, amphibian activity and diversity recorded are too low to meet the threshold to be SWH.

Table 5: GEI Breeding Amphibian Survey Results (2017)

Survey Station Community Type	Station #	April 24, 2017	May 17, 2017	June 22, 2017
FOD8 Western portion of the property	**Station 1**	No calls	No calls, dry no water.	N/A
FOD8	**Station 2**	No calls	No calls, dry no water.	N/A
FOD8	**Station 3**	No calls	No calls, dry no water.	N/A

Survey Station Community Type	Station #	April 24, 2017	May 17, 2017	June 22, 2017
RES Western corner of property near Humber Stn Rd (Observing off-site garden pond)	**Station 10**	No calls	No calls	Green Frog 1[5]
MAM2-2 Adjacent to FOD8	**Station 11**	No calls	No calls, dry no water.	N/A
MAS2/MAM2 Northern corner of property	**Station 12**	No calls	No calls, dry no water.	N/A
RES Southwestern portion of property	**Station 13**	No calls	No calls, dry no water.	N/A
SAS1-1 Along Humber Station Road (assumed recorded off-site)	**Station 14**	American Toad 1[2]	American Toad 1[3]	No calls
SAS1-1 North of Humber Station Road, adjacent to open pond	**Station 15**	No calls	American Toad 1[1] Northern Leopard Frog 1[1]	Green Frog 1[4]

Note:

The calling codes are designated according to the Amphibian Road Call Counts (Gartshore *et al.* 2004).

They are as follows:

1 – Individuals of one species can be counted, calls are not overlapping; second number denotes number of individuals.

2 – Calls of one species are overlapping; second number denotes estimated number of individuals.

3 – Full chorus of one species, calls continuous and overlapping, individuals not distinguishable.

Based on SLR and GEI data combined, frogs were heard calling from the a few locations stations in low numbers. As might be expected given the habitat, the ‘pond’ wetland (SWT2-2/MAM2-2/SAS1-1) near Humber Station Road contained the greatest diversity of species (American Toad, Northern Leopard Frog, Green Frog and Gray Treefrog). Only the Clarkway Tributary contained minimal numbers of American Toad.

These are the only locations on the Subject Property with breeding amphibians. With regard to SWH, the Subject Property does not support breeding amphibian habitat. Amphibian activity and diversity recorded are too low to meet the threshold to be SWH.

4.4 Breeding Birds

A total of 35 breeding season bird species were observed – five of these were foraging on-site only. (**Appendix C**). The majority of birds observed were disturbance-tolerant species that are

frequently found in rural areas (hedgerows, edges, gardens, fields etc.) and are common and widespread in southern Ontario. The four most abundant species in order of abundance were: Song Sparrow (*Melospiza melodia*), Red-winged Blackbird (*Agelaius phoeniceus*), American Robin (*Turdus americanus*), and American Goldfinch (*Cardeulis tristis*). Also common were Savannah Sparrow (*Passerculus sandwichensis*), Killdeer (*Charadrius vociferus*) and Horned Lark (*Eremophila alpestris*). This is not surprising given the expansive agricultural fields on the subject property. All three species are common in southern Ontario where agricultural row-crop fields are large and dominant.

Note that Savannah Sparrow is considered an area-sensitive open-land species. Area-sensitive species are those which either require larger patches of habitat (whether grassland or forest) in which to breed or are more productive in larger patches of habitat. Despite being area-sensitive, Savannah Sparrow is a very common species in southern Ontario in many types of agricultural and old fields.

Most of the bird species recorded in the small forest (FOD8) at the northern edge of the Subject Property would be considered edge or shrubland species. This is not surprising given the small size of the forest. Only one species, Eastern Wood-Pewee (*Contopus virens*), observed would be considered by SLR to be a forest species. However, it may not have been a breeding species as it was observed at the end of May only and may have been a migrant. GEI did not observe pewee in this location in 2017. Black-capped Chickadees (*Poecile atricapillus*) seen in hedgerows may have nested in this woodland.

None of the three wetlands on the property contained many wetland-specific bird species. Only a few common wetland species such as Spotted Sandpiper (*Actitis macularia*), Swamp Sparrow (*Melospiza georgiana*) and Common Yellowthroat (*Geothlypis trichas*) were recorded in one or more of the wetlands (**Appendix C**).

The wetland in the northeastern corner however is part of a larger off-site linear wetland and riparian corridor composed of marshes and old field habitat primarily. Thus, both SLR and GEI observed an other, mainly common, species off-site using this corridor. Additionally, species thought to primarily be associated with this corridor were recorded foraging or moving across the Subject Property fields. For example, three non-breeding species of swallow - Tree (*Tachycineta bicolor*), Barn (*Hirundo rustica*) and Rough-winged Swallow (*Stelgidopteryx serripennis*) - were observed on the Subject Property and a Norther Harrier (*Circus hudsonius*) (S4, L2) flew across the property. This uncommon raptor species of large grasslands could have been nesting in the off-site corridor, although there is no certainty to this. Also, a Clay-Coloured Sparrow (*Spizella pallida*), and uncommon species of some shrublands, was recorded off-site in this corridor.

No provincially ranked S1 through S3 species, and no known regionally rare species were observed. Two species observed are ranked as L3 by TRCA; these are Great Blue Heron (*Ardea herodias*) and Vesper Sparrow (*Pooecetes gramineus*). The heron was not a breeding species (which the rank primarily refers to) – it was observed feeding in the pond wetland in June 2023. Vesper Sparrow is a less common species of very large agricultural fields.

An Upland Sandpiper (*Bartramia longicauda*) was observed by GEI in 2017 in agricultural fields just north of the Subject Property. This is an area-sensitive, uncommon species of large old fields and pastures. As the habitat was not suitable and it was not observed again, it was assumed to be a non-breeding bird.

4.4.1 Avian Species at Risk

Two breeding season, Special Concern birds were observed on the Subject Property. These were Barn Swallow and Eastern Wood-Pewee. The Barn Swallow no longer nests on the Subject Property (as buildings have been removed).

As mentioned, one Eastern Wood-Pewee was observed in the small north woodland (FOD8) in late May. Another pewee was observed in the treed former garden area (CUW1) in the southwestern side of the property. This too was only recorded once in late May, so it is unknown if both were non-breeding late migrants or infrequently singing breeding birds. Despite its status, Eastern Wood-Pewee is still a common species found in deciduous and mixed woodlands of many types and sizes.

GEI did not observe any other breeding Species at Risk on the subject property.

4.5 Incidental Wildlife Observations

The overall area primarily features agricultural lands, wetlands, and woodland. Natural Heritage Features extend off the Subject Property and would provide many habitat opportunities. However, with adjacent agriculture and industrial uses, wildlife present is expected to primarily consist of common, generalist and urban-adapted species such as Raccoon (*Procyon lotor*), and Skunk (*Mephitis mephitis*).

Wildlife incidentally observed during field surveys include Coyote (*Canis latrans*), Muskrat (*Ondatra zibethicus*), Red Squirrel (*Sciurus vulgaris*) and Green Frog (*Rana clamitans*).

4.6 Species at Risk Assessment

The ESA provides protection for species listed as Endangered or Threatened in Ontario, including their habitat. The Species at Risk in Ontario (SARO) List also identifies species of Special Concern that may become Threatened or Endangered in the future. Species of Special Concern and their habitats are not protected under the ESA, rather through designation of Significant Wildlife Habitat.

Prior to 2023 field investigations, a background review was completed for potential SAR habitat opportunities. The NHIC database and other relevant sources were reviewed for SAR records. The Subject Property was screened for potential SAR habitat opportunities by comparing habitat preferences of the species identified from the background and site records against current site conditions. This SAR habitat assessment can be found in **Appendix D**, providing a detailed description of each species' habitat, as well as a discussion of habitat suitability within and surrounding the Subject Property. The following 19 SAR had the potential to occur on the Subject Property, based primarily on both past records in the general vicinity and our professional experience:

- Birds (8)
    - Acadian Flycatcher (*Empidonax virescens*), Endangered
    - Barn Swallow (*Hirundo rustica*), Special Concern
    - Bobolink (*Dolichonyx oryzivorus*), Threatened
    - Chimney Swift (Chaetura pelagica), Threatened
    - Eastern Meadowlark (*Sturnella magna*), Threatened
    - Eastern Whip-poor-will (*Antrostomus vociferus*), Threatened

  - Eastern Wood-pewee (*Contopus virens*), Special Concern
  - Least Bittern (Ixobrychus exilis), Threatened
- Herptiles (3)
  - Eastern Milksnake (*Lampropeltis triangulum*), Special Concern
  - Snapping Turtle (*Chelydra serpentina*), Special Concern
  - Western Chorus Frog (*Pseudacris triseriata*), Threatened (COSEWIC)
- Mammals (7)
  - Non-migratory bats:
    - Tri-colored Bat (*Perimyotis subflavus*), Endangered
    - Eastern Small-footed Myotis (*Myotis leibii*), Endangered
    - Little Brown Myotis (*Myotis lucifugus*), Endangered
    - Northern Myotis (*Myotis septentrionalis*), Endangered
  - Migratory bats:
    - Eastern Red Bat (*Lasiurus borealis*), Endangered
    - Hoary Bat (*Lasiurus cinereus*), Endangered
    - Silver-haired Bat (*Lasionycteris noctivagans*), Endangered
- Insect (1)
  - Monarch (*Danaus plexippus*), Special Concern
- Fish (1)
  - Redside Dace (*Clinostomus elongatus*), Endangered

Of these, the only species observed on or near the Subject Property were Eastern Wood-pewee, Snapping Turtle and Monarch. There is no suitable habitat for most of the other species; bats are discussed below.

Eastern Wood-pewee (*Contopus virens*) is still a common species found in many types of deciduous and mixed forest, as mentioned previously. It is found in small and large forests across southern and central Ontario. The species was observed in two locations, FOD8 and CUW1. But may or may not be breeding based on time of observations. As a Special Concern species, habitat is discussed more in the assessment of SWH (Section 4.8). The other seven SAR bird species were either not observed during surveys and/or suitable habitat is not present within the Subject Property.

Snapping Turtle (*Chelydra serpentina*) was observed in the ‘south pond’ (SAS1-1/SWT2-2/MAM2-2). Therefore, the Subject Property presents suitable habitat. As a Special Concern species, habitat is discussed more in the assessment of SWH (Section 4.8).

Monarch Butterly (*Danaus plexippus*) was not observed within the Subject Property. However, Monarch Butterfly was observed within the adjacent meadow marsh located to the east of the Subject Property. As a Special Concern species, habitat is discussed more in the assessment of SWH (Section 4.8).

4.6.1 Species at Risk Bats

Populations of several non-migratory bat species (the first four species listed above) have been in decline in recent years due to the spread of a fungal pathogen known as white nose syndrome. The other three species are migratory species that are thought to be impacted by wind turbines and thus were listed as Endangered in 2025.

Table 6 indicates the number of files (calls or passes) recorded in the two parts of the property surveyed. **Appendix E** (which was written for MECP and was submitted before the results of the Former Farmstead were analysed) provides information on bat habitat based on the presence of cavity trees as well as additional information.

Of the four non-migratory SAR bats, Eastern Small-footed is not expected due to its habitat preferences. The other three species were not recorded definitively during acoustic surveys, however four Myotis calls were recorded, thus either Little Brown and/or Northern is present. Additional unidentified High Frequency calls could have been one of these species.

Table 6: Results of Bat Acoustic Surveys

Species (common name)	Species (Scientific Name)	No of Files [a] (Former Farmstead, SLR 2025)	No. of Files (North Woodland, GEI 2017)
Big Brown Bat (not Species at Risk)	*Eptesicus fuscus*	4	16
Hoary Bat	*Lasiurus cinereus*	7	7
Silver-haired Bat	*Lasionycteris noctivagans*	2	4
Eastern Red Bat	*Lasiurus borealis*	-	5
Big Brown Bat or Silver-haired Bat		1	-
Unknown bat species (High Frequency), i.e. Myotis spp, Tri-colored or E. Red Bat		18	24
Unknown bat species (Low Frequency) i.e. Big Brown, Hoary, or Silver-haired Bat		3128	51
Unknown Myotis Species i.e. Little Brown or Northern Myotis	*Myotis*	4	-

Note:

a – Number of Files is not equal to number of individuals, but number of calls or passes recorded.

4.6.2 Redside Dace

As mentioned in Section 4.1.1, Redside Dace habitat was discussed with MECP through the preparation of two technical memorandums, one concerning HDF-8, and dated January 31, 2025, the other concerning HDF-3, and dated March 24, 2025. These technical memorandums are appended to this report in **Appendix F**.

The impetus for the MECP consultation was that GEI, through initial background review for the CEISMP reporting, found that Occupied reaches of the Clarkway Tributary existed downstream of the Subject Property, and through interpretation of Redside Dace habitat policy, connected drainage areas may need to be considered as potentially contributing habitat.

Following these initial assessments, SLR provided a summary of existing natural heritage and hydrologic conditions of HDF-8 and HDF-3 to MECP for review and comment. Overall, MECP agreed with SLR's evaluation of HDF-8 and did not consider the feature to provide 'contributing' ecological and hydrological function downstream, and thus it was not considered regulated habitat (See section 6.1 and associated appendices). For HDF-3, MECP indicated that due to the presence of riparian wetlands and other features that provide prolonged hydrologic function (i.e., online pond that draws down into the summer), HDF-3 likely meets the 'contributing' test and should be subject to minimum regulatory requirements. These requirements are outlined in Section 6.1.

4.7 Significant Wildlife Habitat Assessment

Significant Wildlife Habitat (SWH) can be difficult to appropriately 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. To help with site level assessments was completed based on draft criteria and thresholds developed by the Region of Peel and Town of Caledon (NSE *et al.,* 2009) based on the MNRF's *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (Ontario Ministry of Natural Resources 2015).

SWH is defined by the MNRF in the Significant Wildlife Habitat Technical Guide (Ontario Ministry of Natural Resources 2000) and Natural Heritage Reference Manual (Ontario Ministry of Natural Resources 2010) and includes the following categories:

- Seasonal Concentration Areas of Animals;
- Rare Vegetation Communities or Specialized Habitats for Wildlife;
- Habitats of Species of Conservation Concern; and
- Animal Movement Corridors.

Criteria for the identification of these features are provided in the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (OMNRF, 2015). These were used to screen wildlife habitat within the Subject Property for potential SWH (see **Appendix G** for full assessment). Based on the ELC ecosite, habitat screening and field surveys, SLR and GEI have determined that there are SWH habitat for Habitat of Species of Conservation Concern: Terrestrial Crayfish and Special Concern and Rare Wildlife Species (two species within this category).

Terrestrial Crayfish: GEI observed terrestrial crayfish chimneys in three locations on the Subject Property at the interface of the north and east wetlands and the agricultural fields. These locations are shown on Figure 4a from the GEI CEISMP (**Appendix H** this report) Thus, they have been considered SWH and SLR has carried this forward.

Special Concern and Rare Wildlife Species:

- Snapping Turtle: A Snapping Turtle was observed in the wetland containing the SAS1-1 (pond near Humber Station Road). This wetland (SAS1-1/SWT2-2/MAM2-2) has been considered SWH for this reason.
- Eastern Wood-Pewee: Single pewees were observed in two locations (FOD8 and CUW1-1) early in the breeding season. These individuals may or may not have been breeding on site (they would generally be heard later in June if breeding). Generally, SLR does not consider a single territory of pewee to be SWH since it is a common species in many forest types.

However, in this case, in order to be conservative, we have considered woodlands (forest ELC communities) that contain pewee to be SWH. Thus, the FOD8 is a SWH for this species.

- Monarch: GEI considered the MAM2-10/MAM2-2 adjacent to the property on the east side as SWH due to observations of Monarch and presence of milkweed. Therefore, there is SWH for this species adjacent to the Subject Property (**Appendix H** for location).

4.8 Assessment of Other Significant Natural Features

This section discusses the presence and status of woodlands and wetlands on the subject property. There are no Areas of Natural and Scientific Interest nor valleylands on the Subject Property.

4.8.1 Woodlands

The Subject Property supports one woodland area located along the northwestern boundary (Fresh-Moist Deciduous Forest FOD8) (**Figure 2)** which was identified for assessment. This woodland is also known as Woodland 2 in GEI reporting, as there is another woodland off-site in the larger CEISMP area. It is also referred to as the Northern Woodland in parts of SLR reporting. As aforementioned and reiterated below, the Town of Caledon considers significant woodlands as part of their Natural Heritage System. To assess whether this feature may be considered significant, the policies outlined in the Greenbelt Plan, the Region of Peel Official Plan (Table 1) and the Natural Heritage Reference Manual (Ontario Ministry of Natural Resources, 2010) have been reviewed, in addition to Town policy and discussion (by GEI). GEI and SLR consider this woodland area (~1.5 ha) a Significant Woodland due to its proximity to a wetland and a drainage feature HDF3. It includes the FOD unit as well as Buckthorn Cultural Thicket (CUT1) and Old Field Meadow (CUM1).

4.8.1.1 Region of Peel OP

As per the Region's OP, significant woodlands are one component of the Core Areas of the Greenlands System. Woodlands that are included as part of the Core Area, and considered 'significant', are mapped in the OP's Schedule C-2 and are considered "ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history". The Region OP defines relevant criteria and thresholds for the identification of Core, Natural Areas and Corridors (NAC) Woodlands in Table 1.

The recommended criteria / standards for the evaluation of significant woodlands are the following:

1 Woodland Size (0.5 ha or greater, based on the total forested area in the regional landscape)

2 Woodland Age (based on both woodland size and presence of native trees older than 100 years);

3 Significant Linkage function (based on woodland linkage to other significant features in the regional landscape);

4 Woodland Proximity (based on both woodland size and proximity to other significant features that support significant ecological relationships);

5 Surface Water Quality (based on woodland size and proximity to a watercourse, surface water feature, or wetland that can be identified with the Ontario Wetland Evaluation System);

6 Significant Species and Communities (based on woodland size, as well as GRANKS or SRANKS species, species at risk identified by COSEWIC or COSSARO, and/or specific forested communities)

The woodland (including buckthorn thicket) is approximately 1.52 ha based on SLR/SLR mapping, and 1.6 ha based on GEI mapping; the small difference being the exclusion or inclusion of the treed area at the end of the neighbouring property's garden. Based on the criteria above the Fresh-Moist Deciduous Forest (FOD8) GEI and SLR is considered an NAC Significant Woodland because it:

- is >0.5 ha
- associated with a drainage swale/watercourse (HDF3e) and wetland (MAS2-1/MAM2-2) which are located within 30 m of the woodland (GEI Consultants 2023).

Part of the south edge of the woodland was delineated by TRCA with GEI in October 2021. This is shown on **Figure 2** and integrated into our ELC boundaries.

4.8.1.2 Town of Caledon

As shown in section 3.3 of this report, the Town of Caledon in the main defers to Region of Peel definition of Significant (i.e. Core) Woodlands. Furthermore, the definition of any Woodland in the 2024 Town OP is:

> any area greater than 0.5 hectares that has:
>
> a) A tree crown cover of over 60% of the ground, determinable from aerial photography, or
>
> b) A tree crown cover of over 25% of the ground, determinable from aerial photography, together with on-ground stem estimates of at least:
>
> i) 1,000 trees of any size per hectare, or
>
> ii) 750 trees measuring over five centimetres in diameter at breast height (1.37m), per hectare, or
>
> iii) 500 trees measuring over 12 centimetres in diameter at breast height (1.37m), per hectare, or
>
> iv) 250 trees measuring over 20 centimetres in diameter at breast height (1.37m), per hectare (densities based on the Forestry Act of Ontario, 1998)
>
> and, which have a minimum average width of 40 metres or more measured to crown edges.

GEI studies indicate that this woodland meets the stem density given here (pers. communication). Also, the woodland is mostly about 70 m wide and at its widest is about 85 m wide, based on digital measurements.

4.8.2 Wetlands

GEI assessed the provincial significance of three wetlands using current Ontario Wetland Evaluation System (OWES) protocol (MNRF 2022), and two of these were determined they meet the criteria for significance as per OWES (GEI Consultants 2023).

These wetlands are those associated with the Clarkway Drive Tributary and the south 'pond' (**Figure 2**). Other wetland communities are too small (<2 ha) to meet the OWES size criteria.

The wetland parts of the Clarkway Drive Tributary on the Subject Property have been classified as a Cattail Mineral Shallow Marsh Type (MAS2-1). These wetlands are associated with the Core Areas of the Greenlands System of Peel.

The second wetland, that can be described as the pond near Humber Station Road, is an online pond fringed with wetland vegetation is present. This feature has been classified Pondweed Submerged Shallow Aquatic (SAS1-1) and surrounded by Willow Mineral Thicket Swamp and Reed Canary Grass Mineral Meadow Marsh (SWT2-2/MAM2-2).

The remaining wetland (MAS2-1/MAM2-2) does not meet the OWES size criteria and is not associated with the Core Areas of the Greenlands System of Peel.

Wetland boundaries are based on TRCA 2021 feature delineation with GEI.

4.8.3 Ecological Constraints

The natural features of the Subject Property are shown on **Figure 2** and **3**. Figure 3 also maps the buffers required by policy. If a feature has different buffers (or Minimum Vegetation Protection Zones) the greater has been shown. On the Subject Property, the buffers shown follow environmental policy which in summary is:

- Significant Woodland – 10 m (Town of Caledon, Humber Station Employment Area Secondary Plan, Official Plan Amendment 287, July 8, 2025)
- Significant Wetlands – 30 m (TRCA 2014; (Town of Caledon, Humber Station Employment Area Secondary Plan, Official Plan Amendment 287, July 8, 2025)
- Other Wetlands - 10 m (TRCA 2014; (Town of Caledon, Humber Station Employment Area Secondary Plan, Official Plan Amendment 287, July 8, 2025)
- Warmwater Fish Habitat – 15 m (MNRF 2010)

Additionally, HDFs with some form of constraint are shown (see discussion in 4.1.3 and 6.1 regarding Redside Dace and HDF8). Buffers are discussed again in Section 6.2.2.1.

Note that some policy has changed since the CEISMP Phase 1 was prepared and which these buffers are based on (formerly TRCA 2014 and Town of Caledon Op 2018). TRCA is now guided by O. Reg. 41/24 and the Town of Caledon OP was updated in 2024, however these buffers are ecologically sound and are consistent with the Draft Secondary Plan, Section 17.16.7.2 which states that: *Adjacent land use development will minimize any impacts to the natural features and functions within the Environmental Policy Area designation through appropriate buffers as established through the CEISMP.*'

LEGEND

- Watercourse [1]
- Top of Bank [2]
- Creek Bank [2]
- LTSTOS (PNJ) + 10m

HDF Management Recommendations

- Conservation
- Protection
- No Management

- Regional Floodline + 10m

Setbacks

- 10 m from Significant Woodland
- 10 m from Other Wetland
- 30 m from Significant Wetland
- 15 m from Warmwater Fish Habitat
- Significant Woodland
- Ecological Land Classification (ELC)

- Significant Wetland (GEI Consultants Ltd.) [2]
- Other Wetland
- Subject Property

1 - Geospatial Ontario
2 - Staked on October 19, 2021 by Toronto Region Conservation Authority (TRCA) and GEI Consultants

Note - Existing floodline for HDF3 system not available

ELC DESCRIPTIONS

AG – Active agricultural
AN – Anthropogenic (former garden)
CUM1-1 – Dry-Moist Old Field Meadow
CUT1 – Mineral Cultural Thicket (Buckthorn)
CUW1 – Mineral Cultural Woodland
FOD8 – Fresh-Moist Deciduous Forest (Basswood)
HE – Hedgerow
MAS2-1 – Cattail Mineral Shallow Marsh
MAM2-2 – Reed -canary Grass Mineral Meadow Marsh
SAS1-1 – Pondweed Submerged Shallow Aquatic
SWT2-2 – Willow Mineral Thicket Swamp

Key Map

0 50 100 150
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 17

Scale: 1:4,500
Page Size: Tabloid (11 x 17 inches)

Drawn: RS
Checked: RC
Date: Aug 8, 2025

NORTH

Source Notes: Imagery (2024) provided by ESRI Map Services. Contains information licensed under the Open Government License – Ontario.

CLIENT
Prologis

PROJECT
12519 and 12713 Humber Station Road

TITLE
Ecological Constraints and Buffers

SLR

REF. NO. 2008102-3-4

Figure 3

Document Path: G:_Projects\243\243_024265_HumberStnRd\1_Workspace\1_Maps\202507_EISFigures_xx\202507_EISFigures_xx.aprx

5.0 Proposed Development

The proposed Phase 1 industrial development is composed of one industrial slab-on grade building (as below), 356 trailer spaces, 255 loading spaces and 737 parking spaces, one access driveway from Humber Station Road and landscape areas (**Figure 4**). The development will be constructed in phases, including Phase 1A and B through 3 (C.F. Crozier & Associates Inc. 2025), however Phases 2 and 3 are not part of the current application. **Figure 4** shows Phase 1A.

Phase 1A of the proposed development includes the development of a 1-storey industrial building (Building 1) located on the northeast side of the Subject Property (C.F. Crozier & Associates Inc. 2025). The total gross floor area for Building 1 is 144,266 m^2. The Phase 1A area will also include: loading docks on the east and west sides of the building (parallel to Humber Station Road); trailer parking on the same sides; an internal drive aisle that wraps around the extents of the building; and a passenger vehicle parking lot south of the building. Site access for passenger vehicles and trucks is proposed via two driveway accesses from a proposed 'Street A' which will run east-west into the site area connecting with Humber Station Road.

Proposed water servicing and sanitary sewers are proposed to be located within Humber Station Road and future Street A (C.F. Crozier & Associates Inc.)

An interim stormwater management pond (SWMP) is planned for the southeast corner of the Subject Property (**Figure 4** and details in Crozier drawing). Phase 1A (DC1) will be constructed ahead of the Humber Station Villages Employment Area, therefore SWM Pond 3 will not be available (ultimate scenario). During interim conditions, Phase 1A will discharge towards the Clarkway Drive Tributary. An interim pond is proposed downstream of Phase 1A to provide water quality, erosion control, and additional quantity control for the regional storm, to meet the discharge criteria of the Clarkway Drive Tributary. The interim solution also includes perching roof drains so that the first 5mm of rainfall is stored on the roof and evaporates. It is anticipated that the interim pond and perched roof drains will be in place for at least two years until the ultimate pond for the Secondary Plan area and Street A2 are constructed and commissioned.

The interim SWMP will outflow through a storm sewer and headwall that will lead into a patch of wetland west of the Clarkway Tributary. The interim SWMP will also have an emergency overflow in its southeast corner. The proposed permanent solution for stormwater management for the Phase 1A area includes the use of underground detention tanks to provide stormwater quantity control. Storm sewers internal to the site will capture and convey the runoff from the drive aisle, loading docks, and parking areas (C.F. Crozier & Associates Inc. 2025). Portions of rooftop runoff will be conveyed to open-bottom infiltration tanks within the proposed drive aisle on either side of the building. Overflow from the infiltration tanks is proposed to be directed to the proposed detention tanks (C.F. Crozier & Associates Inc. 2025). Based on the results of the SLR Hydrogeological Assessment Report (Nov 22, 2024), the proposed open-bottom infiltration tank Low Impact Development (LID) measures will fully maintain the pre- to post-development water balance (infiltration) for the Subject Property. While the results of the Hydrogeological Assessment (SLR, 2025) concluded that the natural features on site were predominantly surface water supported, any minor groundwater contribution has been mitigated and maintained.

A realignment of drainage feature HDF3d and part of HDF3e is proposed at this stage in order to accommodate future phases. In addition to a channel realignment, this will result in in the removal and compensation of woodland and the relocation of part of a wetland.

These are discussed further in the impacts and mitigation section and will ultimately lead to a larger and more connected natural area.

LEGEND

- Watercourse [1]
- Dripline [2]
- Proposed Channel Realignment and Associated Ponds
- Proposed Natural Heritage System (including new features)

HDF Management Recommendations

- Conservation
- Protection
- No Management
- Assessed as part of the 2023 GEI CEISMP
- Provincially Significant Wetland (as determined by GEI Consultants Ltd) [2]
- Other Wetland
- Subject Property
- Site Plan

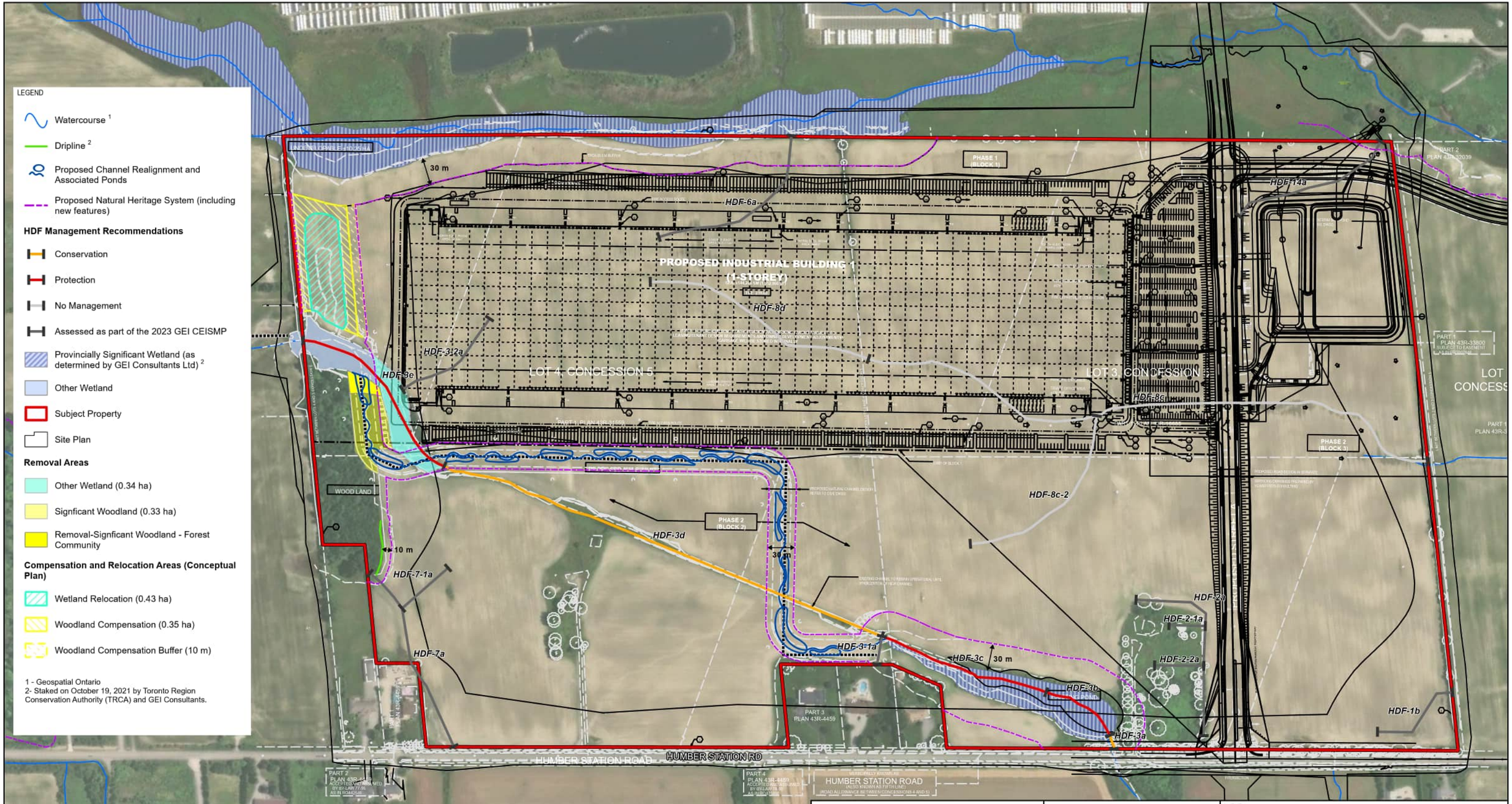
Removal Areas

- Other Wetland (0.34 ha)
- Signficant Woodland (0.33 ha)
- Removal-Signficant Woodland - Forest Community

Compensation and Relocation Areas (Conceptual Plan)

- Wetland Relocation (0.43 ha)
- Woodland Compensation (0.35 ha)
- Woodland Compensation Buffer (10 m)

1 - Geospatial Ontario
2- Staked on October 19, 2021 by Toronto Region Conservation Authority (TRCA) and GEI Consultants.



Key Map

0 50 100 150
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 17

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NORTH

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CLIENT: Prologis

PROJECT: 12519 and 12713 Humber Station Road

TITLE: **Proposed Development**

SLR

REF. NO. 2008102-4-11

Figure 4

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6.0 Impacts and Mitigation

6.1 Aquatic Impacts and Mitigation

For the HDF-3 area, it is proposed that the mid-portion (segment HDF-3d) be realigned and restored to accommodate the proposed and future development within the Subject Property. Also, the development is proposed to overlay the north portion of the HDF-8 drainage area (**Figure 4**). This encroachment will primarily consist of non-permeable and non-natural surfaces associated with the warehouse and pavement, and to a lesser extent, graded slopes and soft-scaped edges which can be restored and naturalized. These two HDF areas are discussed below.

The impact assessment, and corresponding mitigations, have regard for the MECP recommendations provided to SLR through formal correspondence in early 2025 (**Appendix F** – memos to MECP and **Appendix I** – MECP response).

6.1.1 HDF-3 Area Realignment and Restoration

In general, the various main segments of the HDF-3 drainage area are subject to management recommendations of either Protection or Conservation. As outlined in the 2023 CEISMP, the following is generally applicable to Protection reaches:

Reaches HDF-3b, 3c, and the north part of 3e within the Subject Property are classified as ‘Protection’ and will be protected from development. As described in the HDF Guidelines, the Protection designation is for those features with important functions that are to be maintained and protected from potential development impacts.

- Protect and/or enhance the existing feature and its riparian zone corridor, and groundwater discharge or wetland in-situ;
- Maintain hydroperiod;
- Incorporate shallow groundwater and base flow protection techniques such as infiltration treatment;
- Use natural channel design techniques or wetland design to restore and enhance existing habitat features, if necessary; realignment not generally permitted; and
- Design and location of the stormwater management system (e.g., extended detention outfalls) are to be designed and located to avoid impacts (i.e., sediment, temperature) to the feature.
- It is proposed that the realignment of the HDF-3d and the south part of 3e reach be completed through a natural channel design to restore fluvial and riparian functions to the HDF segment, while still maintaining hydrologic and wildlife movement functions between the ponded area associated with HDF-3b and 3c, and the wetland areas associated with HDF-3e. Reaches HDF-3a and 3d have an interpreted Management Recommendation of ‘Conservation’.
- As described in the HDF Guidelines, the Conservation designation affords the ability to realign drainage features using natural channel design, or to maintain or replace on-site flows using wetland creation:
- Maintain, relocate, and/or enhance drainage feature and its riparian zone corridor;

- If catchment drainage has been previously removed or will be removed due to diversion of stormwater flows, restore lost functions through enhanced lot level controls (i.e., restore original catchment using clean roof drainage), as feasible;
- Maintain or replace on-site flows using mitigation measures and/or wetland creation, if necessary;
- Maintain or replace external flows;
- Use natural channel design techniques to maintain or enhance overall productivity of the reach; and

Drainage feature must connect to downstream.

HDF-3e is classified as Protection (**Figure 3**); however, it is also proposed for re-alignment. This is considered acceptable as through this approach, it is expected that a net benefit to the localized aquatic environment will be achieved as the HDF-3 drainage area will be improved from a habitat and fluvial processes standpoint, as it is currently just an eroded swale traversing active agricultural lands (**Photo 6**). More specifically, the realigned channel aims to provide the following channel design elements to improve aquatic habitat with HDF-3 (SLR 2025):

Riffle-Pool Bed Morphology – The channel is designed to be spatially complex with respect to morphology and hydraulics. Riffle and pool sequences will allow for natural instream energy dissipation, thereby reducing shear stress and erosive energy. This morphological variability will also improve diversity of fish habitat.

Bioengineered Bank Treatments – Tiered brush layering is proposed along the toe of the valley corridor at outer meander bends to ensure long term stability of the valley walls

Channel sinuosity – The existing channel has been straightened through historical agricultural activity. The design increases the overall length of HDF-3 by approximately 150 m by incorporating a meandering planform, thereby increasing sinuosity. Lengthening the channel will increase available aquatic habitat and reduce overall slope and shear stress within the reach. The slight reduction in gradient is appropriate for this low-energy, headwater-wetland type system.

Online and Offline Wetlands – The proposed design includes re-positioning of the existing wetland feature along HDF3e on the Subject Property, and incorporation of additional online and offline pocket wetlands along the realigned channel margin. The wetlands are intended to provide additional habitat diversity and to help attenuate higher flow events, beyond the low-flow channel. Water level within the wetlands will fluctuate with respect to various flow events and seasonally. The micro-topography of the wetlands is shallow with small undulations to allow for fully submerged, partially submerged, and dry areas. The features will be vegetated using a wet meadow seed mix.

For the larger riparian corridor, the natural channel design will incorporate a detailed riparian planting plan to restore a robust, native riparian corridor including a 15 m width buffer on either side, for a total of 30 m wide riparian area. Plants proposed for this area include all native species including willow shrub species, dogwood species, Swamp White Oak (*Quercus bicolor*) and Trembling Aspen (*Populus tremuloides*) species. It is important to note that the total length will increase post-restoration; currently HDF 3d and HDF3e together are currently about 750 m, whereas post-restoration it will be at least 950 m (this number will be larger as it excludes the length created by the sinuosity). GEI notes in the CEISMP '*Because HDF-3 provides direct fish habitat, the 15 m warm water fish habitat buffer has been applied to the drainage realignment as shown on Figure 6 (Appendix A1). The meander belt falls within and/or matches this buffer*'.

For Redside Dace considerations, it is proposed that a comprehensive Erosion and Sediment Control (ESC) plan be incorporated into the overall channel design works that has regard for the *Guidance for development activities in Redside Dace protected habitat* (Ministry of Natural Resources and Forestry 2016). Additionally, as the HDF-3 feature is considered 'Contributing' habitat, any works taking place within the active channel (i.e., bankfull channel) of HDF-3 are to be completed between July 1 and September 15.

Photo 6: HDF-3d in current condition (June 2022)

6.1.2 HDF-8 Area

Following SLR's 2023 investigations, and subsequent correspondence with GEI and MECP in 2025, it was determined that the HDF-8 feature provided no ecological or hydrologic function, and overlap of the proposed development would result in a negligible impact to the local aquatic environment. SLR thus classified it as No Management Required
(as presented in **Figures 2, 3** and **4**)

6.1.3 All Aquatic Features

Outside of specific reach-related mitigations and restoration approaches, all surface water features, including the ponded area and the Clarkway Drive Tributary, should be adequately protected through appropriate buffering and setbacks, and through implementation of a comprehensive Erosion and Sediment Control (ESC) plan which adheres to the requirements of the *Erosion and Sediment Control Guide for Urban Construction* (TRCA 2019).

Due to proposed impacts to aquatic areas determined by GEI through their CEISMP mapping to be Contributing habitat for Redside Dace (GEI Consultants Ltd. 2023) (i.e., HDF-8 reaches, the Clarkway Drive Tributary and its associated riparian wetlands), it is recommended that consultation with MECP be undertaken, to confirm the presence or absence of Contributing habitat, and if present to ensure compliance with the *Endangered Species Act*.

Additionally, any impacts to fish and/or fish habitat should be addressed through consultation with the DFO, as required through a formal Request for Review (RFR) application submission.

6.1.4 Temporary Impacts from the Interim Stormwater Management Pond

Vegetation removal along the storm sewer length is anticipated to be approximately to be in the form of a three to five metre width linear strip. The majority of the length of this sewer is through existing farm field, thus there are no removals there, however approximately 20 m will be through semi-natural vegetation (old field meadow, possibly scattered woody vegetation and meadow marsh).

In order to mitigate for this vegetation removal, once construction is completed, the formerly naturally vegetated area should be restored (note this is off the Subject Property). It is recommended that a suitable seed mix be used; depending on the moisture regime, either a native upland meadow and/or a native moist wetland meadow mix should be used. If more than two shrubs are removed, a similar number of native shrubs should also be planted.

GEI recorded the presence of chimney crayfish approximately 100 m downstream from the proposed storm sewer outlet of the interim SWMP; although note that the outlet does not directly outlet into the drainage feature, but into adjacent habitat. Further detail relating to Terrestrial Crayfish mitigation is discussed in Section 6.4 (SWH Impacts and Mitigation) of this report.

In order to determine that water levels in the Clarkway tributary would not change due to the interim SWMP, a downstream sensitivity analysis was completed (by Crozier) using the Humber River VO model provided by the TRCA. The results of the analysis showed that there would be no increases in downstream peak flows. The node located directly downstream has a negligible precent decrease during the 100-year storm event. Since there would be no increases in peak flows, the downstream watercourse will not be impacted. Additionally, the interim SWMP will provide additional quality control through the permanent pool component and extended detention, achieving Enhanced Level water quality control.

6.2 Terrestrial Impacts and Mitigation

6.2.1 Impacts

Potential impacts of the proposed development of the Subject Property can be divided into two types: those primarily associated with the construction phase and those that are permanent.

Construction related impacts include:

- Potential for erosion and loss of soils; and
- Disturbance to wildlife including birds during vegetation removal.

Permanent potential or actual impacts include:

- Removal of natural vegetation, buffers and associated wildlife habitat;
- Impacts to water quality through for example soil erosion, removal of vegetation etc.; and
- Changes to wildlife behaviour due to the introduction of artificial light, noise etc.

The anticipated removal of vegetation communities will consist of the removal of mainly agricultural lands, as well as portions of the northwestern woodland/wetland feature (**Figure 4**).

Amounts to be removed are approximately:

- Non-significant wetland (Cattail Mineral Shallow Marsh Type and Reed Canary Grass Mineral Meadow Marsh or MAS2-1/MAM2-2) – 0.34 ha
- Significant Woodland: Fresh-Moist Deciduous Forest, Basswood or FOD8 (0.06 ha) and Buckthorn Cultural Thicket, CUT1 combined with Cultural Meadow, CUM1-1 (0.28 ha) – total 0.33 ha

The Humber Station Employment Secondary Plan polices (Section 7.16.7.3) have been revised to permit minor encroachment as outline in an approved CESIMP. This is based on the principal that the area of woodland (forest ELC community) is small – 0.06 ha as note above – and the proposed Natural Heritage System will have improved connectivity and enhanced native woodland.

Also, some of the removal areas will become part of the restored realigned drainage feature, thus the impacts are less than might appear. Any differences in areas between SLR and GEI reporting are due to either minor mapping differences or rounding errors; the intent and areas are the same.

6.2.2 Mitigation

6.2.2.1 Mitigation by Design

Buffers

The term “buffer” (or Minimum Vegetation Protection Zone) refers to an area of land neighbouring natural features that is alongside lands that are planned to undergo site alteration or development. The purpose of the buffer is to protect the ecological functions and features of the woodlands and wetlands by reducing impacts from site alteration or the proposed development. Generally, the buffer width depends on the sensitivity of the feature being protected and the potential risks of the proposed land use resulting in impacts to the natural heritage feature.

Buffers are proposed for all features. Apart from in two areas (noted above in section 6.2.1), proposed buffers follow environmental policy (TRCA 2014 and Town of Caledon, Humber Station Employment Area Secondary Plan, Official Plan Amendment XXX, Draft June 2024), which in summary is:

- Significant Woodland – 10 m
- Significant Wetlands – 30 m
- Other Wetlands -10 m

All of these buffers are considered to be ecologically appropriate buffers which will protect the features that they surround. Buffers around wetlands ensure that pollutants are kept out of the wetlands, sedimentation into wetlands is minimized or stopped, and that habitat for wetland edge species is maintained. Woodland buffers protect the root zones of trees within the woodlands, among other functions.

The proposed removals of non-significant wetland and Significant Woodland are proposed to accommodate the drainage realignment and the edge of the warehouse.

The partial removal and compensation for the Significant Woodland is considered ecologically acceptable because, this feature, while meeting the Significant Woodland criteria, is: small (about 1.5 ha), relatively isolated, not mature, and has minimal function as a woodland in terms of avifauna (almost all birds recorded there are 'edge' species, disturbance-tolerant, and/or typically shrubland species). Also, the amount of actual forest community (FO as defined by ELC classification) is very small (0.06 ha).

There is a minor encroachment of grading into the 30 m wetland buffer near the north end of the Clarkway tributary (on Prologis property). This is within an area that is currently agricultural row crop and which will become part of the buffer planting plan, thus there is no ultimate impact.

In the future, there may be an encroachment into the pond wetland buffer based on plans for future phases. If this occurs, compensation will be undertaken.

Buffer Plantings

In addition to naturalized compensation within the compensation and relocation areas (as below), all the natural feature buffer areas will be planted with native species. These areas are currently primarily row crop agricultural field, and thus the existing features will ultimately be enhanced and widened. For example, the Clarkway Tributary area will be widened by 30 m westward on the Subject Property. The total areas of buffer restoration (not including any compensation areas and drainage realignment area) are: 0.12 ha adjacent to existing woodland, 2.14 ha adjacent to the Clarkway Tributary, and another 0.25 adjacent to the pond wetland. MHBC (2025) has prepared Landscape Plan drawings L2 through 4 and 9 through 12 which indicate plantings.

Compensation and Relocation Opportunities

In order to compensate for feature removals, woodland compensation and wetland relocation areas are proposed within the Subject Property (**Figure 4**) and areas are listed below:

- Wetland relocation area of 0.425 ha
- Woodland compensation area of 0.35 ha

The proposed compensation/relocation areas are located directly adjacent to the impacted communities, thus, limiting the impact of community alteration. The impacted communities will have the same or larger overall area. MHBC has prepared restoration drawings for these areas. All species used would be native to the region and planted in a naturalized manner.

Wetland Relocation

The proposed Wetland Relocation is within area at the north end of the property, that is almost adjacent to its current location (less than 50 m away) and is proposed to be accomplished through the moving of the soils, seed bank and potentially the plants themselves. The size of the proposed relocation area for the non-significant wetland is larger than the area being removed. Additionally, this does not take into account the benefit that some of the wetland removal area will be returned to naturalized riparian corridor under this proposal. The native wetland restoration proposed is one that would be composed of two types of wetland: cattail shallow marsh and meadow marsh, with two ground level depths. This has the potential to provide for amphibian breeding habitat (that is not currently present in this location), as well as diversity of habitat.

Woodland Compensation and Buffer

The proposed Woodland Compensation area is adjacent to the Wetland Relocation area and similarly is almost adjacent to the existing woodland. The area at the north end of the property and west of the Clarkway Tributary is the area proposed for compensation. The proposed compensation area for the FOD8/CUT1/CUM1-1 Significant Woodland is marginally greater than that being removed (0.33 ha removed; 0.35 ha compensated). Tree species proposed to be planted here include: Red Oak (*Quercus rubra*), White Oak (*Quercus alba*), Bur Oak (*Quercus macrocarpa*), Sugar Maple (*Acer saccharum*), Red Maple (*Acer rubrum*), Shagbark Hickory (*Carya ovata*) and Bitternut Hickory (*Carya cordiformis*). MHBC Drawings L2 and L5 illustrate a proposed planting plan. This will a marked improvement on species composition as the area of woodland removed is dominated by buckthorn.

Town of Caledon requested a buffer for the Woodland Compensation Area in 2025 comments directed at the CEISMP. Prologis has thus provided this buffer which not only adds width to the new natural area but adds another 0.14 ha of restored habitat.

In addition to providing a net benefit in area, the location of the compensation/relocation area will mean that the existing woodland/wetland area and the Clarkway tributary wetlands will be much better connected ecologically than currently (due to continuous natural habitat), thus providing better movement opportunities for wildlife movement. The width of the proposed corridor (i.e. compensation/relocation area plus buffer) between the two existing areas is 70 m.

An Environmental Management Plan (EMP) for the Woodland Removal and Compensation is in draft form (Prologis Woodland EMP, SLR 2025). This EMP is part of the stated requirements within the CEISMP Phase 2 (p 53, Section 8.1.1.1).

Wetlands and Feature-Based Water Balance

SLR hydrogeologists completed a Feature-Based Water Balance (FBWB) for the two wetlands that GEI had assessed and concluded that they have provincial significance, including Cattail Mineral Shallow Marsh Type (MAS2-1) developed along the Clarkway Drive Tributary (East Wetland in the SLR Hydrogeological report – SLR, 2025) and the Pondweed Submerged Shallow Aquatic (SAS1-1) corresponding to the online pond (West Wetland in the hydrogeological report).

The results of FBWB indicated that the proposed development will cause the following hydrological change to the catchment areas of the wetlands:

- Catchment of East Wetland:
  - Increased runoff by 86,633 m^3/year;
  - Reduced infiltration by 1,012 m^3/year.
- Catchment of West Wetland:
  - Increased runoff by 81,353 m^3/year;
  - Reduced infiltration by 678 m^3/year.

Based on the mini-piezometer monitoring results and the low hydraulic conductivity of stratigraphy, the wetlands do not receive significant groundwater discharge contribution. Therefore, the reduced infiltration will not be a factor affecting wetland hydroperiod. It is the increased runoff that will affect the wetland hydroperiod. The increased runoff will be managed with the stormwater management facilities and onsite LID features.

After LID infiltration and regulation with the stormwater management facilities, the impact to hydroperiod of the two wetlands will be mitigated. Detailed analysis can be found in the SLR Hydrogeological Assessment report (SLR, 2025).

6.3 Species at Risk Impacts and Mitigation

The following three Species of Special Concern have been identified within or adjacent to the Subject Property:

- Eastern Wood-Pewee
- Snapping Turtle
- Monarch Butterfly (Not observed by SLR, but GEI observed on adjacent meadow marsh to east).

The Eastern Wood-Pewee was observed in the FOD8 and CUW1 communities. The FOD8 is proposed to be retained. Removal of the CUW1 will follow the Migratory Birds Convention Act (MBCA) and Fish and Wildlife Conservation Act. Eastern Wood-Pewee habitat on the Subject in the forest community (FOD8) is considered SWH, but not that in the Cultural Woodland.

The Snapping Turtle was observed in the south pond (SAS1-1/SWT2-2/MAM2-2). No impacts anticipated as the wetland found will be retained with a large buffer.

Monarch Butterfly was observed off property on the adjacent meadow marsh located east of the Subject Property; since the observation was recorded off property, no impacts are anticipated.

6.3.1 SAR Bats

Three SAR bat species (Hoary, Silver-haired and E. Red Bat) were definitively recorded on the Subject Property, while one or more of three other species (Tri-coloured Bat, Northern Myotis and Little Brown Myotis) may or may not be present. SAR bat species were recorded in both the North Woodland and Former Farmstead. As outlined in the memo (**Appendix E**) prepared for MECP there are different approaches for each of these two locations.

Note that recent MECP correspondence regarding bats (**Appendix I**) under current legislation indicates that proponents are to make their own assessments regarding SAR habitat impacts and only include MECP when there are clear impacts:

> *Authorizations under the Endangered Species Act, 2007, are only required where impacts contravene sections 9 and 10 of the amended Act. There may be times where an applicant completes a thorough species at risk screening, including relevant field assessments and surveys, and definitively determines there is no evidence of species at risk or their habitat on or near the proposed activity site, or the activity can be completely avoided, and concludes that an authorization under the amended Endangered Species Act, 2007, is not required. In this case, the applicant does not need to submit the Information Gathering Form or screening results to the ministry, but it is recommended that screenings, assessments, and rationale for how prohibited impacts will be avoided be thoroughly documented and retained for possible future reference.*

Snag habitat surveys in the North Woodland (FOD8, CUT1, CUM1-1) indicated that the only suitable habitat for roosting bats was in the north and west portions of the woodland. These portions will not be affected by the proposed ‘woodland’ removal, as most of the woodland being removed is Buckthorn Cultural Thicket or a patch of Cultural Meadow, and the small portion of Deciduous Forest being removed does not contain any ‘snags’. Thus, no impacts to SAR bats are anticipated in this part of the property.

Snag habitat surveys in the Former Farmstead (SLR described as Cultural Woodland CUW and Cultural Meadow CUM1, and GEI as Residential and Cultural Meadow) revealed the presence of two snags. Acoustic surveys did record SAR bats in this area. At this point in time, there is no proposed works in the Former Farmstead. If and when future works are proposed by Prologis, it can be determined if either of the snags will be removed, and if it is determined that habitat might be impacted, this can be countered through vegetation removal timing windows and the installation of bat boxes. Thus, at this time, no impacts to SAR bats are anticipated in this part of the property.

6.4 SWH Impacts and Mitigation

There are two onsite SWH types and one adjacent to the Subject Property. The onsite 'pond' wetland (SAS1-1) provides SWH habitat for Snapping Turtle; there are several locations of Terrestrial Crayfish beside northerly wetlands, and Monarch Butterfly SWH has been identified along part of the Clarkway Tributary adjacent to the Subject Property. The proposed development will not affect SWH with Snapping Turtle or Monarch Butterfly as proposed development is outside these habitats.

For Terrestrial Crayfish, there are potential temporary impacts associated with the proposed wetland relocation as works are to occur adjacent to burrows and suitable habitat is to be reconfigured. To facilitate the relocation of habitat, and potentially crayfish individuals, it is recommended that DFO be engaged, as they regulate the species and their habitat under the *Fisheries Act*, and can provide a permitted methodology for relocation, if required. From a habitat standpoint, the proposed wetland relocation will create a larger area of similar habitat which is contiguous to other natural spaces.

6.5 General Mitigation

In order to mitigate for the construction related impacts, the following general mitigation measures are necessary to protect the ecological features and functions:

- Removal of all vegetation (not only trees) should be completed outside of the breeding bird season (April 1 – August 31) to ensure compliance with the Migratory Birds Convention Act (MBCA) and provincial Fish and Wildlife Act. If vegetation removal during this period cannot be avoided, active nest searches may be conducted by a qualified biologist immediately prior to removal to ensure that no active nests of breeding birds are present.
- Erosion and Sediment Control (ESC) measures should be installed and maintained during construction. ESC measures are recommended to be installed at the limit of construction works Best practices could follow those recommended in the TRCA's *Erosion and Sediment Control Guide for Urban Construction*, dated 2019.

With respect to ESC measures, the contractor should:

- Retain existing vegetation and stabilize ground with native vegetation where possible;
- Limit the duration of soil exposure and/or phase construction;
- Delimit the perimeter of excavation area with light-duty silt fencing;
- Maintain overland sheet flow and avoid concentrating flow;
- Store and stockpile soil away from natural drainage feature and drainage structure; and
- Assess ESC measures before and after significant rainfall and snowmelt events.

- Apply Redside specific measures for ESC measures fronting onto HDF-3 (i.e., double-row silt fence with strawbales in between) consistent with Redside Dace development guidelines (Ministry of Natural Resources and Forestry 2016).

Also, all repairs required to ESC measures will be completed within 48 hours of notice unless otherwise agreed by the Region, the Contractor, the regulatory authority and the environmental inspector(s).

7.0 Policy Conformity

Table 7: Natural Heritage Policy Conformity

Policy Document	Policy Intent/Objective	Implications and Policy Conformity
Migratory Birds Convention Act	*The Migratory Birds Convention Act* (MBCA), 1994 and Migratory Birds Regulations (MBR) 2014 (along with the provincial Fish and Wildlife Convention Act), protect most species of birds and their nests and eggs anywhere they are found in Canada.	To ensure the protection of actively nesting birds, their eggs and their nests, vegetation removal should be completed outside of the breeding bird season (April 1 – August 31) or a site inspection for nesting birds should be completed immediately prior to vegetation removal.
Endangered Species Act	Species designated as Endangered or Threatened by the Committee on the Status of Species at Risk in Ontario (COSSARO) are listed as Species at Risk in Ontario (SARO). These species at risk (SAR) and their habitats (e.g., areas essential for breeding, rearing, feeding, hibernation and migration) are afforded legal protection under the *Endangered Species Act* (ESA).	Three Endangered SAR bats (Hoary, Silver-haired and E. Red Bat) were recorded on the Subject Property, with the potential for three other SAR bats to be present (not all calls could be identified to species). No impacts are anticipated. No other Endangered or Threatened Species at Risk were identified within the Subject Property. Only Species of Concern were identified and are generally protected through SWH. As discussed throughout this report, correspondence with MECP staff identified that HDF-3 is contributing habitat for Redside Dace, but as long as standard mitigations are met, a permit is not required (**Appendix I**). HDF-8 is not identified as contributing habitat by MECP.
Provincial Policy Statement	The Provincial Policy Statement (PPS) provides direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features and resources (OMMAH, 2014). Section 2.1 of the PPS defines ten natural heritage features (NHF) and adjacent lands and provides planning policies for each.	Within or adjacent to the Subject Property, the following natural heritage features have been identified: • Significant Woodlands • Significant Wetlands • Significant Wildlife Habitat (SWH) The Significant Wetlands and SWH are protected through retention and buffers. Compensation is proposed for the Significant Woodland removal. It is anticipated that the woodland compensation area will not only have a net benefit in composition but once naturalized the woodland will be better connected to the Clarkway Tributary area.

Policy Document	Policy Intent/Objective	Implications and Policy Conformity
Region of Peel Official Plan	In accordance with policy 2.14.16 of the OP, development and site alteration is prohibited within the Core Areas of the Greenlands System in Peel. Unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.	The wetland associated with the Clarkway Tributary is designated as Core Area within the Greenland Systems of Peel. Through the implementation of setbacks and proposed mitigation measures, no impacts are anticipated to this feature and its function.
Town of Caledon Official Plan	As stated in the OP's Section 5.7.3.1.1, new development is prohibited within areas designated EPA. Beyond EPA areas, there are other wetlands on the Subject Property. OP Policy 3.2.5.4.2 states that "*New development will not be permitted in Other Wetlands unless it can be demonstrated that such development will not result in the degradation of ecosystem integrity, to the satisfaction of the Town, the Conservation Authority, the Ministry of Natural Resources and Forestry, or other delegated authority*".	Within the Subject Property the three identified wetlands are designated as EPA. Through the implementation of setbacks and proposed mitigation measures, no impacts are anticipated to two wetlands. The north wetland will be relocated within the Subject Property. With the addition of the compensation areas. We propose that the development will not result in the degradation of the ecosystem integrity.
Humber Station Employment Area – Draft Secondary Plan	In accordance with the draft secondary plan (June 2024), Section 7.16.7.2: Adjacent land use development will minimize any impacts to the natural features and functions within the Environmental Policy Area designation through appropriate buffers as established through the CEISMP. And 7.16.7.3: The limits of wetlands, woodlots, and stream corridors within the Secondary Plan Area are established through the recommendations of the CEISMP and form the basis for the Environmental Policy Area designation. Development and site alteration will not be permitted within this designation except as set out in the CEISMP. Also in 7.16.7.5: The Natural Features and Areas designation within the Secondary Plan Area includes a conceptual drainage realignment in the central portion of the plan. The CEISMP sets out the detailed justification for its refinement and/or relocation.	The natural features found within the Subject property are: • Significant wetlands • Significant woodland • Other wetland The buffers as in the CEISMP have been applied, apart from two partial removals that have a proposed compensation/relocation approach. This EIS is consistent with the CEISMP regarding the drainage realignment.

Policy Document	Policy Intent/Objective	Implications and Policy Conformity
Toronto Region Conservation Authority	The Subject Property falls within the jurisdiction of the TRCA. Watercourses and wetlands are regulated under the TRCA. TRCA Regulated Area lands exist within the limits of the Subject Property, in association with drainage features and wetland features. Development within these areas will be subject to approvals and permitting from the TRCA.	The drainage/swale (HDF3) and wetlands on the Subject Property are regulated by TRCA. The realignment of part of HDF3 reach will be completed through a natural channel design to restore fluvial and riparian functions to the HDF segment, while still maintaining hydrologic and wildlife movement functions. Through this approach, it is likely that a net benefit to the localized aquatic environment will be achieved as the HDF-3 drainage area will be improved from a riparian habitat and fluvial processes standpoint. With the addition of the wetland compensation areas, the development will not result in the degradation of the ecosystem integrity. No impacts are anticipated to these features and their functions.

8.0 Conclusion

The findings of the Environmental Impact Study are based on the results of a background review including use of GEI CEISMP information, field investigations and analysis of the data using the current scientific understanding of the ecology of the area, as well as the current natural heritage policy requirements. Based on the work completed, we have identified the natural environmental sensitivities, constraints and development opportunities of the Subject Property. In conjunction with GEI, SLR has recommended outcomes for drainage features, characterized and, confirmed the limits of areas of a significant woodland, wetlands, and Significant Wildlife Habitat, which are present on the Subject Property.

Based on the findings and recommendations of this study, it is our professional opinion that the proposed development is environmentally feasible provided that the recommended mitigation and protection measures described in the report are implemented and subject to any approval requirements determined through consultation with the Town, the TRCA, the Ministry of Environment Conservation and Parks, or other delegated authority, respectively.

Mitigation or enhancement includes:

- Woodland Compensation Area for woodland removal; quality of woodland to be improved and actual forest area to be increased.
- 10 m buffer to Woodland Compensation Area to be applied.
- Wetland Relocation to be applied; greater structural complexity within relocated wetland anticipated.
- Placement of Woodland Compensation Area and Wetland Relocation will improve ecological connectivity on the property.
- A re-aligned, lengthened and restored drainage feature HDF3; significantly improved width of corridor (from approximately 1 to 5 m width to 30 m planted corridor).
- Timing windows for vegetation removal.

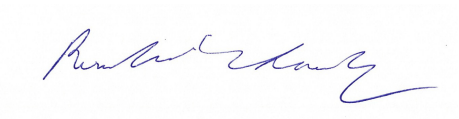
- ESC measures.
- All buffers to be planted with native species which will enhance features; total area of buffer planting is approximately 2.65 ha (0.12 ha on existing woodland, 2.14 ha on Clarkway tributary wetland, 0.25 ha on pond wetland, 0.14 on woodland compensation). This does not include new channel corridor plantings.

9.0 Closure

This report was prepared, and reviewed by the undersigned:

Regards,

SLR Consulting (Canada) Ltd.



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Appendix A Floral Inventory (SLR)

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

Common Name	Native/Eotic/Unranked	S Rank	COSEWIC Status	SARO Status	Eotic Status	Coefficient of Conservatism	Coefficient of Wetness	TRCA RANKS 2019	STATUS (CVC 2002)
Norway Maple	E	SNA			SE5		5	L+	
European Water-plantain						3	-5	L5	
Meadow Fotail	E	SNA			SE5		-3	L+	
Common Milkweed	N	S5				0	5	L5	
Aster Species									
Smooth Brome	E	SNA			SE5		5	L+	
Crested Sedge	N	S5				3	-3	L5	
Awl-fruited Sedge	N	S5				3	-5	L5	
Orchard Grass	E	SNA			SE5		3	L+	
Red-stemmed Spikerush	N	S5				4	-5	L5	
Wild Strawberry	N	S5				2	3	L5	
Red Ash	N	S4				3	-3	L5	
Black Walnut	N	S4?				5	3	L5	
Small Duckweed	N	S5?				5	-5	L5	
Wood Lily	N	S5				8	0	L	
Purple Loosestrife	E	SNA			SE5		-5	L+	
Reed Canarygrass	N	S5				0	-3	L+?	
Common Timothy	E	SNA			SE5		3	L+	
Small Pondweed	N	S4?				4	-5	L1	rare
Chokecherry	N	S5				2	3		
Common Buttercup	E	SNA			SE5		0	L+	
European Buckthorn	E	SNA			SE5		0	L+	
Peach-leaved Willow	N	S5				6	-3	L4	rare
Sandbar Willow	N	S5				1	-3	L5	
Willow Species									
Soft-stemmed Bulrush	N	S5				5	-5	L4	
Tall Goldenrod	N	S5				1	3	L5	
Goldenrod Species									
Sago Pondweed	N	S5				4	-5	L4	
Panicled Aster	N	S5				3	-3	L5	
Basswood	N	S5				4	3	L5	
Red Clover	E	SNA			SE5		3	L+	
Narrow-leaved Cattail	E	SNA			SE5		-5	L+	
(Typha angustifolia Typha	E	SNA					-5	L+	
White Elm	N	S5				3	-3	L5	
Tufted Vetch	E	SNA			SE5		5	L+	
Riverbank Grape	N	S5				0	0	L5	

LEGEND	
SRANK	**Provincial Status:** Provincial ranks are used by the NHIC to set protection priorities for rare species and natural communities. These ranks are not legal generally uncommon to common in the province. Species ranked S1-S3 are considered to be rare in Ontario. designations. S4 and S5 species are generally uncommon to common in the province. Species ranked S1-S3 are considered to be rare in 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.
SU Unrankable	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA Unranked	A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
SX Presumed Extirpated	Species or community is believed to be extirpated from the nation or state/province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
SH Possibly Extirpated (Historica	Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.
SE# Exotic Status	
S#? Rank Uncertain	

Ontario Ministry of Natural Resources (OMNR). 2018. Natural Heritage Information Centre Species Lists. Last updated January 30, 2018. https://www.ontario.ca/page/get-natural-heritage-information

COSSARO	
END Endangered	A species facing imminent extinction or extirpation in Ontario which is a candidate for regulation under Ontario's ESA.
THR Threatened	A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.
SC Special Concern	A species with characteristics that make it sensitive to human activities or natural events.
DD Data Deficient	
EXP Extirpated	A species that no longer exists in the wild in Ontario but still occurs elsewhere.

Ontario Ministry of Natural Resources and Forestry (2018). Species Risk in Ontario. Last updated UNE 28, 2018. https://www.ontario.ca/environment-and-energy/species-risk-type

COSEWIC	
END Endangered	A wildlife species facing imminent extirpation or extinction.
THR Threatened	A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
SC Special Concern	A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
VUL Vulenerable	
NAR Not at Risk	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
DD Data Deficient	A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.
NA Non-active	
XT Extirpated	A wildlife species that no longer exists in the wild in Canada, but exists elsewhere.

Committee for the Status on Endangered Wildlife in Canada (COSEWIC). 2018. Canadian Wildlife Species at Risk. Last updated February 22, 2018. http://www.sararegistry.gc.ca/sar/index/default_e.cfm

Coefficient of Conservation

'Higher values of the coefficients of conservatism, on the scale of 1–10, indicate species that are more "conservative" (or ecologically sensitive), including those least associated with anthropogenic disturbance, least aggressive, least able to spread, and most confined to particular natural habitat' (Catling

Catling, Paul M. 2013. Using Coefficients of Conservatism and the Floristic Quality Index to assess the potential for serious and irreversible damage to plant communities. Canadian Field-Naturalist 127(3): 285–288.

Coefficient of Wetness

5 - Almost always occur on upland; 3 - Usually occur on uplands; 0 - Found on uplands and in wetlands; -3 Usually occur in wetlands; -5 Almost always occur in wetlands

Floristic Assessment System for Southern Ontario (Oldham et al, 1995).

Toronto and Region Conservation Authority L rank:

L1 to L3 Regional species of concern from highest to lowest; L4 Urban concern; L5 Secure through region

Appendix B Floral Inventory for Humber Station Employment Area (GEI)

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

Latin Name	Common Name	Coefficient of Conservatism	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status (G-Rank)	Local Status Area	Local Status Peel	Local Staus CVC/Peel	Local Status Peel
									Local Status Source	Varga 2005	CVC 2002	
Equisetaceae	**Horsetail Family**											
Equisetum arvense	Field Horsetail	0	0		S5			G5		X	X	X
Cupressaceae	**Cedar Family**											
Thuja occidentalis	Eastern White Cedar	4	-3		S5			G5		X	X	X
Pinaceae	**Pine Family**											
Picea abies	Norway Spruce		5	-1	SNA			G5		X	I	I
Picea glauca	White Spruce	6	3		S5			G5		R3	L	L
Aceraceae	**Maple Family**											
Acer negundo	Manitoba Maple	0	-2		S5			G5		X	X	X
Acer saccharum ssp. saccharum	Sugar Maple	4	3		S5			G5T5		X	X	X
Amaranthaceae	**Amaranth Family**											
Amaranthus retroflexus	Red-root Amaranth		2	-1	SNA			G5		X	X	I
Anacardiaceae	**Sumac or Cashew Family**											
Rhus typhina	Staghorn Sumac	1	5		S5			G5		X	X	X
Toxicodendron rydbergii	Rydberg's Poison Ivy	0	0		S5			G5T		X	X	X
Apiaceae	**Carrot or Parsley Family**											
Daucus carota	Wild Carrot		5	-2	SNA			GNR		X	X	I
Asclepiadaceae	**Milkweed Family**											
Asclepias syriaca	Common Milkweed	0	5		S5			G5		X	X	X
Asteraceae	**Composite or Aster Family**											
Achillea millefolium	Yarrow		3	-1	S5			G5		X	X	I
Ambrosia artemisiifolia	Annual Ragweed	0	3		S5			G5		X	X	X
Arctium lappa	Greater Burdock				SNA			GNR		X	X	I
Arctium minus	Common Burdock		5	-2	SNA			GNR		X	X	I
Artemisia biennis	Biennial Wormwood		-2	-1	SNA			G5		X	X	I
Bidens frondosa	Devil's Beggaticks	3	-3		S5			G5		X	X	X
Bidens vulgata	Tall Beggarticks	5	-3		S5			G5		R1	R	L
Carduus crispus	Curled Plumless Thistle		5	-1	SNA			GNR		X	X	I
Cichorium intybus	Chicory		5	-1	SNA			GNR		X	X	I
Cirsium arvense	Canada Thistle		3	-1	SNA			GNR		X	X	I
Cirsium vulgare	Bull Thistle		4	-1	SNA			GNR		X	X	I
Erigeron annuus	Annual Fleabane				S5			G5		X	X	
Erigeron strigosus	Daisy Fleabane	0	1		S5			G5		X	X	X
Eurybia macrophylla	Large-leaved Aster	5	5		S5			G5		X	X	X
Euthamia graminifolia	Grass-leaved Goldenrod	2	-2		S5			G5		X	X	X
Gnaphalium uliginosum	Low Cudweed		0	-1	SNA			G5		X	I	I
Inula helenium	Elecampane Flower		5	-2	SNA			GNR		X	I	I
Lactuca serriola	Prickly Lettuce		0	-1	SNA			GNR		X	I	I
Leucanthemum vulgare	Oxeye Daisy		5	-1	SNA			GNR		X	X	I
Matricaria perforata	Scentless Chamomile		5	-1	SNA			GNR		X	I	I
Pilosella caespitosa	Field Hawkweed		5	-2	SNA			GNR		X	I	I
Solidago altissima	Tall Goldenrod	1	3		S5			G5		X	X	X
Sonchus arvensis ssp. *arvensis*	Field Sow-thistle				SNA			GNRTNR		X	I	I
Sonchus asper	Prickly Sow-thistle		0	-1	SNA			GNR		X	I	I
Sonchus oleraceus	Common Sow-thistle		3	-1	SNA			GNR		X	I	I
Symphyotrichum lanceolatum var. lanceolatum	White Panicled Aster	3	-3		S5			G5T5		X	X	X
Symphyotrichum novae-angliae	New England Aster	2	-3		S5			G5		X	X	X
Taraxacum officinale	Common Dandelion		3	-2	SNA			G5		X	I	I
Balsaminaceae	**Touch-me-not Family**											

Latin Name	Common Name	Coefficient of Conservatism	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status (G-Rank)	Local Status Area	Local Status Peel	Local Staus CVC/Peel	Local Status Peel
									Local Status Source	Varga 2005	CVC 2002	
Impatiens capensis	Spotted Jewelweed	4	-3		S5			G5		X	X	X
Berberidaceae	**Barberry Family**											
Podophyllum peltatum	May Apple	5	3		S5			G5		X	X	X
Brassicaceae	**Mustard Family**											
Alliaria petiolata	Garlic Mustard		0	-3	SNA			GNR		X	X	I
Barbarea vulgaris	Yellow Rocket		0	-1	SNA			GNR		X	X	I
Capsella bursa-pastoris	Common Shepherd's Purse		1	-1	SNA			GNR		X	X	I
Erysimum cheiranthoides	Worm-seed Mustard		3	-1	SNA			G5		X	X	X
Hesperis matronalis	Dame's Rocket		5	-3	SNA			G4G5		X	I	I
Lepidium densiflorum	Dense-flower Pepper-grass		0	-2	SNA			G5		X	X	X
Rorippa palustris ssp. *hispida*	Hispid Marsh Yellowcress				S5			G5T5		X	X	X
Sinapis arvensis	Corn Mustard		5	-1	SNA			GNR		X	I	I
Thlaspi arvense	Field Penny-cress		5	-1	SNA			GNR		X	I	I
Campanulaceae	**Bellflower Family**											
Lobelia inflata	Indian Tobacco	3	4		S5			G5		X	X	X
Caprifoliaceae	**Honeysuckle Family**											
Lonicera tatarica	Tartarian Honeysuckle		3	-3	SNA			GNR		X	I	I
Caryophyllaceae	**Pink Family**											
Cerastium fontanum	Common Mouse-ear Chickweed		3	-1	SNA			GNR		X	X	I
Stellaria graminea	Little Starwort		5	-2	SNA			GNR		X	I	I
Chenopodiaceae	**Goosefoot Family**											
Atriplex patula	Halberd-leaf Saltbush	0	-2		S5			G5		X	X	X
Cucurbitaceae	**Gourd Family**											
Echinocystis lobata	Wild Mock-cucumber	3	-2		S5			G5		X	X	X
Elaeagnaceae	**Oleaster Family**											
Elaeagnus angustifolia	Russian Olive		4	-1	SNA			GNR		X	I	I
Fabaceae	**Pea Family**											
Lotus corniculatus	Bird's-foot Trefoil		1	-2	SNA			GNR		X	I	I
Medicago lupulina	Black Medic		1	-1	SNA			GNR		X	I	I
Melilotus albus	White Sweetclover		3	-3	SNA			G5		X	I	I
Trifolium pratense	Red Clover		2	-2	SNA			GNR		X	I	I
Vicia cracca	Tufted Vetch		5	-1	SNA			GNR		X	I	I
Fagaceae	**Beech Family**											
Quercus macrocarpa	Bur Oak	5	1		S5			G5		X	X	X
Guttiferae	**St. John's-wort Family**											
Hypericum perforatum	Common St. John's-wort		5	-3	SNA			GNR		X	I	I
Hydrophyllaceae	**Water-leaf Family**											
Hydrophyllum virginianum	Virginia Waterleaf	6	-2		S5			G5		X	X	X
Juglandaceae	**Walnut Family**											
Carya ovata	Shagbark Hickory	6	3		S5			G5		X	X	X
Lamiaceae	**Mint Family**											
Leonurus cardiaca	Common Motherwort		5	-2	SNA			GNR		X	I	I
Mentha arvensis	Corn Mint	3	-3		S5			G5		X	X	X
Nepeta cataria	Catnip		1	-2	SNA			GNR		X	I	I
Lythraceae	**Loosestrife Family**											

Latin Name	Common Name	Coefficient of Conservatism	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status (G-Rank)	Local Status Area	Local Status Peel	Local Staus CVC/Peel	Local Status Peel
									Local Status Source	Varga 2005	CVC 2002	
Lythrum salicaria	Purple Loosestrife		-5	-3	SNA			G5		X	I	I
Oleaceae	**Olive Family**											
Fraxinus americana	White Ash	4	3		S4?			G5		X	X	X
Fraxinus pennsylvanica	Red Ash	3	-3		S5			G5		X	X	X
Syringa vulgaris	Common Lilac		5	-2	SNA			GNR		X	I	I
Onagraceae	**Evening-primrose Family**											
Circaea lutetiana	Enchanter's Nightshade	3	3		S5			G5		X	X	X
Epilobium parviflorum	Small-flower Willow-herb		3	-1	SNA			GNR		X	X	I
Ludwigia palustris	Marsh Seedbox	5	-5		S5			G5		R5	RL	RL
Oenothera biennis	Common Evening-primrose	0	3		S5			G5		U	X	X
Papaveraceae	**Poppy Family**											
Sanguinaria canadensis	Bloodroot	5	4		S5			G5		X	X	X
Plantaginaceae	**Plantain Family**											
Plantago major	Common Plantain		-1	-1	SNA			G5		X	I	I
Polygonaceae	**Smartweed Family**											
Fallopia convolvulus	Black Bindweed		1	-1	SNA			GNR		X	I	I
Persicaria hydropiper	Marshpepper Smartweed	4	-5		SNA			GNR		X	I	I
Persicaria maculosa	Lady's-thumb		-3	-1	SNA			G3G5		X	I	I
Persicaria pensylvanica	Pennsylvania Smartweed	3	-4		S5			G5		R3	RL	RL
Polygonum aviculare ssp. aviculare	Prostrate Knotweed		1	-1	SNA			GNR		X	I	I
Rumex crispus	Curly Dock		-1	-2	SNA			GNR		X	I	I
Primulaceae	**Primrose Family**											
Anagallis arvensis	Scarlet Pimpernel		4	-1	SNA			GNR		X	X	I
Lysimachia ciliata	Fringed Loosestrife	4	-3		S5			G5		X	X	X
Ranunculaceae	**Buttercup Family**											
Ranunculus acris	Tall Buttercup			-2	SNA			G5		X	I	I
Ranunculus sceleratus var. sceleratus	Cursed Buttercup	2	-5		SU			G5T5			X	X
Rhamnaceae	**Buckthorn Family**											
Rhamnus cathartica	Common Buckthorn		3	-3	SNA			GNR		X	I	I
Rosaceae	**Rose Family**											
Crataegus species	Hawthorn species											
Fragaria virginiana	Virginia Strawberry	2	1		S5			G5		X	X	X
Geum aleppicum	Yellow Avens	2	-1		S5			G5		X	X	X
Geum canadense	White Avens	3	0		S5			G5		X	X	X
Potentilla argentea	Silvery Cinquefoil		3	-2	SNA			GNR		X	I	I
Potentilla recta	Sulphur Cinquefoil		5	-2	SNA			GNR		X	I	I
Prunus virginiana	Choke Cherry	2	1		S5			G5		X	X	X
Rubus idaeus ssp. *strigosus*	Red Raspberry	0	-2		S5			G5T5		X	X	X
Rubiaceae	**Madder Family**											
Galium aparine	Catchweed Bedstraw	4	3		S5			G5		R4	L	L
Galium mollugo	White Bedstraw		5	-2	SNA			GNR		X		I
Galium palustre	Marsh Bedstraw	5	-5		S5			G5		X	X	X
Salicaceae	**Willow Family**											
Populus alba	White Poplar		5	-3	SNA			G5		X	I	I
Populus tremuloides	Trembling Aspen		0		S5			G5		X	X	X
Salix amygdaloides	Peach-leaved Willow	6	-3		S5			G5		R6	L	L
Salix bebbiana	Bebb's Willow	4	-4		S5			G5		X	X	X
Salix eriocephala	Heart-leaved Willow	4	-3		S5			G5		X	X	X
Salix interior	Sandbar Willow	3	-5		S5			GNR		R5	L	L

Latin Name	Common Name	Coefficient of Conservatism	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status (G-Rank)	Local Status Area	Local Status Peel	Local Staus CVC/Peel	Local Status Peel
									Local Status Source	Varga 2005	CVC 2002	
Salix x rubens	Reddish Willow		-4	-3	SNA			GNA		XSR		
Scrophulariaceae	**Figwort Family**											
Mimulus ringens	Square-stemmed Monkey-flower	6	-5		S5			G5		U	X	X
Verbascum thapsus	Common Mullein		5	-2	SNA			GNR		X	I	I
Veronica serpyllifolia	Thyme-leaved Speedwell	0	-3		SNA			G5TNR		X	I	I
Solanaceae	**Nightshade Family**											
Solanum dulcamara	Climbing Nightshade		0	-2	SNA			GNR		X	I	I
Tiliaceae	**Linden Family**											
Tilia americana	American Basswood	4	3		S5			G5		X	X	X
Ulmaceae	**Elm Family**											
Ulmus americana	White Elm	3	-2		S5			G5		X	X	X
Violaceae	**Violet Family**											
Viola sororia	Woolly Blue Violet				S5			G5		X	X	X
Vitaceae	**Grape Family**											
Parthenocissus inserta	Inserted Virginia-creeper	3	3		S5			G5		X	X	X
Vitis riparia	Riverbank Grape	0	-2		S5			G5		X	X	X
Alismataceae	**Water-plantain Family**											
Alisma subcordatum	Southern Water-plantain				S4?			G5		X		
Cyperaceae	**Sedge Family**											
Carex cristatella	Crested Sedge	3	-4		S5			G5		X	X	X
Carex lupulina	Hop Sedge	6	-5		S5			G5		X	X	X
Carex radiata	Eastern Star Sedge	4	5		S5			G5		X	X	X
Carex species	Sedge species											
Carex spicata	Spiked Sedge		5	-1	SNA			GNR		X	X	X
Carex vulpinoidea	Fox Sedge	3	-5		S5			G5		X	X	X
Cyperus esculentus	Yellow Nut-grass	1	-3		S5			G5		X	X	X
Eleocharis obtusa	Blunt Spike-rush	5	-5		S5			G5		U	X	X
Eleocharis palustris	Small's Spike-rush	6	-5		S5			G5?		R4	L	L
Schoenoplectus tabernaemontani	American Great Bulrush	5	-5		S5			G5		X	X	X
Juncaceae	**Rush Family**											
Juncus bufonius	Toad Rush	1	-4		S5			G5		X	X	X
Juncus effusus var. effusus	Soft Rush	4	-5		SNA			GNR		X	X	X
Lemnaceae	**Duckweed Family**											
Lemna minor	Lesser Duckweed	2	-5		S5			G5		X	X	X
Poaceae	**Grass Family**											
Agrostis gigantea	Redtop		0	-2	SNA			G4G5		X	I	I
Agrostis stolonifera	Redtop		-3		S5			G5		X	X	X
Bromus inermis	Awnless Brome		5	-3	SNA			G5TNR		X	I	I
Bromus tectorum	Downy Chess		5	-2	SNA			GNR		X	I	I
Dactylis glomerata	Orchard Grass		3	-1	SNA			GNR		X	I	I
Digitaria sanguinalis	Hairy Crabgrass		3	-1	SNA			G5		X	I	I
Echinochloa crus-galli	Common Barnyard Grass		-3	-1	SNA			GNR		X	I	I
Elymus repens	Quack Grass		3	-3	SNA			GNR		X	I	I
Eragrostis pectinacea var. *miserrima*	Tufted Love Grass				SNA			G5T4T5		X		
Glyceria striata	Fowl Meadow Grass	3	-5		S5			G5		X	X	X
Leersia oryzoides	Rice Cut Grass	3	-5		S5			G5		X	X	X
Lolium perenne	English Rye Grass		3	-1	SNA			GNR		X	I	I
Panicum dichotomiflorum	Spreading Panic Grass		-2	-1	SNA			G5		X	I	I
Phalaris arundinacea var. arundinacea	Reed Canary Grass	0	-4		S5			GNR		X	X	X

Latin Name	Common Name	Coefficient of Conservatism	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status (G-Rank)	Local Status Area	Local Status Peel	Local Staus CVC/Peel	Local Status Peel
									Local Status Source	Varga 2005	CVC 2002	
Phleum pratense	Timothy		3	-1	SNA			GNR		X	I	I
Poa annua	Annual Blue Grass		1	-2	SNA			GNR		X	I	I
Poa palustris	Fowl Meadow Grass	5	-4		S5			G5		X	X	X
Poa pratensis ssp. pratensis	Kentucky Bluegrass	0	1		SNA			G5T5		X	X	X
Puccinellia distans	Spreading Goose Grass		-5	-1	SNA			G5		X	I	I
Schedonorus pratensis	Meadow Fescue		4	-1	SNA			G5		X	I	I
Setaria pumila	Yellow Foxtail		0	-1	SNA			GNR		X	I	I
Potamogetonaceae	**Pondweed Family**											
Potamogeton pusillus ssp. pusillus	Small Pondweed	5	-5		SU			G5T5		R3	R	RL
Typhaceae	**Cattail Family**											
Typha angustifolia	Narrow-leaved Cattail	3	-5		SNA			G5		X	X	X
Typha latifolia	Broad-leaved Cattail	3	-5		S5			G5		X	X	X
Typha x glauca	Glaucous Cattail	3	-5		SNA			GNA		X	X	X
STATISTICS												
Species Richness												
Total Number of Species:	153											
Native Species:	74	48%										
Exotic Species:	79	52%										
S1-S3 Species:	0	0%										
S4 Species:	2	3%										
S5 Species:	70	97%										
Floristic Quality Indices												
Mean Co-efficient of Conservatism (CC)	3.0											
CC 0 - 3 = lowest sensitivity	41	58%										
CC 4 - 6 = moderate sensitivity	30	42%										
CC 7 - 8 = high sensitivity	0	0%										
CC 9 - 10 = highest sensitivity	0	0%										
Floristic Quality Index (FQI)	26											
Weedy and Invasive Species												
Mean Weediness Index:	-1.6											
-1 = low potential invasiveness	39	54%										
-2 = moderate potential invasiveness	22	31%										
-3 = high potential invasivenss	11	15%										
Wetland Species												
Mean Wetness Index	0.5											
upland	28	19%										
facultative upland	36	25%										
facultative	28	19%										
facultative wetland	33	23%										
obligate wetland	19	13%										

Appendix C Breeding Bird List

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

Breeding Birds of 12519 and 12713 Humber Station Road, Brampton

Common Name	Scientific Name	Status					Number of Pairs/Territories			
		National Species at Risk COSEWIC [a]	Species at Risk in Ontario Listing [a]	Provincial breeding season SRANK [b]	TRCA Status	Area-sensitive (OMNR) [c]	FOD Woodland	On-site Wetlands	Fields, Hedgerows and former Gardens	Total
Great Blue Heron	*Ardea herodias*			S4	L3			1 F		1 F
Canada Goose	*Branta canadensis*			S5	L5				3 F	3 F
Mallard	*Anas platyrhynchos*			S5	L5			1		1
Killdeer	*Charadrius vociferus*			S5	L4				5	5
Spotted Sandpiper	*Actitis macularia*			S5	L4			1	1	2
Mourning Dove	*Zenaida macroura*			S5	L5		1	1, 6 F		2, 6 F
Downy Woodpecker	*Dryobates pubescens*			S5	L5				1	1
Northern Flicker	*Colaptes auratus*			S4	L4		1			
Eastern Wood-Pewee	*Contopus virens*	SC	SC	S4	L4		1 M?		1 M?	2 M?
Willow Flycatcher	*Empidonax traillii*			S5	L4			3		3
Eastern Kingbird	*Tyrannus tyrannus*			S4	L4				2	2
Horned Lark	*Eremophila alpestris*			S5	L3				5	5
Tree Swallow	*Tachycineta bicolor*			S4	L4			6 F		6 F
N. Rough-winged Swallow	*Stelgidopteryx serripennis*			S4	L4				4 F	4 F
Barn Swallow	*Hirundo rustica*	SC	SC	S4	L4				3 F	3 F
American Crow	*Corvus brachyrhynchos*			S5	L5				2	2
Black-capped Chickadee	*Poecile atricapillus*			S5	L5				1	1
American Robin	*Turdus migratorius*			S5	L5		3	1	7	11
Gray Catbird	*Dumetella carolinensis*			S4	L4		1		2	3
Brown Thrasher	*Toxostoma rufum*			S4	L3		1		1	2
Cedar Waxwing	*Bombycilla cedrorum*			S5	L5				1	1
European Starling	*Sturnus vulgaris*			SE	L+		1		1	2
Warbling Vireo	*Vireo gilvus*			S5	L5		1		1	2
Yellow Warbler	*Setophaga petechia*			S5	L5				1	1
Common Yellowthroat	*Geothlypis trichas*			S5	L4			3	1	4
Northern Cardinal	*Cardinalis cardinalis*			S5	L5		1		1	2
Chipping Sparrow	*Spizella passerina*			S5	L5				1	1
Vesper Sparrow	*Pooecetes gramineus*			S4	L3				5	5
Savannah Sparrow	*Passerculus sandwichensis*			S4	L4	A			7	7
Song Sparrow	*Melospiza melodia*			S5	L5		1	5	14	20
Swamp Sparrow	*Melospiza georgiana*			S5	L4			3		3
Red-winged Blackbird	*Agelaius phoeniceus*			S4	L5			11	9	20
Common Grackle	*Quiscalus quiscula*			S5	L5		2	1	1	4
Brown-headed Cowbird	*Molothrus ater*			S5	L5		1		1	2
American Goldfinch	*Spinus tristis*			S5	L5		2	2	2	6

F = species foraging only M? = possible migrant

Field Work Conducted On:	Date	Temp (°C)	Wind Speed (km/h)	Cloud Cover (%)	Start time (a.m.)
Site visit 1	June 30, 2022	17	0	30	8:30
Site visit 2	May 26, 2023	6	9	0	7:10
Site visit 3	June 19, 2023	13	10	0	6:35

Number of Species: 35 (30 plus 5 foraging)
Number of (provincial and national) Species at Risk: 2 (Barn Swallow F, Eastern Wood-Pewee M ?)
Number of S1 to S3 (provincially rare) Species: 0
Number of Grassland Area-sensitive Species: 1 (Savannah Sparrow)
Number of Forest Area-Sensitive Species: 0
KEY
a COSEWIC = Committee on the Status of Endangered Wildlife in Canada
a Species at Risk in Ontario List (as applies to ESA) as designated by COSSARO (Committee on the Status of Species at Risk in Ontario)
END = Endangered, THR = Threatened, SC = Special Concern

[b] SRANK (from Natural Heritage Information Centre) for breeding status if:
S1 (Critically Imperiled), S2 (Imperiled),S3 (Vulnerable), S4 (Apparently Secure), S5 (Secure)
SZB (breeding migrants or vagrants) and SR (reported as breeding, but no persuasive documentation) .
SE (exotic, i.e. non-native)

c Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat Technical Guide (Appendix G). 151 p plus appendices.

d Toronto and Region Conservation Authority L rank:
L1 to L3 Regional species of concern from highest to lowest; L4 Urban concern; L5 Secure through region

Appendix D Species at Risk Assessment

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

Appendix D: Species at Risk Screening Table

NAME	SARA STATUS	SARO	COSEWIC	SCHEDULE	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
AVIFAUNA										
Acadian Flycatcher (*Empidonax virescens*)	END	END	END	1	S1B	The Acadian Flycatcher is typically found in mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees. In Canada, the Acadian Flycatcher nests only in southwestern Ontario, near the shore of Lake Erie, in large forests and forested ravines. This species is found primarily southern Ontario's Carolinian forests, and requires large, undisturbed forests, often more than 40 hectares in size. This species is relatively rare in Ontario, with 25 to 75 breeding pairs recorded in 2010 (Ministry of Natural Resources and Forestry, 2017). The main threat to the Acadian flycatcher is habitat loss due to urban and agricultural development.	Breeding Bird Atlas	N	Not observed during either Palmer or GEI surveys and no suitable habitat.	NA
Barn Swallow (Hirundo rustica)	THR	SC	SC	1	S4B	The Barn Swallow is a threatened species, is found throughout southern Ontario, and can range into the north as long as suitable nesting locations can be found. These birds prefer to nest within human made structures such as barns, bridges, and culverts. Barn Swallow nests are cup-shaped and made of mud; they are typically attached to horizontal beams or vertical walls underneath an overhang. A significant decline in populations of this species has been documented since the mid-1980s, which is thought to be related to a decline in prey. Since the Barn Swallow is an aerial insectivore, this species relies on the presence of flying insects at specific times during the year. Changes in building practices and materials may also be having an impact on this species (Ministry of Natural Resources and Forestry, 2015).	Professional experience	N	Nesting habitat is no longer present on the property (except structure placed as compensation) although the species contines to forage over the fields.	NA
Bobolink (*Dolichonyx oryzivorus*)	THR	THR	SC	1	S4B	The Bobolink is found in grasslands and hayfields, and feeds and nests on the ground. This species is widely distributed across most of Ontario; however, are designated at risk because of rapid population decline over the last 50 years (Ministry of Natural Resources and Forestry, 2014). The historical habitat of the bobolink was tallgrass prairie and other natural open meadow communities; however, as a result of the clearing of native prairies and the post-colonial increase in agriculture, bobolinks are now widely found in hayfields. Due to their reproductive cycle, nesting habits, and use of agricultural areas, bobolink nests and young are particularly vulnerable to loss as a result of common agricultural practices (i.e. first cut hay).	NHIC	N	Not observed during either Palmer or GEI surveys	NA
Chimney Swift (*Chaetura pelagica*)	THR	THR	THR	1	S3B	The Chimney Swift is a threatened species which breeds in Ontario and winters in northwestern South America. It is found mostly near urban areas where the presence of chimneys or other manmade structures provide nesting and roosting habitat. Prior to settlement, the Chimney Swift would mainly nest in cave walls and hollow tress. The Chimney Swift initially benefitted from human settlement; however, recent declines in flying insects and the modernization of chimneys are factors attributed to their current population declines. As a threatened species, the Chimney Swift receives protection for both species and habitat under the ESA (Ministry of Natural Resources and Forestry, 2014).	Breeding Bird Atlas	N	Not observed during either Palmer or GEI surveys and not suitable habitat.	NA
Eastern Meadowlark (*Sturnella magna*)	THR	THR	THR	1	S4B,S3N	The Eastern Meadowlark is a bird that prefers pastures and hayfields, but is also found to breed in orchards, shrubby fields and human use areas such as airports and roadsides. Eastern meadowlarks can nest from early May to mid-August, in nests that are built on the ground and well-camouflaged with a roof woven from grasses. The decline in population of these species is thought to be at least partially related to habitat destruction and agricultural practices (Ministry of Natural Resources and Forestry, 2014).	NHIC	N	Not observed during either Palmer or GEI surveys	NA
Eastern Whip-poor-will (*Antrostomus vociferus*)	THR	THR	SC	1	S4B	Once widespread throughout the central Great Lakes region, distribution of the Eastern Whip-poor-will in this area is now fragmented. Although there is uncertainty about the causes of the population decline, the main threat is likely habitat loss and fragmentation. Additional threats may include car mortality and food supply changes related to pesticides and climate change. The Eastern Whip-poor-will is usually found in areas with a mix of open and forested areas, such as patchy forests with clearings, forests that are regenerating after major disturbances, savannahs, open woodlands or openings in more mature forests. Breeding habitat is dependent on forest structure rather than composition, although common tree associations are pine and oak, and it nests directly on the forest floor. Its distinctive call can be heard at dusk or dawn during the breeding season, and whip-poor-wills heard singing between mid-May and mid-July are likely local breeders (Committee on the Status of Endangered Wildlife in Canada, 2009).	Breeding Bird Atlas	N	No suitable habitat.	NA
Eastern Wood-Pewee (*Contopus virens*)	SC	SC	SC	1	S4B	The Eastern Wood-pewee is classified as a species of special concern by COSSARO. Their population has been gradually declining since the mid-1960's (The Cornell Lab of Ornithology, 2015). The Eastern Wood-pewee is a "flycatcher", a bird that eats flying insects, that lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation. Threats to the population are largely unknown; however, causes may include loss of habitat due to urban development and decreases in the availability of flying insect prey (Ministry of Natural Resources and Forestry, 2014).	NHIC	Y	The species was observed in two locations (FOD8 and CUW1) but may or may be breeding based on time of observations.	FOD8 will be retained. Removal of CUW1 should follow Migratory Birds Convention Act and Fish and Wildlife Conservation Act.

Appendix D: Species at Risk Screening Table

NAME	SARA STATUS	SARO	COSEWIC	SCHEDULE	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
Least Bittern (*Ixobrychus exilis*)	THR	THR	THR	1	S4B	The Least Bittern prefers marshes and swamps dominated by emergent vegetation, preferably cattails, interspersed with patches of woody vegetation and open water. The smallest member of the heron family, least bitterns nest in marshes south of the Precambrian Shield in Ontario. Due to the location of the nests close to the water surface, least bittern nests are susceptible to damage as a result of wakes cast by recreational boats (Government of Canada, 2015).	Breeding Bird Atlas	N	Not observed during either Palmer or GEI surveys and cattail habitat at and beyond the property is likely too small to support the species	NA
Loggerhead Shrike (*Lanius ludovicianus*)	END	END	END	1	S1B	The Loggerhead Shrike has specific habitat requirements that are dependent on active livestock grazing, or grassland areas that have naturally short grass cover (i.e. alvar communities). They prefer grassland habitats that have sporadic occurrences of low trees and shrubs; particularly hawthorn species, which are used as part of their feeding behaviour. Presently, Loggerhead Shrike populations in Ontario are a fraction of their former abundance, and their typical range is limited to the Carden Plain and the Napanee Limestone Plain (Ministry of Natural Resources and Forestry, 2014).	Breeding Bird Atlas	P		
HERPTILES										
Eastern Milksnake (*Lampropeltis triangulum*)	SC	-	SC	-	S4	"Eastern Milksnakes are habitat generalists but prefer open habitats, including rock outcrops and meadows. They require suitable microhabitats for egg laying, hibernation and thermoregulation. Eastern Milksnakes are well known for occupying barns, sheds and houses in rural landscapes" (COSEWIC Report, 2015)	Amphibian/ Reptile Atlas	N	Not present based on GEI surveys which included cover boards, transects and road kill surveys. Additionally,Palmer did not observe the species on the property,	NA
Snapping Turtle (*Chelydra serpentina*)	SC	SC	SC	1	S4	The snapping turtle is a species of special concern in Ontario due to the potential for the species to become threatened or endangered as a result of biological factors or other identified threats. While not presently protected by law, the snapping turtle has been recognized as a species of special concern by COSSARO. Snapping turtles spend the majority of their lives in water and travel slightly upland to gravel or sandy embankments or beaches to lay their eggs (Ontario Ministry of Natural Resources and Forestry, 2014).	Amphibian/ Reptile Atlas	Y	Observed in 'south pond' (SAS1-1/SWT2-2/MAM2-2)	No impacts anticipated as the wetland found will be retained.
Western Chorus Frog Great Lakes / St. Lawrence - Canadian Shield population (*Pseudacris triseriata*)	THR	-	THR	1	S4	The Great Lakes/St. Lawrence – Canadian Shield population of the western chorus frog is federally listed as threatened by COSEWIC. This small frog is primarily a lowland terrestrial species that requires access to terrestrial and aquatic habitats in close proximity to one another. Relying on marshes and wooded wetlands adjacent to forested habitats, this species also requires isolated, predator free pools for breeding. Temporary pools, such as vernal pools in wooded areas, are preferred. This species hibernates terrestrially in a variety of environs, including leaf litter, wood debris, and vacant animal burrows (Government of Canada, 2016)	Amphibian/ Reptile Atlas	N	Not observed during either Palmer or GEI surveys	NA

Appendix D: Species at Risk Screening Table

NAME	SARA STATUS	SARO	COSEWIC	SCHEDULE	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
MAMMALS										
Tri-colored Bat (*Perimyotis subflavus*)	END	END	END	1	S3?	Tri-colored Bat is a small bat that is widely distributed in eastern North America and whose range extends north to southern Ontario. Tri-colored Bat is rare in this region of Ontario which is at the northernmost limit of the natural range for the species. These bats prefer to nest in foliage, tree cavities and woodpecker holes, and are occasionally found in buildings; though this is not their preferred habitat. Winter hibernation takes place in caves, mines and deep crevices. Tri-colored Bat feed primarily on small insects and prefer an open forest habitat type in proximity to water (University of Michigan Museum of Zoology, 2004).	Professional experience	P	Not recorded during GEI North Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; two snags and none definitively recorded in Former Farmstead based on acoustic surveys by SLR (2025)	No impacts anticipated as not definitvely recorded on the property and if present, no suitable habitat removed in North Woodland. No impacts in Former Famstead under current proposal (any impacts due to later phases of development can be addressed through tree removal timing windows and bat box placement if required).
Eastern Small-footed Myotis (*Myotis leibii*)	No Statu	END	No Sta	No Schedu	S2S3	The eastern small-footed myotis, a bat, are an endangered species threatened by a disease known as white nose syndrome, caused by a fungus from Europe. Eastern small-footed myotis' fur has black roots and shiny light brown tips, giving it a yellowish-brown appearance. Its face mask, ears and wings are black, and its underside is grayish-brown, about 8 cm long in size and weighs 4-5 grams. In the spring and summer, eastern small-footed myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. They change their roosting locations daily and hunt at night for insects to eat, including beetles, mosquitos, moths, and flies. They hibernate in winter, often in caves and abandoned mines. They can be found from south of Georgian Bay to Lake Erie and east to the Pembroke area, and choose colder and drier sites (Ministry of Natural Resources and Forestry, 2014).	Professional experience	N	Not recorded during GEI North Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; none recorded in Former Farmstead by SLR (2025). Habitat requirements also differ from other species and are usually associated with a variety of rocky habitats.	No impacts as not recorded on the property and suitable habitat not present.
Little Brown Myotis (*Myotis lucifugus*)	END	END	END	1	S3	Little brown myotis, a bat, are an endangered species threatened by a disease known as white nose syndrome, caused by a fungus from Europe. Little brown myotis have glossy brown fur and usually weigh between four and 11 grams. Bats are nocturnal. During the day they roost in trees and buildings. They often select attics, abandoned buildings and barns for summer colonies where they can raise their young. Little brown myotis hibernate from October or November to March or April, most often in caves or abandoned mines that are humid and remain above freezing – an ideal environment for the fungus to grow and flourish. The syndrome affects bats by disrupting their hibernation cycle, so that they use up body fat supplies before the spring when they can once again find food sources (Ministry of Natural Resources and Forestry, 2014).	Professional experience	P	Not recorded during GEI North Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; two snags and may be present (a few *Myotis* calls) recorded in Former Farmstead based on acoustic surveys by SLR (2025)	No impacts anticipated as not deinfitely recorded on the property and if present, no suitable habitat in FOD8 removed. No impacts in Former Famstead under current proposal (No impacts in Former Famstead under current proposal (any impacts due to later phases of development can be addressed through tree removal timing windows and bat box placement if required).
Northern Myotis (*Myotis septentrionalis*)	END	END	END	1	S3	Northern myotis, a bat, are an endangered species threatened by a disease known as white nose syndrome, caused by a fungus from Europe. Northern myotis have dull yellow-brown fur with pale grey bellies. They are approximately eight cm long, with a wingspan of about 25 cm, and usually weigh six to nine grams. Northern myotis can be found in boreal forests but occurs throughout southern Ontario to the north shore of Lake Superior and occasionally as far north as Moosonee. roosting under loose bark and in the cavities of trees. Northern Myotis roosts within tree crevices, hollows and under the bark of live and dead trees, particularly when trees are located within a forest gap. These bats hibernate from October or November to March or April, most often in caves or abandoned mines (Ministry of Natural Resources and Forestry, 2014).	Professional experience	P	Not recorded during GEI North Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; two snags and may be present (a few *Myotis* calls) recorded in Former Farmstead based on acoustic surveys by SLR (2025)	No impacts anticipated as not deinfitely recorded on the property and if present, no suitable habitat in FOD8 removed. No impacts in Former Famstead under current proposal (any impacts due to later phases of development can be addressed through tree removal timing windows and bat box placement if required).
Eastern Red Bat (*Lasiurus borealis*)	No Status	END	END	No Schedule	S3	Eastern red bats roost in the foliage of deciduous or sometimes evergreen trees and occassionally in shrubs (Bat Conservation International, 2024; COSEWIC, 2024). Trees used as maternity roosts tend to be large diameter and tall, reaching or exceeding the height of the surrounding canopy. Their solitary roosting behaviour and well-camouflaged fur results in roosts being highly cryptic. Roost sites that have overhead foliage for cover and open flight space below are selected. Eastern red bats typically uses several trees during the breeding season (COSEWIC, 2024).	Professional Experience	Y	Was recorded during GEI North Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; none definitively recorded in Former Farmstead by SLR (2025)	No impacts as proposed removals (primarily thicket and wetland) adjacent to north woodland habitat do not remove recorded snag trees/roost habitat. Not definitively present in Former Farmstead, but no impacts to this area under current proposa (any impacts due to later phases of development can be addressed through tree removal timing windows and bat box placement if required)l.
Hoary Bat (*Lasiurus cinereus*)	No Status	END	END	No Schedule	S3	Hoary bats roost solitarily among the foliage of trees, with preferences including maple, oak, ash, elder, hemlock, and redwood trees (Bat Conservation International, 2024). Trees used as maternity roosts tend to be large diameter and tall, reaching or exceeding the height of the surrounding canopy. There is little information regarding roost switching and roost area for Hoary Bats (COSEWIC, 2024).	Professional Experience	Y	Was recorded during GEI Norrth Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; was recorded in Former Farmstead by SLR (2025)	No impacts as proposed removals (primarily thicket and wetland) adjacent to north woodland habitat do not remove recorded snag trees/roost habitat. No ichanges to Former Farmstead under current proposal (any impacts due to later phases of development can be addressed through tree removal timing windows and bat box placement if required)
Silver-haired Bat (*Lasionycteris noctivagans*)	No Status	END	END	No Schedule	S3	Silver-haired Bats occurs primarily under bark and in the cavities of trees, making them reliant on habitats where large, decaying trees are available. Silver-haired Bats roost in a variety of large diameter coniferous and deciduous trees. Frequent roost switching is common (COSEWIC, 2024).	Professional Experience	Y	Was recorded during GEI North Woodland acoustic surveys (2017); surveys not repeated at later date since no habitat to be impacted; was recorded in Former Farmstead by SLR (2025)	No impacts as proposed removals (primarily thicket and wetland) adjacent to north woodland habitat do not remove recorded snag trees/roost habitat. No changes to Former Farmstead under current proposal (any impacts due to later phases of development can be addressed through tree removal timing windows and bat box placement if required)

Appendix D: Species at Risk Screening Table

NAME	SARA STATUS	SARO	COSEWIC	SCHEDULE	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
FISH										
Redside Dace (*Clinostomus elongatus*)	END	END	END	1	S2	The redside dace is found in pools and slow-flowing sections of relatively small headwater streams with both pool and riffle habitats and a moderate to high gradient (McKee and Parker 1982, Meade et al. 1986, Goforth 2000, Andersen 2002, Daniels pers. comm. 2005). Substrate varies from silt to boulders, but they are often associated with gravel (McKee and Parker 1982; Becker 1983; Holm and Crossman 1986, Daniels, pers. comm. 2005). Overhanging riparian vegetation in the form of grasses and shrubs as well as undercut banks and instream cover (boulders, large woody debris) are important components of redside dace habitat. Redside dace are typically found in stream segments that flow through open meadows, pasture or shrub overstory as opposed to closed canopy forest in Ontario (Andersen 2002, Parish 2004) and Wisconsin (Becker 1983). They are known to be coolwater species and and water clarity is important to redside dace habitat.	MECP Consultation	Y	Contributing Habitat for Redside Dace is identified along the HDF3 feature within the Prologis Lands. Through consultation MECP specified that although a permit was not required for channel works, RSD mitigations should be in place, including timing for works taking place in the active channel.	Adhere to Redside Dace timing window for works that affect the HDF3 active channel area.
OTHER										
Monarch Butterfly (*Danaus plexippus*)	END	SC	END	1	S2N,S4B	The monarch is an orange and black butterfly with small white spots and is classified as a species of special concern by COSSARO. The monarch relies on milkweed plants as a food source for growing caterpillars, but the adult butterflies forage in diverse habitats for nectar from wildflowers. The greatest threat to the monarch is loss of overwintering habitat in Mexico. Other threats include use of pesticides and herbicides throughout its range (Ministry of Natural Resources and Forestry, 2014).	Ontario Butterfly Atlas	P	Not observed by Palmer, but GEI observed on adjacent meadow marsh to east.	None.

Notes:
SC - Special Concern
THR - Threatened
END - Endangered
S1 - Extremely rare in Ontario
S2 - Very rare in Ontario
S3 - Rare to uncommon in Ontario
S4 - Considered to be common in Ontario
S5 - Species is widespread in Ontario
SH - Possibly extirpated
S#S# - Indicates insufficient information exists to assign a single rank.
S#? - Indicates some uncertainty with the classification due to insufficient data.
S#N - Nonbreeding
S#B - Breeding
Y= Yes, P = Potential, N = No

Appendix E SAR Bat Habitat Memo for MECP (SLR May 2025)

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

Technical Memorandum

To: Devon Fowler (MECP)

From: Rosalind Chaundy, Carly Houghton (SLR)

Company:

Ministry of Environment, Conservation and Parks (MECP)

SLR Consulting (Canada) Ltd.

cc: Joel Davey (SLR), Carlos Canejo (Prologis)

Date: May 30, 2025

Project No. 243.V24265.00000

Revision 01

RE: SAR Bat Habitat at 12519 & 12713 Humber Station Road Town of Caledon, Region of Peel

1.0 Introduction

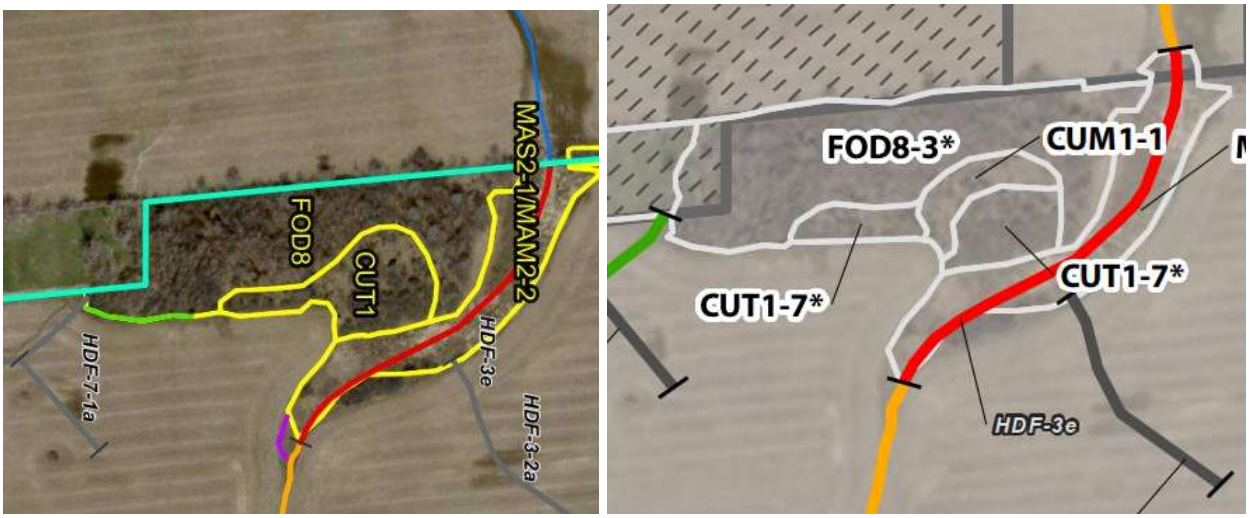
The following memorandum addresses comments received from the Ministry of Environment, Conservation and Parks (MECP) on March 4, 2025, relating to **Species at Risk (SAR) bats** located within the **12519 and 12713 Humber Station Road** property, in the Town of Caledon, Regional Municipality of Peel (the Subject Property). SLR Consulting (Canada) Ltd. (SLR) has previously provided memos regarding HSD8 and HDF 3 within the Subject Property. Additionally, a revised Information Gathering Form (IGF) with updated information on bats is also being sent.

Through March 4, 2025 email correspondence, it was requested by MECP to provide further information on SAR bats by updating the IGF. We have also elected to provide a memo which can provide new information in a clearer format, and respond to questions from MECP. We understand that the MECP is asking questions in part because three new species of bats [Eastern Red Bat *(Lasiurus borealis*), Hoary Bat *(Lasiurus cinereus*) and Silver-haired Bat (*Lasionycteris noctivagans*)] were added to the list of Endangered species in Ontario in late January 2025.

2.0 Existing Conditions - Vegetation

The Subject Property is predominantly row crop agricultural fields (**Map 1**). There are also smaller areas of wetland, woodland and treed areas. MECP has bat habitat questions about two of these areas. Near the northern property boundary, there is a small woodland, that is described as FOD8 or FOD8-3 Fresh-Moist Basswood Deciduous Forest (by SLR, formerly Palmer) and GEI (**Map 2**). This is called *North Woodland Area* in this memo and is further described in Section 2.1. The other area of interest is an area that used to contain buildings and gardens. This area is called *Former Farmstead* in this memo.

Map 1. Agricultural and industrial context of North Woodland Area and Former Farmstead.



Map 2. ELC (Ecological Land Classification) of North Woodland as mapped by Palmer (November 2024, EIS) and GEI (October 2024, CEISMP Phase 2) respectively.

2.1 North Woodland Area

The North Woodland is considered to be approximately 1.1 ha in size by SLR or 1.2 ha in size by GEI (including a small, treed area with lawn at the bottom end of the adjacent property owner's garden). Despite being classified as a woodland, both it and the adjacent thicket are densely covered by the Common Buckthorn (*Rhamnus cathartica*) throughout (**Photos 1** and **2**). It is the dominant woody species in the woodland. There are also scattered deciduous trees, that are mostly young with a few mid-aged trees. Most trees are either ash (White or Green *Fraxinus americana or penslyvanica*), or Basswood (*Tilia americana*), while Shagbark Hickory (*Carya ovata*) is also present in very small numbers.

Adjacent and continuous with this woodland is a cultural thicket (CUT1) that is highly dominated by Common Buckthorn. SLR mapping indicates this area as CUT1, while GEI ELC mapping indicates the thicket as mainly Buckthorn Thicket (CUT1-7) with a piece of cultural meadow (CUM1-1) in between.

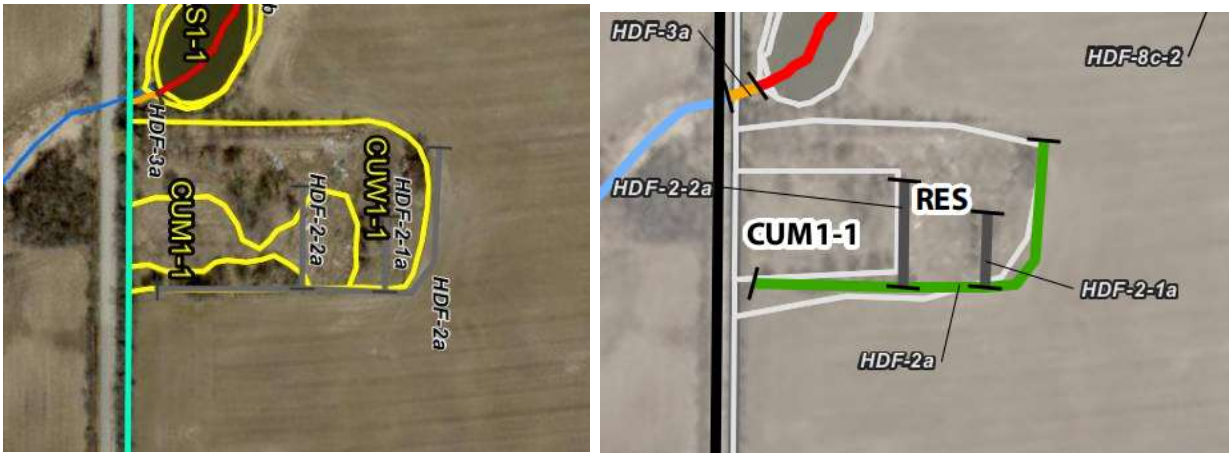
Photos 1 and 2. Typical North Woodland photos showing dominance of Buckthorn (Nov. 2024).

The mid-sized trees are mostly present along the north property edge (**Photo 3**).

Photo 3. An atypical tree of the North Woodland; it is not young and is a Shagbark Hickory.

2.2 Former Farmstead

There is an area that was a former farmstead situated along Humber Station Road which was mapped as either Cultural Woodland (CUW1-1 and Cultural Meadow (CUM1-1) by Palmer (now SLR) or Residential and Cultural Meadow by GEI (**Map 3**). Both approaches to mapping could be considered correct, as the ELC classification method for southern Ontario does not describe anthropogenic vegetation communities such as these well. Both describe an area of vegetation community that is mainly a grassy meadow, with lines of trees along the edges and a cluster of trees in the centre (**Photo 4**). These trees are a mix of Norway Maple (*Acer platanoides*), Manitoba Maple (*Acer negundo*), Honey Locust (*Gleditsia triacanthos*) and Poplar sp. (*Populus* sp.) (SLR, EIS and MHBC Tree Inventory, Protection and Removal, in progress). It is likely that many of these were planted, especially the Norway Maple and Honey Locust, whereas others may be natural regeneration.



Map 3. ELC of Former Farmstead as mapped by Palmer and GEI respectively.

Photo 4. Former Farmstead (June 2022)

3.0 Existing Conditions - Bats

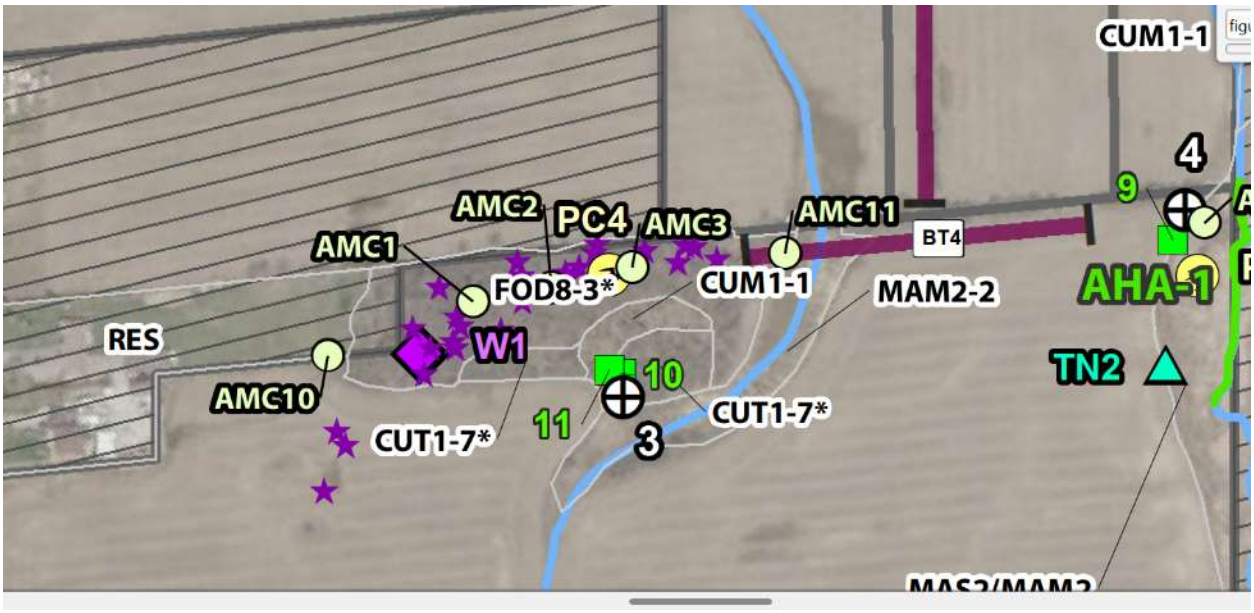
3.1 Bat Habitat Assessment – North Woodland Area

GEI undertook a bat habitat assessment in the North Woodland on April 21, 2017, using *Bats and Bat Habitats: Guidelines for Wind Power Projects*" (MNR 2011), which was the standard at the time, as well as consultation with MNRF, and professional experience. *For the purposes of this survey, hedgerows (HR), Cultural woodlands (CUW), and residential/disturbed areas were also targeted.*

'*The entire woodlot was assessed using a transect approach to determine whether suitable maternity roosting habitat was present. All trees and snags greater than or equal to 10 cm diameter-at-breast height (DBH) were visually inspected using binoculars to document any cavities, leaf clusters, and loose or peeling bark that may or may not be present along the trunk or large branches. In addition, survey efforts also targeted oak and maple tree species to identify suitable maternity roost habitat for Tri-coloured Bats'*. Note that no maple nor oak trees have been observed in the North Woodland.

GEI found that potential 'snag' or 'cavity' trees were present almost exclusively in the north and west sides of the woodland (**Map 4**) and not in the south nor cultural thicket areas. No rock

features were observed in the North Woodland as potential habitat for Eastern Small-footed Bat (*Myotis leibii*).



Map 4. Purple stars indicate 'cavity trees' (GEI Fig. 5 CEISMP Ph 1 Oct 2023)

3.2 Bat Habitat Assessment – Former Farmstead

No leaf-off bat habitat surveys were undertaken by GEI in the Former Farmstead, however SLR did undertake snag surveys on April 15, 2025. At this time, two potential bat habitat trees ('snag

trees') were found (Tree #s 131, 467 as inventoried byMHBC). The approximate locations are shown in **Map 5**. No rock features were in the Former Farmstead.

Map 5. Green Triangles indicate 'cavity trees' (SLR fieldwork April 2025)

3.3 Acoustic Surveys – Northern Woodland

GEI undertook surveys using one SM3BAT acoustic detector in June 2017. The length of time that the detector was recording was not 10 days, as per standard protocol, as the battery died unexpectedly. Further discussion about the sufficiency of these surveys is given in Section 4.1.

According to GEI (CEISMP Phase 1, 2023):

> Four bat species were confirmed to be present within the FOD8-3: Big Brown Bat (*Eptesicus fuscus*), Hoary Bat (*Lasiurus cinereus*), Silver-haired Bat (*Lasionycteris noctivagans*) and Eastern Red Bat (*Lasiurus borealis*). During the evenings of acoustic surveys, a total of 77 low frequency calls and 29 high frequency calls were recorded; with a cumulative total of 106 passes by all species. Of the low frequency calls, 16 calls were confirmed to be Big Brown Bat, seven calls were confirmed to be Hoary Bat, four confirmed calls were Silver-haired, and the remaining 51 low frequency calls were not identifiable to species (Table 15, Appendix C1). Of the high frequency calls, 5 calls were confirmed to be Eastern Red bat. No Myotis species were recorded in the Study Area.

3.4 Acoustic Surveys – Former Farmstead

GEI did not undertake standard acoustic monitoring of the former farmstead area as it was not considered necessary due to the lack of woodland. SLR concurred. In regard to the buildings that were present until 2017 or 2018, GEI stated that "*two individuals standing on opposite sides of the structure with the detector held above their heads for 10 minutes*" on one date in June,

2017. GEI recommended bat exit surveys for structures as the next step, however it is our understanding that the buildings were destroyed due to arson in the late summer/fall of 2017, thus no further surveys were done here.

During the initial surveys, GEI recorded Big Brown Bat and one instance of Silver-haired Bat, using the hand-held detector.

4.0 Proposed Development, Impacts and Discussion

4.1 North Woodland Area Impacts and Discussion

A channel realignment is proposed for part of a drainage feature (HDF3) which occurs on the property (**Figure 1**). As part of this proposed realignment, much of the buckthorn thicket that is present will be removed (0.252 ha) and a small amount of the woodland (0.081) as identified by both Palmer (SLR) and GWI. Upland and wetland areas being removed will be replaced area-for-area nearby and is expected to be part of an approved development plan. In 2025, MHBC undertook a tree inventory in this area (MHBC, Tree Inventory, Protection and Removals, TI-6, March 2025, in progress). In the vegetation removal area, 22 young trees (that is 9 to 21 cm dbh) were mapped (12 Basswood *Tilia americana*, 10 Ash. *Fraxinus sp.*, and one Hawthorn, *Crataegus sp.*). Based on SLR field observations and GEI snag tree data (**Map 5**), no suitable snag trees will be removed as part of this process.

It is therefore SLR's opinion that the proposed works would not impact bat habitat.

And, even though the original 2017 GEI acoustic data is older and was not carried out for 10 days, it is SLR's opinion that given the presence of Hoary, Silver-haired and Eastern Red Bat in the general vicinity, that these three species would likely still be recorded if surveys were done again, while at the same time, not providing any more meaningful data. That is, the precise habitat attributes that the bats are likely to be using (i.e. the snag trees in the north and west of the woodland) will remain post-development, even should more species be recorded.

4.2 Former Farmstead Impacts and Discussion

Given the minimal data gathered in the Former Farmstead area, SLR is proposing to undertake acoustic surveys (using one detector) in this area in June 2025. No works are proposed in this area for at least two to three years. Works that would be proposed are linear infrastructure works, for which precise locations have not been determined, due to later phasing. Thus, it seems logical to defer discussion of impacts (if any) until a that later date.

5.0 Conclusion

The purpose of this memo is to obtain confirmation from the MECP that:

a) MECP concurs that the vegetation removal associated with the North Woodland Area will not affect any SAR bat habitat and thus can proceed without further discussion with MECP; and that

b) MECP and SLR will discuss the impacts to bat habitat (if any) of the Former Farmstead area once i) SLR undertakes bat acoustic surveys in June 2025 and ii) Prologis confirms infrastructure placement in this general area (likely to happen in two to three years).

6.0 Statement of Limitations

This report has been prepared by SLR Consulting (Canada) Ltd. (SLR) for the MECP in accordance with the scope of work and all other terms and conditions of the agreement between SLR and Prologis (Client). SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this report, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

Any findings, conclusions, recommendations, or designs provided in this report are based on conditions and criteria that existed at the time work was completed and the assumptions and qualifications set forth herein.

This report may contain data or information provided by third party sources on which SLR is entitled to rely without verification and SLR does not warranty the accuracy of any such data or information.

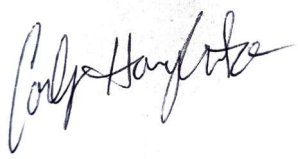
Nothing in this report constitutes a legal opinion nor does SLR make any representation as to compliance with any laws, rules, regulations, or policies established by federal, provincial territorial, or local government bodies, other than as specifically set forth in this report. Revisions to legislative or regulatory standards referred to in this report may be expected over time and, as a result, modifications to the findings, conclusions, or recommendations may be necessary.

7.0 Closure

This report was prepared and reviewed by the undersigned. This memorandum is subject to the Statement of Limitations provided above.

Regards,

SLR Consulting (Canada) Ltd.



Rosalind Chaundy, M.Sc.F.
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Carly Houghton,
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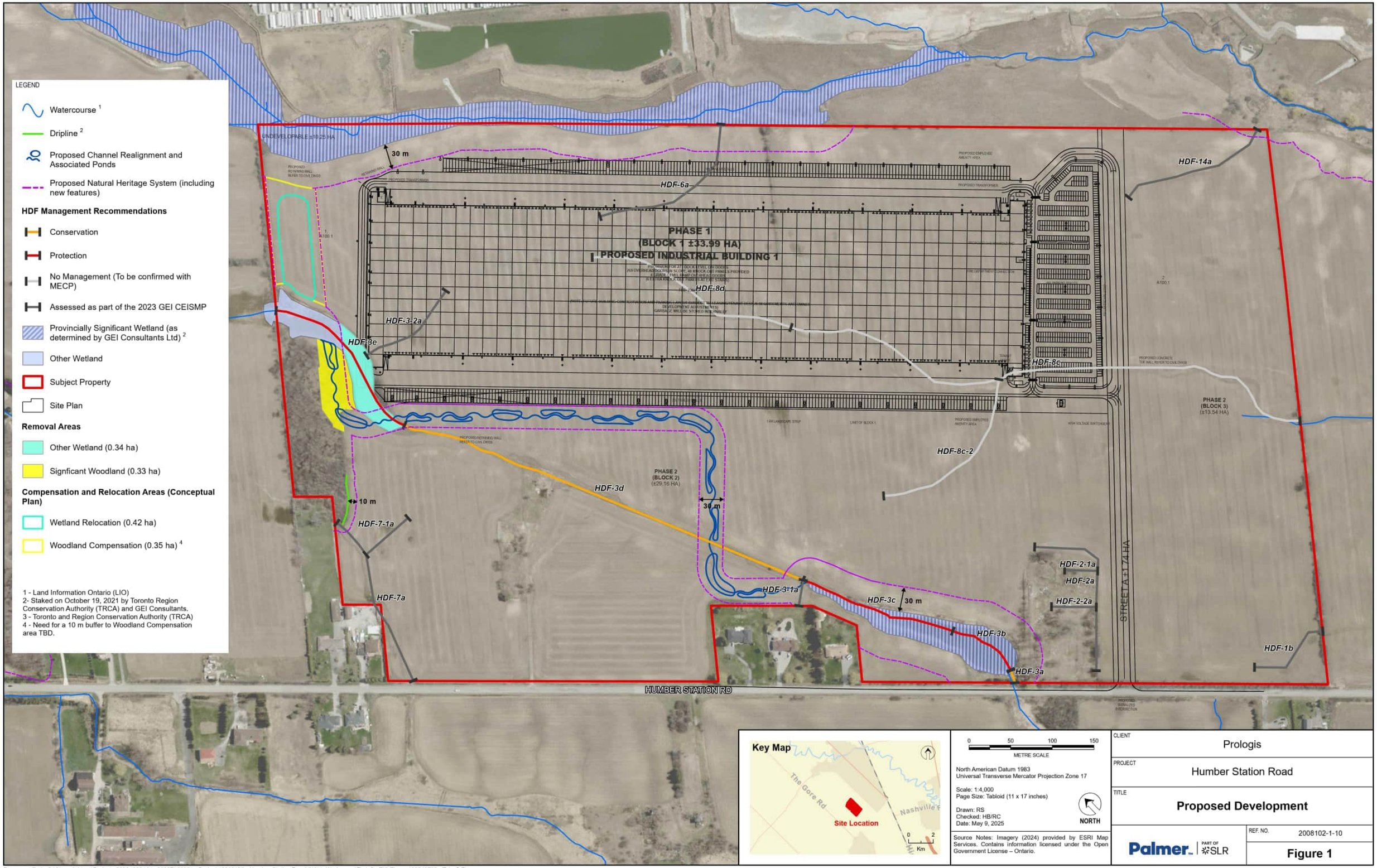

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Appendix F Redside Dace Memos for MECP (SLR January & March 2025)

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

SLR Consulting (Canada) Ltd.
16 Robert Boyer Lane, Bracebridge, ON P1L 1R9

January 31, 2025

Attention: Aurora McAllister
Management Biologist
Ministry of Environment, Conservation and Parks (MECP)

SLR Project No.: 243.V24265.00000

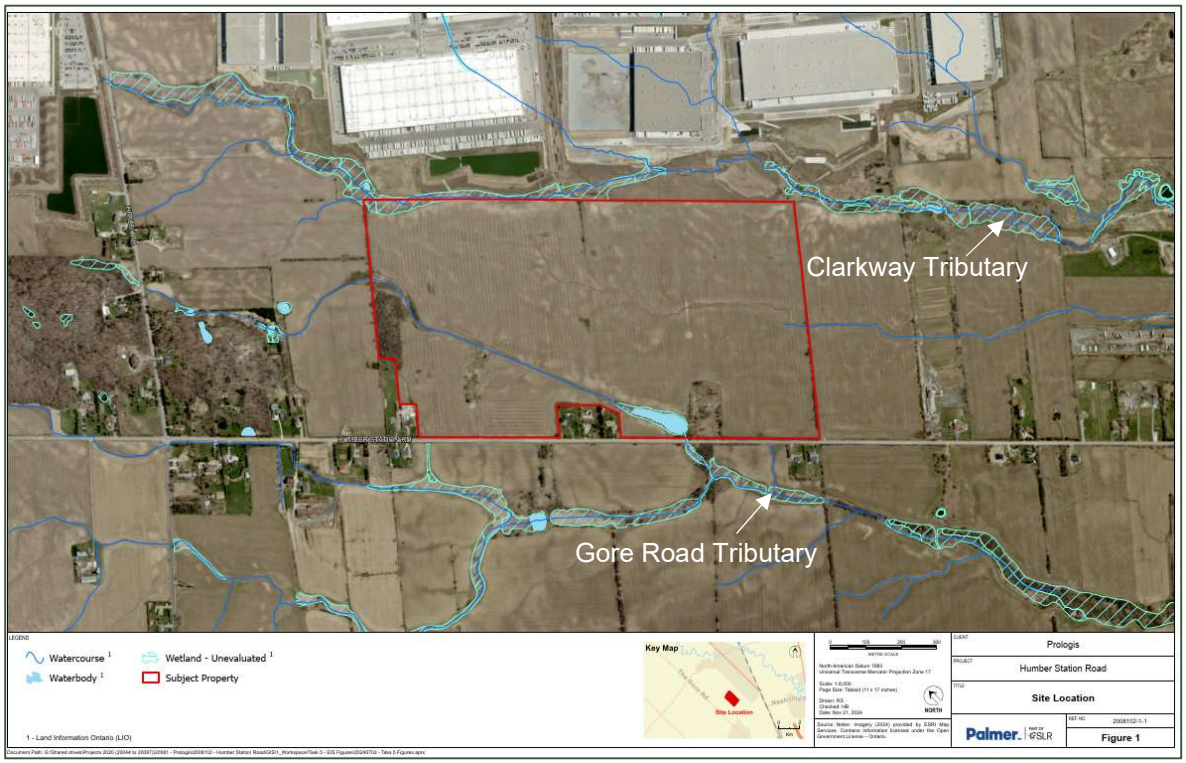
Revision: 0

RE: 12519 & 12713 Humber Station Road – Clarkway Tributary Headwaters 2024 Existing Conditions Summary - Redside Dace Habitat Verification

1.0 Introduction

SLR (formerly Palmer Environmental Consulting Group Inc.) has been retained to complete an Environmental Impact Study (EIS) and Hydrogeological Investigation as part of an application for the proposed development of a property at 12519 & 12713 Humber Station Road (Subject Property; **Figure 1**) in the Town of Caledon, Regional Municipality of Peel.
The Subject Property is approximately 78 hectares in size and is situated along the east side of Humber Station Road, on the west side of the town of Bolton. In its current state, the Subject Property exists primarily as agricultural lands.

Figure 1: Subject Property Location



Several Headwater Drainage Features (HDFs) segments were identified as intersecting the Subject Property, with some draining to the Gore Road Tributary, and others to the Clarkway Tributary. From background review, Occupied Habitat for Redside Dace (*Clinostomus elongatus*) is identified within the Clarkway Tributary subwatershed, approximately 5 kilometres downstream of the Subject Property. Through SLR's correspondence with GEI Consultants (GEI); the consultant responsible for the larger Block Plan approvals for the area, it is understood that one of the HDFs (HDF-8) within the Subject Propety requires additional data to fulsomely describe, understand and evaluate the functions of this feature in relation to its potential to be considered Contributing Habitat to the downstream Occupied Habitat. GEI has informed our team at SLR that these habitat considerations were discussed between GEI staff and MECP in December 2024, and the following criteria were requested by MECP to fully determine the overall function of HDFs in the Subject Property:

- Several years of survey data;
- Supported by data loggers in the HDFs; and
- Assess relationship between groundwater and surface water for the HDFs.

In review of the existing data that SLR and other consultants have gathered to date, SLR is of the opinion that we have sufficient data, for the HDF features within the Subject Property, to address the requests of MECP and provide a conclusive determination on the habitat status as it relates to Redside Dace. Data amalgamated by SLR is the result of the investigations completed for the Site Plan approvals within the Subject Property, and the larger Block Plan studies, as well as other secondary plan studies which overlapped with the Subject Property lands.

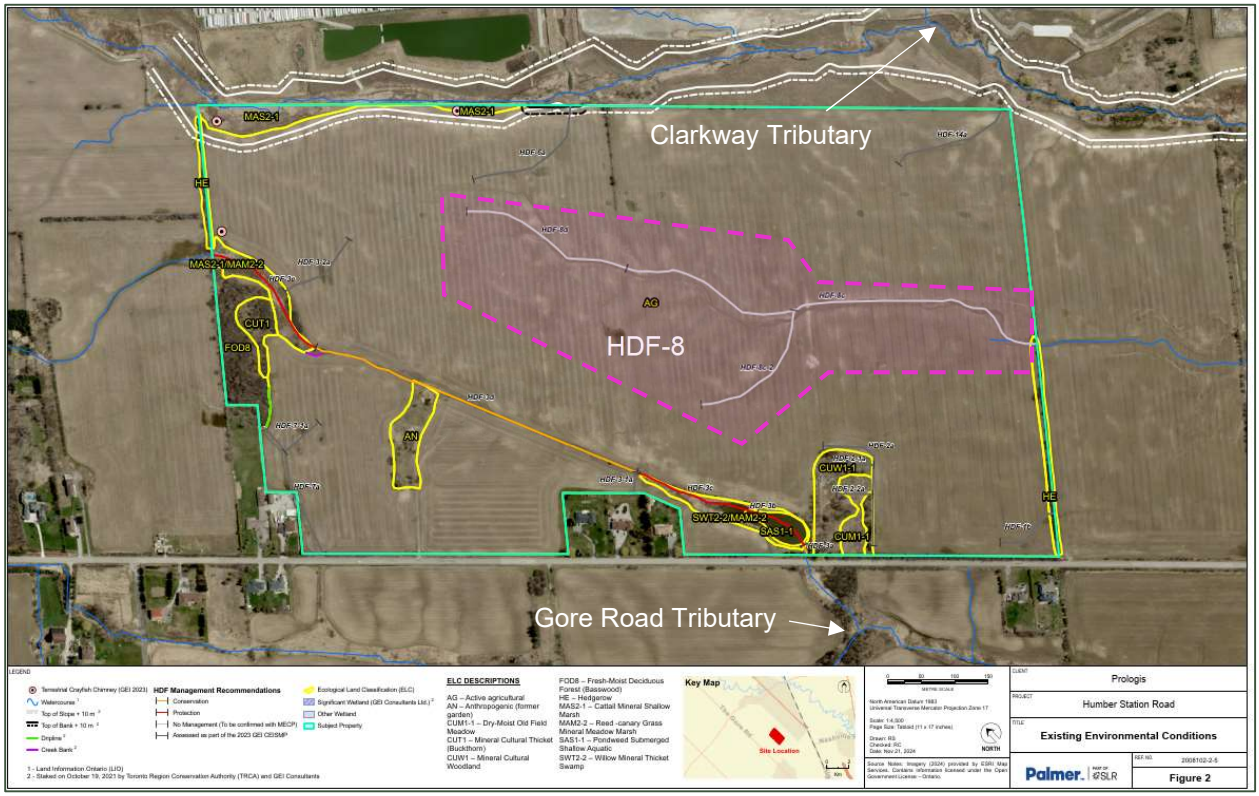
Using these data, we provide a fulsome characterization of the hydrologic and ecological functions of the HDF network, within the Subject Property lands, which drains to the Clarkway Tributary, identified as HDF-8. From review of this characterization, we request that the MECP provide clarity on any potential habitat status for HDF-8 (all segments) within the Subject Property, if any, in relation to Redside Dace (*Clinostomus elongatus*). Additional discussion on the potential habitat status for HDF-8 for lands *outside of the Subject Property* will be provided by GEI as part of reporting for the overall Humber Station Landowners Group.

2.0 Project Context

A drainage divide exists within the Subject Property, separating surface drainage along a line from northeast to southwest, with western features draining westwards towards the Gore Road Tributary (West Humber River), and central and eastern features draining southeasterly into the Clarkway Tributary (**Figure 2**). To capture existing conditions within these features, SLR completed appropriately timed seasonal HDF surveys in 2023, characterizing the hydrologic and ecologic function of each of the HDF segments in accordance with the *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (TRCA and CVC, 2014). In addition to the 2023 HDF investigations, site monitoring was also completed by SLR staff to capture localized groundwater conditions from 2022 to 2024. SLR's groundwater findings are summarized in the document titled *Hydrogeological Assessment 12519 & 12713 Humber Station Road, Bolton, Ontario* document (Palmer, 2024). Further to SLR's own monitoring, other consulting firms, including GEI Consultants (GEI) and Arcadis (formerly IBI Group), also captured surface water and groundwater data within the surrounding area, including the Subject Property lands from 2017 to 2018.

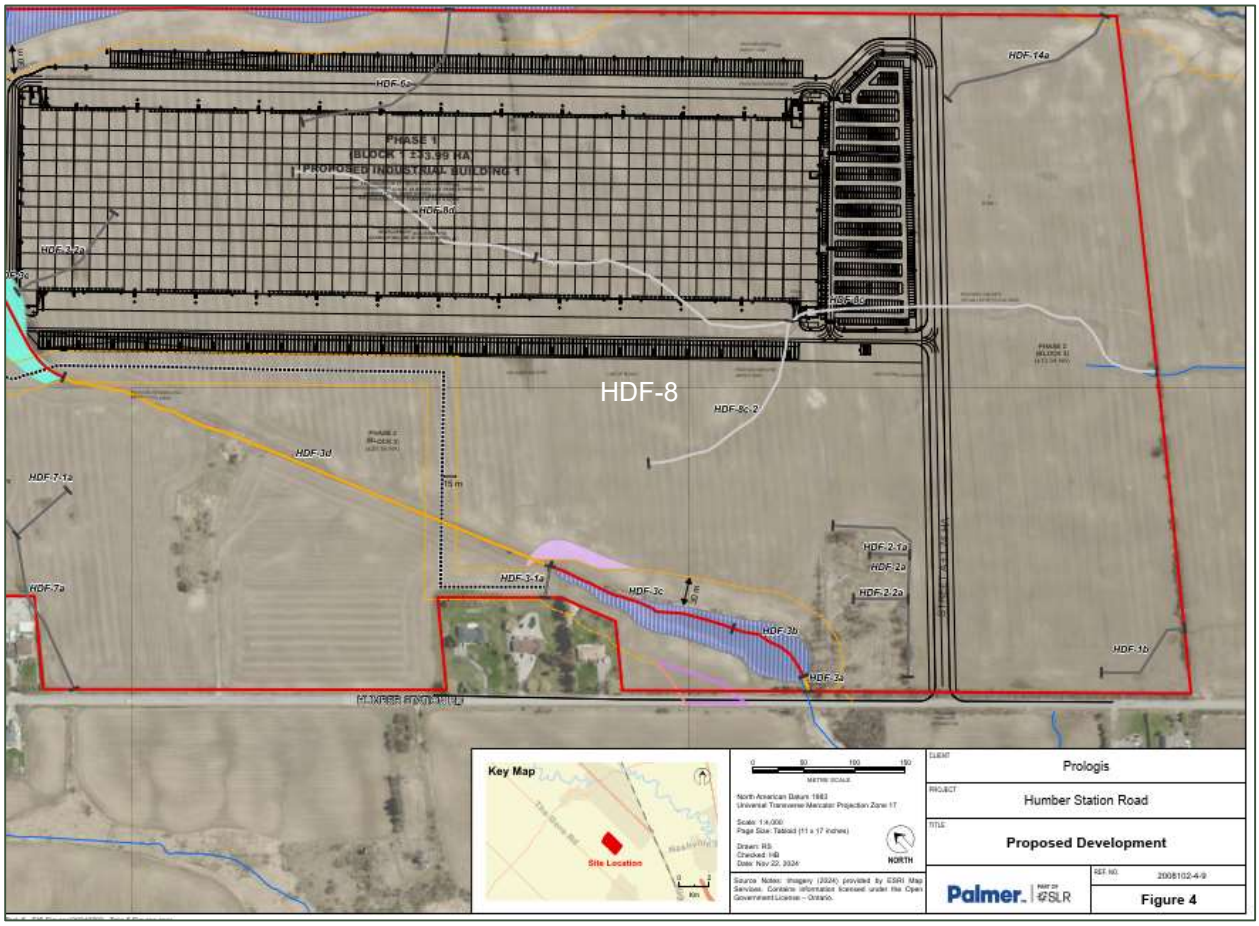
For context, GEI is completing a Comprehensive Environmental Impact Study and Management Plan (CEISMP) monitoring program for the larger Block Plan Area that includes the Subject Property lands (GEI, 2023). While Arcadis was tasked with providing a characterization of the geological, hydrogeological, and surface water settings of the *Bolton Residential Expansion Study Area* (IBI Group, 2022), which also included the Subject Property lands.

Figure 2: Existing Conditions within the Subject Property. Area of the HDF-8 feature highlighted (Purple area)



As part of the proposed Site Plan design within the Subject Property, HDF-8 (which includes HDF segments HDF-8c, HDF-8c-2, and HDF-8d, as highlighted in purple on **Figure 2**), overlaps a portion of the proposed commercial development (i.e., warehouse) footprint within the Subject Property lands (**Figure 3**). It is proposed that the HDF-8 feature be removed from the landscape to accommodate the proposed commercial development and its associated construction works.

Figure 3: Proposed Commercial Development and HDF-8



3.0 Background Review

To complete our evaluation of HDF-8's form and function, background review included the collection and review of relevant mapping and reports, including both internal and publicly available documents and data. As a result, the following data sources included:

- Natural Heritage Information Centre (NHIC) database (Ministry of Natural Resources and Forestry, 2024);
- Land Information Ontario (LIO) database (Government of Ontario, 2024);
- *Humber Station – Comprehensive Environmental Impact Study and Management Plan* (GEI, 2023);
- *Draft Hydrogeological Investigation Bolton Residential Expansion Site – Option 6 Lands* (IBI Group, 2022);
- Aquatic Species at Risk Mapping (Fisheries and Oceans Canada, 2024); and
- *Hydrogeological Assessment 12519 & 12713 Humber Station Road, Bolton, Ontario* (Palmer, 2024).

4.0 Field Investigations Methodology and Summary

The various site investigations which included data for HDF-8, for all consultants, are outlined in **Tables 1** to **3**. In general, the following includes investigations related to direct HDF assessments, streamflow monitoring, and groundwater monitoring within and immediately downstream of the Subject Property.

Table 1: SLR and GEI HDF Field Investigations (2017 - 2023)

Company	Field Investigation(s)	Dates	Weather Conditions*
GEI	Headwater drainage Feature Assessment #1	April 12, 2017	5°C, sunny, Cloudy and 20 km winds
GEI	Headwater drainage Feature Assessment #2	June 14, 2017	20°C, sunny, Clear and 18 km winds
GEI	Headwater drainage Feature Assessment #3	August 28, 2017	19°C, sunny, Mainly Clear and 10 km winds
SLR/GEI	Headwater drainage Feature Assessment #1	April 13, 2023	17°C, sunny, no cloud cover and 14 km winds
SLR/GEI	Headwater drainage Feature Assessment #2	May 18, 2023	13°C, sunny, no cloud cover and 6 km winds
SLR	Headwater drainage Feature Assessment #3	June 29, 2023	23°C, Mainly Clear, and 8 km winds
GEI	Headwater drainage Feature Assessment #3	August 11, 2023	21°C, sunny, Mainly Clear and 30 km winds

***** Weather conditions for GEI field dates sourced from Environment Canada's Toronto INTL A weather station (Environment Canada, 2024).

Table 2: Arcadis (IBI Group) Streamflow Monitoring

Company	Field Investigation(s)	Dates	Weather Conditions
Arcadis (IBI Group)	Streamflow and Groundwater Monitoring	July 2017 – April 2018 (various dates capturing seasonality)	N/A

Table 3: SLR Hydrogeological Monitoring

Company	Field Investigation(s)	Dates	Weather Conditions
SLR	Manual measurements and continuous hydrogeological monitoring	2022 and 2023 (various dates capturing seasonality)	N/A

4.1 SLR 2023 HDF Field Investigation Methodology and Results Summary

As noted in the introduction, HDF surveys completed by SLR is 2023 were completed in accordance with the *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (TRCA and CVC, 2014). It should be noted that the April and May 2023 investigations were completed alongside GEI field staff.

During SLR's April and May 2023 HDF site investigations, the HDF-8 feature was observed to be dry; evidence of moist soils or recent flow were absent (**Photos 1 & 2**). The HDF-8 feature, as can be seen through aerial imagery and onsite investigations, lacks a riparian corridor and traverses actively cultivated farm fields. Other evidence of previous sustained flow, such as sediment sorting or stratification, was poor defined or absent along the segments of the HDF-8 feature.

Photo 1: HDF-8 Feature conditions on April 13, 2023

Photo 2: HDF-8 Feature conditions on May 18, 2023

4.2 GEI Consultants 2017 and 2023 HDF Methodology and Results Summary

Similar to SLR, GEI undertook HDF surveys in accordance with the *Evaluation, Classification and Management of Headwater Drainage Features Guidelines* (TRCA and CVC, 2014). HDF surveys were completed initially in 2017, and then again in 2023.

From review of GEI's data (GEI, 2023), interstitial flow was observed during the initial site visit in April 2017; however, all other site visits, including those in both 2017 and 2023, the HDF-8 feature was observed to be dry.

4.3 Arcadis (IBI Group) 2017-2018 Streamflow and Groundwater Monitoring Summary

Further to SLR and GEI's HDF observations, streamflow and groundwater monitoring was completed by Arcadis during five separate events from July 2017 to April 2018 and found that no flow was observed within the HDF-8 feature. In addition to manual survey events, Arcadis completed continuous streamflow monitoring via the installation of a pressure transducer within a downstream portion of HDF-8 (identified as monitoring location SF7-17 in the IBI draft report), with no discharge recorded at anytime between July 2017 and December 2017 (IBI Group, 2022). For context, IBI's SF7-17 monitoring station was located approximately 725 m south of the Subject Property's southern boundary (**Map 1**), indicating that even though a large catchment associated with the HDF-8 feature was assessed as part of Arcadis' monitoring, and the feature was still found to provide no hydrologic function from mid-summer to mid-spring. This result, combined with only minor flow in the interstitial pavement layer of HDF-8 in April of the same year (2017) and dry conditions in May 2017, is consistent with the SLR HDF observations from 2023.

From the same Arcadis report the soils on the Subject Lands and within the overall Humber Station Landowners Group area consist of low permeability, clayey silt to silty clay Halton Till. Results from surface/groundwater interaction monitoring by IBI concluded that the majority of the nested mini-piezometers indicated a downward or near neutral hydraulic gradient during their monitoring period (**Map 2**). These results indicates that the majority of drainage features would not be connected to the groundwater table and would be considered ‘‘losing’’ features (i.e., not areas of groundwater discharge). Some monitoring well nests and mini-piezometer nests (SF3-17, SF5-17, SF6-17) did show upward gradients during the spring period; however, these MPs were positioned on larger HDF features that also exhibited riparian wetland habitat. It is expected that localized and minor groundwater discharge could occur into these wetland features, albeit limited by the low permeability of the Halton Till soils ($<10^{-7}$ to 10^{-10} m/s range). While no MPs were installed in HDF-8 on the Subject Lands, the absence of any vegetation or wetland habitat along HDF-8, and the observation of dry or only interstitial flow during HDF Assessment completed between 2017 and 2024 would indicate that this feature is not connected to the groundwater table during any time of the year and would be considered fully ephemeral.

A groundwater monitoring well nest (shallow and deep wells installed that the same location) installed by Arcadis and monitored from Summer of 2017 to Spring of 2018, indicated that there was a neutral to downwards hydraulic gradient in proximity to the upstream extent of HDF-8 (identified as monitoring well MW4-17 in the IBI draft report) indicating a recharge condition and deeper groundwater table across the site. This is consistent with what we would expect from flow through Halton Till soils and with the mini-piezometer data, also showing neutral to downwards hydraulic gradients in the area. Figure 14 from the 2022 report is shown on **Map 3**.

Map 1: IBI's Figure 12 (IBI Group, 2022) showing Station SF7-17 downstream of the Subject Property along the HDF-8 Feature. Subject Property highlighted in yellow

Map 2: IBI's Figure 13 (IBI Group, 2022) showing Station SF7-17 downstream of the Subject Property along the HDF-8 Feature. The hydraulic gradient was not determined downstream of HDF-8 at mini-piezometer SF7-17.

Map 3: IBI's Figure 14 (IBI Group, 2022) showing Station MW4-17 adjacent to the HDF-8 Feature, within the Subject Property.

4.4 SLR 2022/2023 Hydrogeological Monitoring Methodology and Results Summary

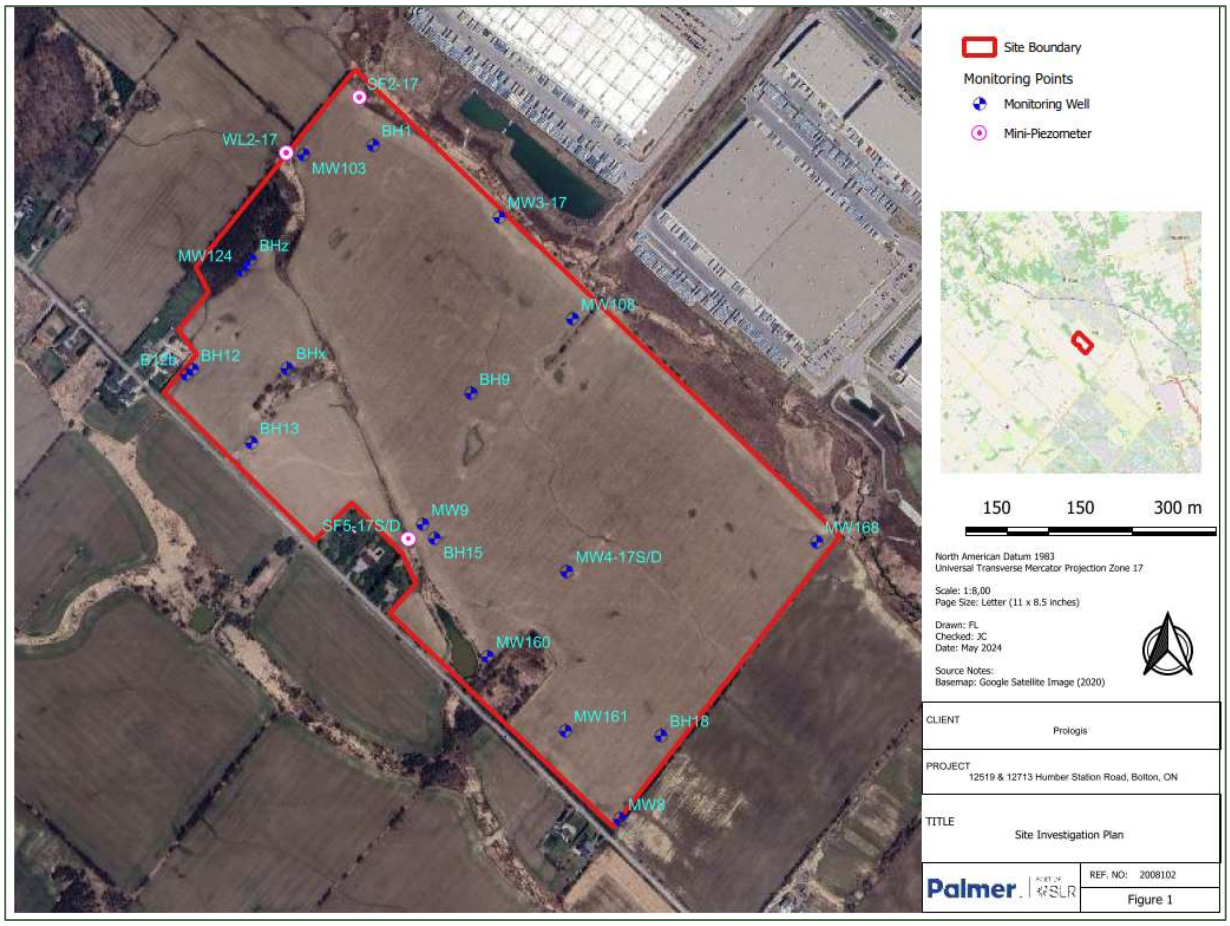
Further to Arcadis' investigations in 2017 and 2018, groundwater level and surface water stage monitoring was conducted by SLR through manual measurements, visual observations, and logger recording, delineated water level trends and the fluctuation magnitude, as well as the interaction between surface water and groundwater (Palmer, 2024). Monitoring well location is provided on **Map 4**. SLR completed eight (8) rounds of site visits for groundwater level and surface water stage monitoring from November 2022 to May 2024, and the following is the activities completed during each site visit:

- Measure groundwater levels for monitoring wells and mini-piezometers;
- Measure and observe surface water stage for creek and wetlands;
- Download data from loggers, confirm the conditions of logger, and reset loggers as required; and
- Carry out maintenance for monitoring wells and mini-piezometers.

The following is a summary of the results from of SLR's groundwater monitoring program, as they relate to HDF-8 and other HDFs within Subject Property:

- Groundwater levels from monitoring wells range from 0.1 to 2.7 metres below ground surface (mbgs) with a predominant flow direction from northwest to southeast and to southwest, towards the tributary of West Humber River. The shallow groundwater levels measured are interpreted to be a reflection of the low permeability and poor drainage of the surficial soils.
- Groundwater level and surface water level data from mini-piezometers do not show hydraulic connection between groundwater and surface water, indicating that groundwater does not support stream flow and associated wetlands and shallow ponds. Therefore, groundwater does not take part in forming the hydroperiod of these features and these features can be considered surface water supported.
- Hydraulic conductivity values range from the orders of $6.0x10^{-10}$ to $6.6x10^{-7}$ m/s, generally increasing with depths and grain size of formations. These values indicate soil conditions have very low permeability and general restrict upwards hydraulic movement.

Map 4: Monitoring well and borehole locations for Palmer's 2024 Hydrogeological Assessment.



5.0 Discussion and Conclusions

From review of the various reports, the following summary tables have been prepared to provide a comparative understanding of the surface and groundwater conditions along the HDF-8 feature across several monitoring seasons.

It should be noted from a climatic standpoint, that 2017, 2018, and 2023 were relatively similar in terms of annual precipitation levels with a total of 846.0, 885.0, and 858.1 mm, respectively (Environment Canada, 2024). Climatic data for 2022, indicates that the monitoring year was drier than the other years, with a total annual precipitation level of only 672.8 mm (Environment Canada, 2024). Gathering localized climatic data, average annual rainfall for the Caledon area is identified as being approximately 711.8 mm, indicating that 2017, 2018 and 2023 were generally considered to be 'wet', and 2022 was generally considered 'dry', compared to annual average precipitation conditions (Environment Canada, 2024).

Surface level observations (i.e., HDF and streamflow observations) are included in **Table 4**, and subsurface observations (i.e., groundwater and hydraulic gradient data) is provided in **Table 5**.

Table 4: Summary of 2017-2023 HDF and Streamflow Survey Results for the HDF-8 Feature

Company	Dates	Hydrologic Conditions	General Notes
SLR/GEI	April 13, 2023	Dry	The HDF-8 feature was completely dry with cracked dry soils.
SLR	May 18, 2023	Dry	The HDF-8 feature was completely dry with cracked dry soils.
Arcadis (IBI Group)	July 2017 to April 2018 (5 manual measurements and continuous logging instrumentation)	Dry	IBI recorded a series of 5 manual measurements, alongside continuous data logging, and no flow was recorded in the HDF-8 feature
GEI	April 12, 2017, June 14, 2017, August 28, 2017, April 13, 2023, June 12, 2023, August 11, 2023	Dry during all visits except for on April 12, 2017.	Interstitial flow observed on April 12, 2017; however, following 5 surveys, including those during the spring of 2023 dry conditions were observed.

Table 5: Summary of the 2017-2023 Groundwater Monitoring for the HDF-8 Feature

Company	Dates	Groundwater and Hydraulic Gradient Conditions	General Notes
Arcadis (IBI Group)	July 2017 to April 2018	Neutral hydraulic gradient adjacent to HDF-8	The HDF-8 feature was completely dry with cracked dry soils.
SLR	November 2022 to May 2024	Downward hydraulic gradient	Downward hydraulic gradient across the majority of the site, including in proximity to HDF-8.

As outlined in this report, the HDF-8 feature was recorded as providing very limited hydrologic function, across multiple monitoring years, and does not exhibit any riparian or terrestrial function, being that it traverses an existing agricultural field. From a review of hydrogeological information, the feature was concluded to not be groundwater supported, with the feature being underlain by low porosity soils, groundwater levels below the base of the HDF, and localized hydraulic gradients functioning in a neutral or downward manner.

Through our background review and observations, we conclude that the HDF-8 feature does not provide hydrologic or ecologic function downstream. Within the context of the HDF evaluation guidelines (TRCA and CVC, 2014) HDF-8 is thus assigned a management recommendation of “No Management Required”. This feature is characterized by lack of flow, and lack of natural vegetation or riparian corridor. As such, HDF-8 does not contribute functions essential to Redside Dace, including sustained spring run-off, baseflow, coarse sediment supply or allochthonous material (i.e., nutrients). Based on the findings of this evaluation, it is SLR’s professional opinion that the HDF-8 feature would not be defined as regulated contributing habitat for Redside Dace and could be removed from the landscape to accommodate the proposed development footprint (**Figure 3**).

Statement of Limitations

This report has been prepared by SLR Consulting (Canada) Ltd. (SLR) for Ministry of Environment, Conservation and Parks (MECP) (Client) in accordance with the scope of work and all other terms and conditions of the agreement between such parties. SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this report, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

Any findings, conclusions, recommendations, or designs provided in this report are based on conditions and criteria that existed at the time work was completed and the assumptions and qualifications set forth herein.

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6.0 Closure

This report was prepared and reviewed by the undersigned. This memorandum is subject to the Statement of Limitations provided at the end of the report.

Regards,

SLR Consulting (Canada) Ltd.

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Technical Memorandum

To: Devon Fowler (MECP)

From: Joel Davey (SLR)

Company:

Ministry of Environment, Conservation and Parks (MECP)

SLR Consulting (Canada) Ltd.

cc: Mike Roy (SLR), Rosalind Chaundy (SLR), Carlos Canejo (Prologis)

Date: March 24, 2025

Project No. 243.V24265.00000

Revision 0

RE: 12519 & 12713 Humber Station Road
12519 & 12713 Humber Station Road, Town of Caledon, Region of Peel

1.0 Introduction

The following memorandum addresses comments received from the Ministry of Environment, Conservation and Parks (MECP) on March 4, 2025, relating to HDF-3 located within the 12519 and 12713 Humber Station Road property, in the Town of Caledon, Regional Municipality of Peel (the Subject Property). SLR Consulting (Canada) Ltd. (SLR) had previously provided a summary for other natural heritage features within the Subject Property including a separate headwater drainage feature, identified as HDF-8, and potential Species at Risk (SAR) bat habitat associated with a small woodland area.

Through the March 4th email correspondence, it was requested by MECP to provide an assessment of the form and function of HDF-3 in providing potential habitat function for Redside Dace, in accordance with the habitat regulation. From SLR's subsequent review of available aquatic SAR mapping, Redside Dace habitat is identified downstream within a portion of the Clarkway Tributary (Fisheries and Oceans Canada, 2024). For watershed context, HDF-3 initially drains into the Gore Road Tributary, located on the west side of Humber Station Road. This tributary consists of an approximately 14.5 km channel that flows southward toward its confluence with the Clarkway Tributary (Figures 1 and 2). The Gore Road Tributary is not identified as Redside Dace habitat (Fisheries and Oceans Canada, 2024).

Beyond the confluence of these channels, Redside Dace habitat is identified in the Clarkway Tributary for approximately 450 m before it joins the main branch of the West Humber River (Figure 3); a system that is not identified as Redside Dace habitat and is considered to be too wide (i.e., greater than 7.5 m) to be suitable Redside Dace habitat.

1.1 Site Context

Within the Subject Property, the HDF-3 feature predominantly flows through an existing agricultural field (Figure 3). Near the northern property boundary, HDF-3 enters the property between a small linear wetland and woodland/thicket. Along the eastern property boundary, adjacent to Humber Station Road, HDF-3 traverses another small wetland before emptying into a shallow wetland pond. From onsite review of the pond by SLR in 2023, as well as by GEI Consultants (GEI, 2023), the pond was found to be formed by an existing beaver dam, as well as by man-made berms along the eastern, western and southern edges of the existing pond area.

1.2 Existing Conditions and Management Recommendations

The HDF-3 feature, within the Subject Property, is divided into five main segments: identified as HDF-3a, HDF-3b, HDF-3c, HDF-3d, and HDF-3e. The segments are shown on Figure 4 in a descending order from upstream to downstream. Within the HDF-3e segment, the feature traverses a small linear wetland area. The HDF-3d segment, being the longest segment, traverses an existing agricultural field. The HDF-3c segment traverses another short wetland area. HDF-3b comprises the online pond. Downstream of the pond and existing beaver dam is segment HDF-3a which empties into a portion of the roadside ditch before entering a culvert beneath Humber Station Road.

The longest segment within the Subject Property, HDF-3d, traverses an existing farm field with a very narrow, sparse band of riparian vegetation. The majority of this vegetation consists of remnant row crop vegetation including corn and soybean, with some other vegetation indicative of disturbed areas including Dandelion (Taraxacum sp.) and Orchard Grass (Dactylis glomerata) (Photo 1). The entire HDF-3d segment of the channel is uniform in bed and banks, indicating historical channel maintenance.

Photo 1: General conditions along HDF-3d on May 18, 2023.

The HDF-3 feature was surveyed by GEI in 2017, 2022 and 2023 and found to be an intermittently flowing feature with certain segments drying out by mid-spring to early summer, and other segments, notably the HDF-3a downstream of the beaver dam, flowing into the summer months as the pond feature drew down (GEI, 2023).

Due to the presence of existing wetland vegetation communities and the online pond, the management recommendation for HDF segments HDF-3b, HDF-3c, and HDF-3e is Protection, through the application of the 2014 TRCA and CVC HDF Guidelines (TRCA and CVC, 2014). Using these Guidelines, SLR and GEI determined the management recommendation for other segments which connect these feature areas, including HDF-3a and HDF-3d, is Conservation.

2.0 Proposed Development and Natural Channel Design

Development is proposed to overlap a limited portion of the HDF-3 feature (Figure 5). To accommodate the proposed development, a portion of the adjacent HDF-3 channel is proposed to be realigned. As part of this realignment, a comprehensive natural channel design is to be implemented along the HDF-3 feature, primarily within the degraded HDF-3d segment. The natural channel design is anticipated to rejuvenate and enhance the form and function of the feature. At a high level, the proposed channel design will include a meandering low-flow channel, riparian wetland features, and a comprehensive riparian planting plan.

The natural channel design, as part of the larger development application, is to be developed in consultation with the Town of Caledon and Toronto and Region Conservation Authority's (TRCA's) natural heritage and engineering staff.

3.0 Discussion

Overall, HDF-3 is a historically maintained feature that has been subject to site-level inputs (ex. sediments and nutrients) as a result of past agricultural practices. As part of the site plan development, the feature is proposed to be restored and enhanced through a natural channel design and comprehensive planting plan.

At a landscape and subwatershed level, although the HDF-3 feature is technically connected to a drainage network that outlets to identified Redside Dace habitat, it is positioned at a very significant distance (~14.5 km) upstream (Figure 2). Additionally, the portion of the Clarkway Tributary identified as Redside Dace habitat beyond the confluence of these systems is 450 m in length before it enters the main channel of the West Humber River where Redside Dace habitat is absent (Figure 3).

From a landscape drainage perspective, the HDF-3 feature drains an area that is approximately 43.68 hectares (0.4368 sq. km). Using the Ministry of Natural Resources' (MNR) Ontario Watershed Information Tool (OWIT), the Clarkway Tributary is identified as draining an area of approximately 15.71 sq. km, while the Gore Road Tributary drains an area of approximately 13.7 sq. km (MNR, 2025). When combined, the two subwatersheds drain a total approximate area of 29.41 sq. km. When comparing the drainage area for HDF-3 to the total subwatersheds, the HDF-3 feature then comprises only 1.5 % of the total overall drainage area of the two subwatersheds before emptying into the West Humber River.

From a groundwater perspective, general observations for the HDF-3 feature are similar to those identified by SLR for the HDF-8 feature (SLR, 2025). In general, the following is the major findings from water level monitoring and site observations (Palmer, 2024):

- Groundwater levels in monitoring wells are all below ground surface indicating downward gradient from surface water to groundwater, and groundwater has no potential to discharge onto ground surface to maintain consistent surface water runoff;
- The nested monitoring wells show a downward groundwater gradient indicating groundwater has no potential to discharge onto ground surface to maintain consistent surface water runoff;
- Monitoring results from the two (2) mini-piezometers installed along HDF-3 showed that the HDF-3 has been always dry;
- SLR staff found that the topsoil and vegetation (weeds and grasses) along HDF-3 were well developed, and no active erosion (such as exposed soil, undercutting, uprooted grass and weeds and debris accumulations) had occurred. In addition, SLR staff have not observed alluvial sediment (sorted sand and gravels, sand bars, and etc.) developed along the drainage marks of HDF-3 during site visits. These observations indicate that the drainage marks had not undergone persistent runoff action.

Based on the above findings, it can be concluded that the drainage marks and weak topographical reflections along HDF-3 results from erosion of snow melt events during spring and large storm events, and there is no flow during the other seasons, or during regular storm events. Consequently, HDF-3 is considered an ephemeral feature (Palmer, 2024).

From a land use perspective, significant urban development exists downstream of the Subject Property, in both the Gore Road and Clarkway Tributary subwatersheds. This is depicted on Figure 1 where extensive urban development can be observed south of Castlemore Road in Brampton, Ontario. Extensive stormwater inputs and other urban runoff sources are directed to the subwatersheds from this area, in addition to agricultural inputs between the Subject Property and Castlemore Road.

4.0 Conclusion

In light of these above considerations, it is SLR's opinion that the proposed works would not result in impacts to Redside Dace habitat located 14.5 km downstream of the Subject Property, and that all site works could proceed in accordance with proper approvals from the Town and TRCA. As part of the development proposal, no segments or habitat area of HDF-3 are proposed to be removed or reduced in length or function.

Aside from the discussion around potential impacts and proposed mitigation, it is SLR's opinion that HDF-3 would have an imperceptible influence on downstream Redside Dace habitat within the Clarkway Tributary. This opinion, as discussed above, is related to HDF-3 distant placement within the subwatershed from noted habitat (~14.5 km), the numerous influences from other urban and agricultural inputs located downstream of the Subject Property, and historic degradation and inputs to the HDF-3 feature from past agricultural practices. The purpose of this memo is to obtain confirmation from the MECP that HDF-3 is not regulated Redside Dace habitat.

5.0 Statement of Limitations

This report has been prepared by SLR Consulting (Canada) Ltd. (SLR) for the MECP in accordance with the scope of work and all other terms and conditions of the agreement between SLR and Prologis (Client). SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this report, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

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6.0 Closure

This report was prepared and reviewed by the undersigned. This memorandum is subject to the Statement of Limitations provided above.

Regards,

SLR Consulting (Canada) Ltd.

Joel Davey, B.BRM, M.ES.
Senior Aquatic Ecologist

Michael Roy, B.Sc.
Principal Ecologist

Attachments Figures

Figure 1: Spatial separation between HDF-3 and the Clarkway Tributary Confluence

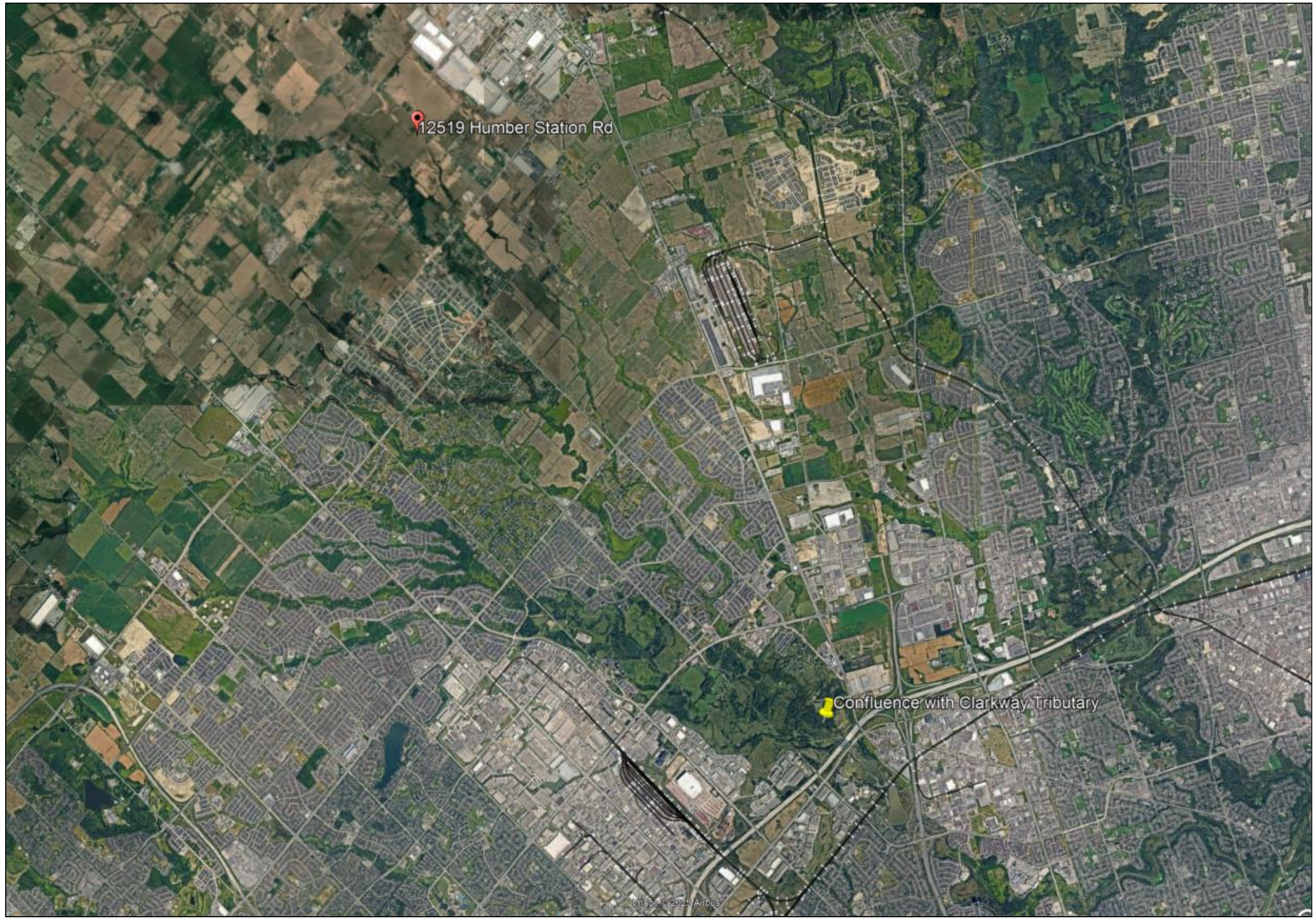


Figure 2: Both subwatersheds (Gore Road Tributary – left, Clarkway Tributary – Right) with HDF-3 location (yellow) versus the general location of downstream Redside Dace habitat (blue). No Redside Dace habitat is identified within the Gore Road Tributary.

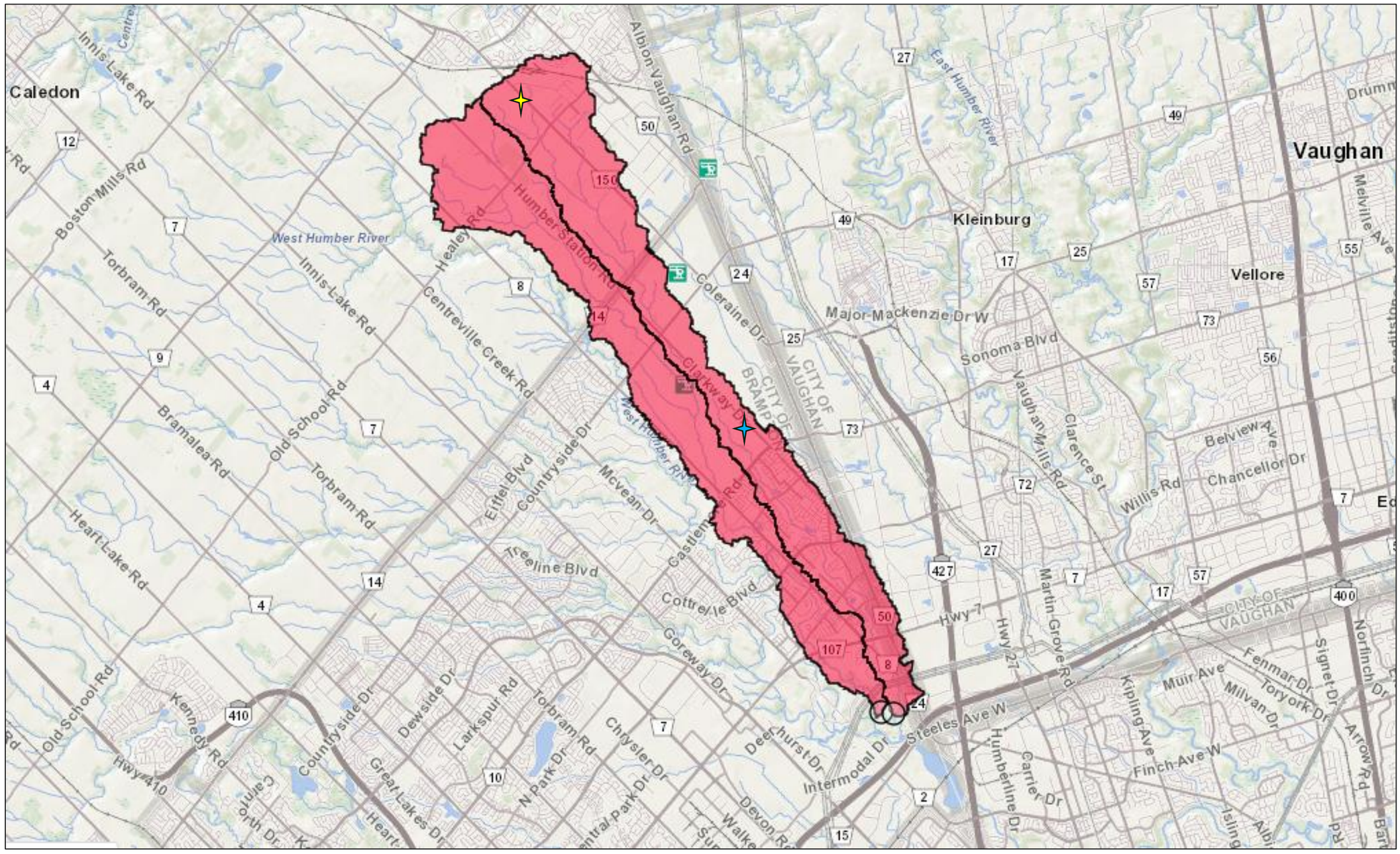


Figure 3: Confluence of the Gore Road Tributary and the Clarkway Tributary.

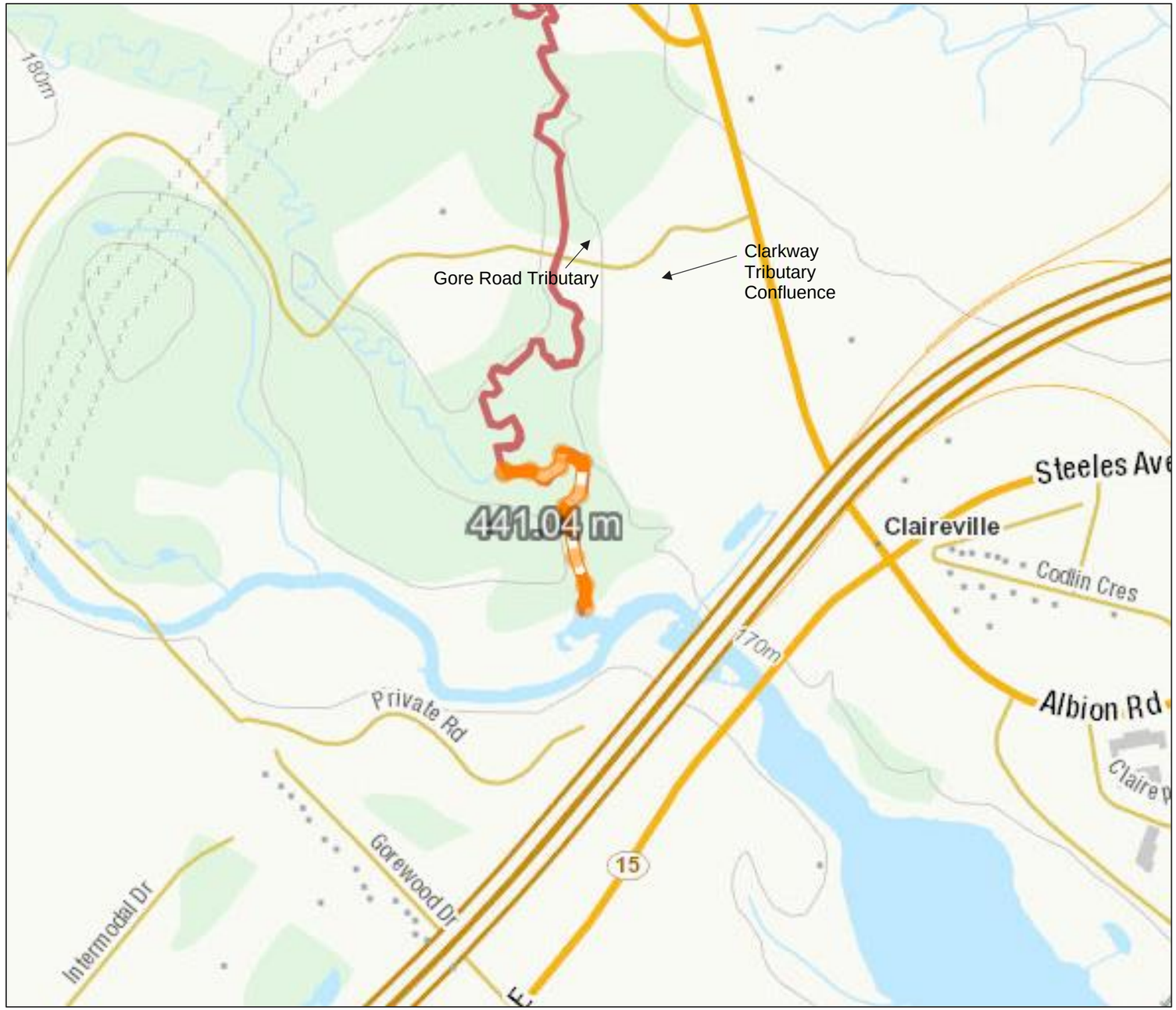


Figure 4: Existing Conditions and Management Recommendations along HDF-3.

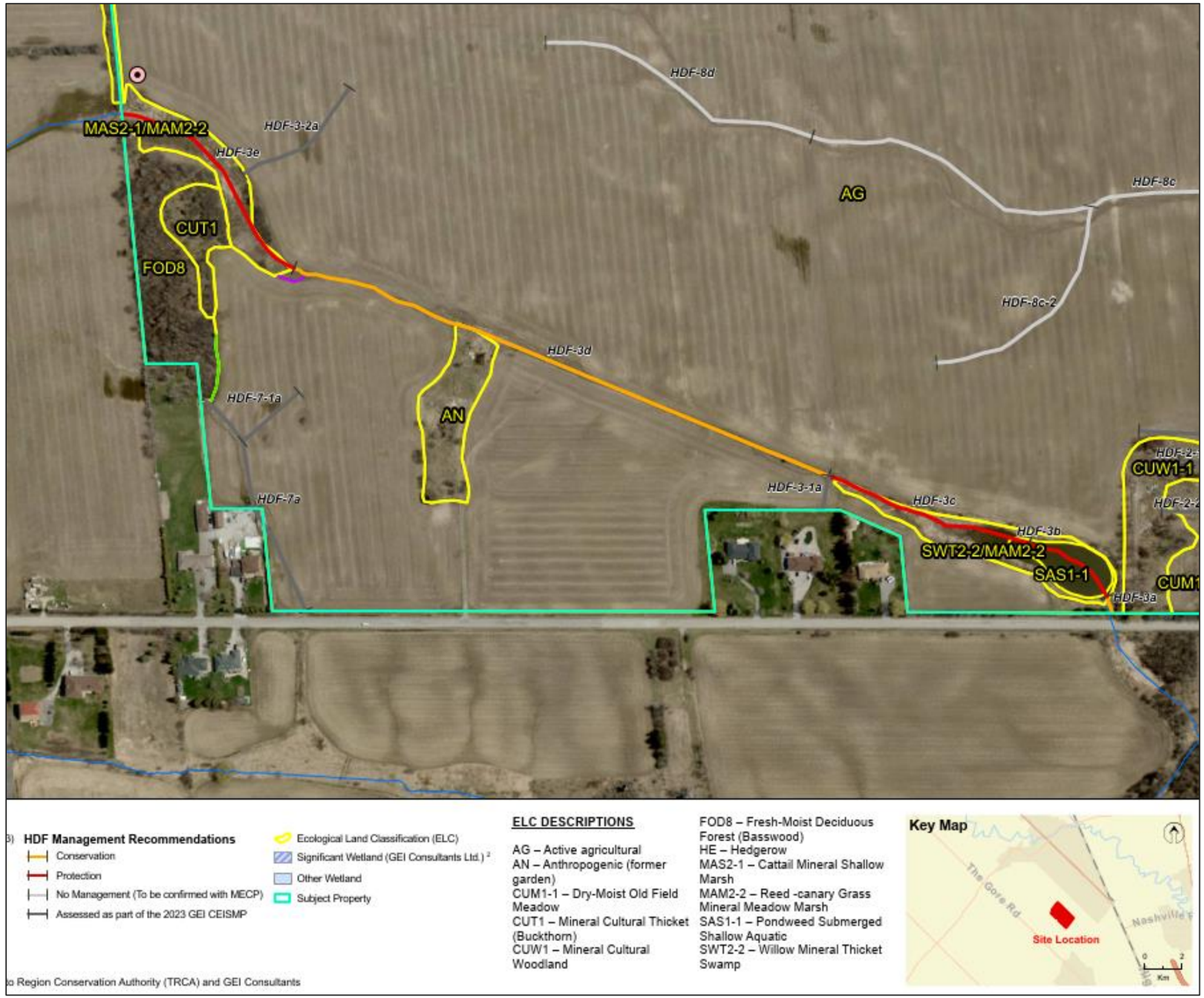
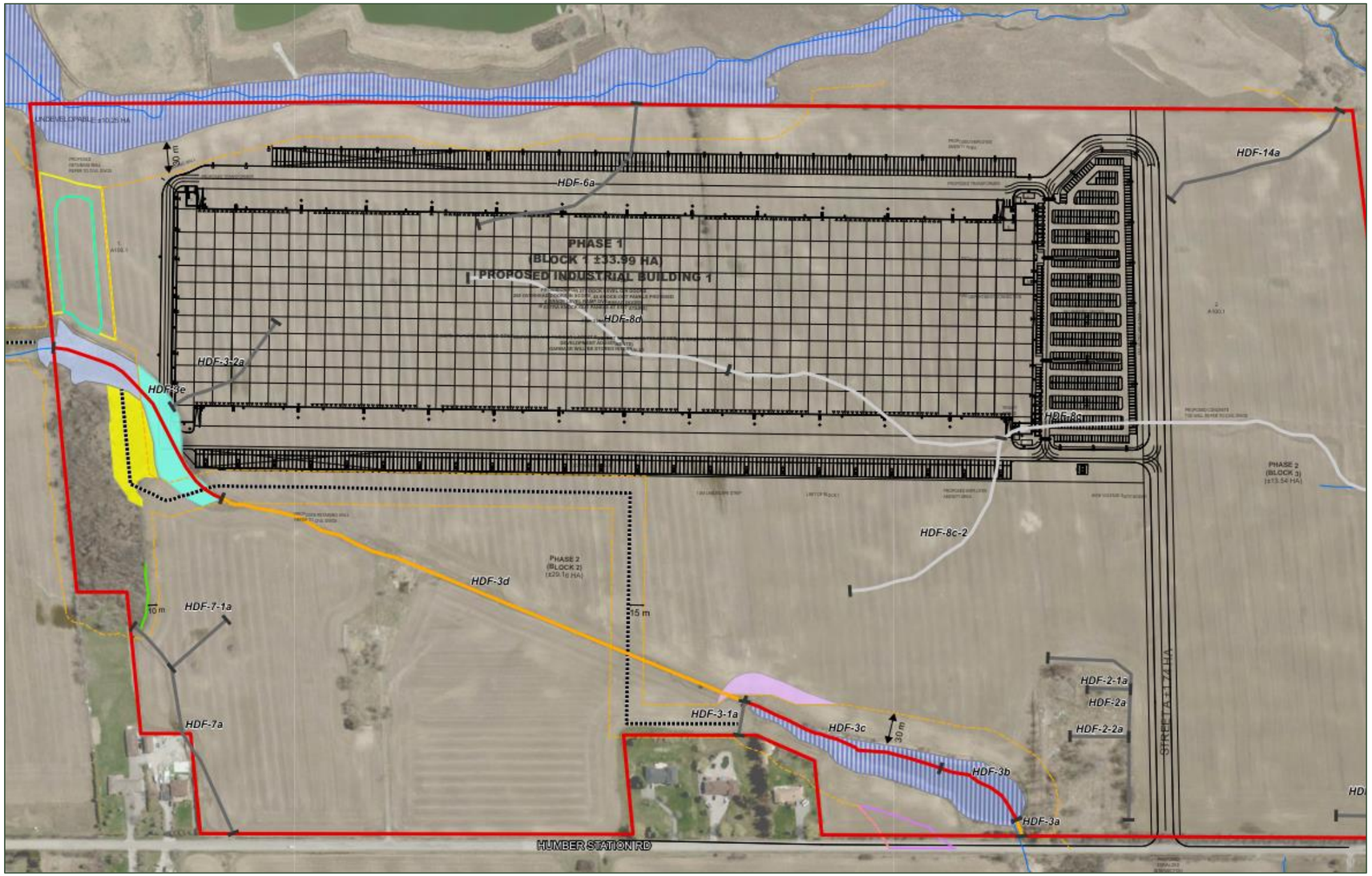
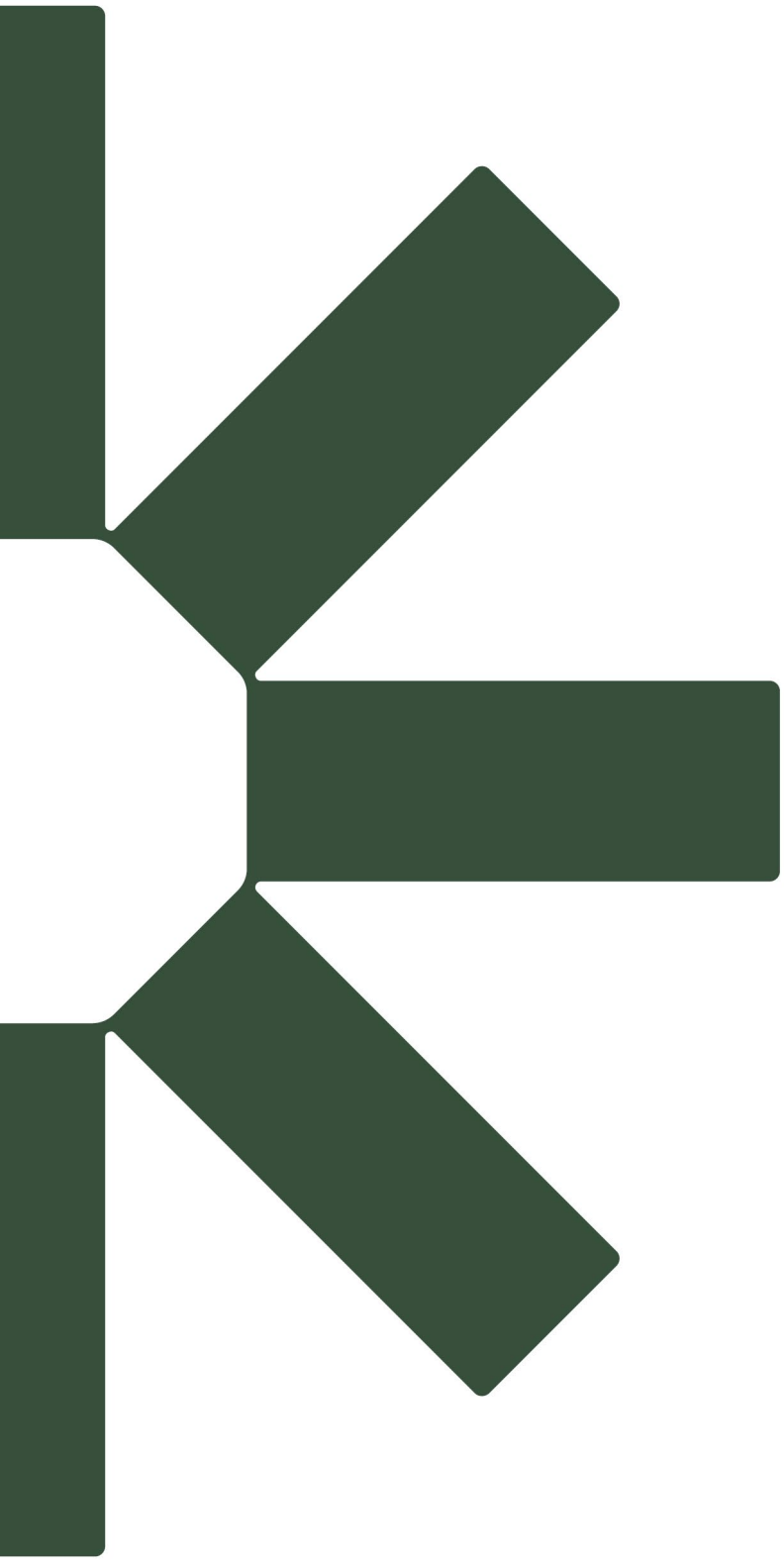


Figure 5: Proposed Development in proximity to HDF-3. The proposed natural channel realignment footprint is highlighted in dashed orange.





Making Sustainability Happen

Appendix G Significant Wildlife Habitat Assessment

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

Significant Wildlife Habitat Screening - Ecoregion 6E

SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Additional Notes and Species Observations
Seasonal Concentration Areas of Animals					
Waterfowl Stopover and Staging Areas (Terrestrial)	Ducks	CUM + CUT ecosites	Fields with sheet-water flooding mid-March to May	N	All fields are agricultural.
Waterfowl Stopover and Staging Area (Aquatic)	Ducks, Geese	Ponds, Lakes, Inlets, Marshes, Swamps, Shallow Water Ecosites	Sewage & SWM ponds **not** SWH. Reservoir managed as a large wetland or pond/lake qualifies.	N	Wetlands too small.
Shorebird Migratory Stopover Area	Shorebirds	Beaches, Dunes, Meadow Marshes	Shorelines. Sewage treatment ponds and storm water ponds **not** SWH.	N	Shoreline of pond minimal habitat.
Raptor Wintering Area	Eagles, Hawks, Owls	**Hawks/Owls:** Combination of both Forest and Cultural Ecosites **Bald Eagle:** Forest or swamp near open water (hunting ground)	**Raptors:** >20ha, with a combo of forest and upland. Meadow (>15ha) with adjacent woodlands. **Eagles:** open water, large trees & snags for roosting.	N	No upland meadow.
Bat Hibernacula	Big Brown Bat, Tri-coloured Bat	Caves, Crevices, mines, karsts	Buildings and active mine sites **not** SWH.	N	No caves or mines.
Bat Maternity Colonies	Big Brown Bat, Silver-haired Bat	Deciduous or mixed forests and swamps.	Mature deciduous and mixed forests with >10/ha cavity trees >25 cm DBH.	N	Not present within Subject Property.
Turtle Wintering Area	**Turtles** (Midland, N. Map, Snapping)	SW, MA, OA, SA, FEO, BOO (requires open waters)	**Free water beneath ice.** Soft mud substrate. Permanent water bodies, large wetlands, bogs, fens with adequate DO.	N	The SAS1-1 ('pond') has the potential to contain SWH. However GEI basking surveys indicate that insufficient numbers of turtles are present.
Reptile Hibernaculum	Snakes	**Snakes:** Any ecosite (esp. w/ rocky areas), other than very wet ones. **Five-lined Skink:** FOD and FOM, FOC1, FOC3 - with rock outcrops	**Access below frost line:** burrows; **rock** crevices, piles or slopes, **stone** fences or foundations. Conifer/shrubby swamps/swales, poor fens, depressions in bedrock w/ accumulations of sphagnum moss or sedge hummock ground cover.	N	No suitable reptile hibernacula were observed.
Colonially-nesting Bird Breeding Habitat (Bank and Cliff)	Cliff Swallow, N. Rough-winged Swallow	Banks, sandy hills/piles, pits, slopes, cliff faces, bridge abutments, silos, barns.	Exposed soil banks, **not** a licensed/permitted aggregate area or new man-made features (2 yrs).	N	No swallow colonies on subject property.
Colonially-nesting Bird Breeding Habitat (Tree/Shrubs)	Great Blue Heron, Black-crowned NightHeron, Great Egret, Green Heron	SWM2, SWM3, SWM5, SWM6, SWD1 to SWD7, FET1	Nests in live or dead standing trees in wetlands, lakes, islands and peninsulas. Shrubs and emergents may be used. Nests in trees are 11 - 15 m from ground, near tree tops.	N	No heron or egret colonies on subject property.
Colonially-nesting Bird Breeding Habitat (Ground)	Herring Gull, Great Black-backed Gull, Little Gull, Ring-billed Gull, Common Tern, Caspian Tern, Brewer's Blackbird	**Gulls/Terns:** Rocky island or peninsula in lake or river. **Brewer's Blackbird:** close to watercourses in open fields or pastures with scattered trees or shrubs.	**Gulls/Terns:** islands or peninsulas with open water or marshy areas. **Brewers Blackbird colonies:** on the ground in low bushes close to streams and irrigation ditches.	N	No gull or tern colonies on subject property.
Migratory Butterfly Stopover Area	Painted Lady, Red Admiral, **Special Concern:** Monarch	Combination of open (CU) and forested (FO) ecosites (need one from each).	≥10 ha, located within 5 km of Lake Ontario. Undisturbed sites, with preferred nectar species.	N	No large old field meadows on subject property and not within 5 km of Lake Ontario
Landbird Migratory Stopover Areas	All migratory songbirds. All migrant raptor species.	Forest (FO) and Swamp (SW) ecosites	Woodlots >10 ha within 5 km of Lake Ontario. If multiple woodlands are along the shoreline, those <2 km from L. Ontario are more significant.	N	Site is over 5 km from Lake Ontario.
Deer Yarding Areas	White-tailed Deer	Mixed or Conifer ecosites	Determined by MNRF - no studies	N	No suitable forests present.
Deer Winter Congregation Areas	White-tailed Deer	Mixed or Conifer ecosites	Determined by MNRF - no studies	N	No suitable forests present.

SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Additional Notes and Species Observations
Rare Vegetation Communities					
Cliffs and Talus Slopes		TAO, TAS, CLO, CLS, TAT, CLT e.g., Niagara Escarpment (contact NEC)	**Cliff:** near vertical bedrock >3m **Talus Slope:** coarse rock rubble at the base of a cliff	N	Habitat not present.
Sand Barren		SBO1, SBS1, SBT1	Sand Barrens >0.5 ha. Vegetation can vary from patchy and barren to tree covered, but <60%. <50% vegetation cover are exotic species.	N	Habitat not present.
Alvar	*Carex crawei, Panicum philadelphicum, Eleocharis compressa, Scutellaria parvula, Trichostema brachiatum,* Loggerhead Shrike	ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1, CUW2	Alvar >0.5 ha. **Need 4 of the 5 Alvar Inidcator Spp**. <50% vegetation cover are exotic species.	N	Habitat not present.
Old Growth Forest	Trees >140 yrs; heavy mortaily = gaps. Multi-layer canopy, lots of snags and downed logs	FOD, FOC, FOM, SWD, SWC, SWM	Woodland areas ≥30 ha with a≥10 ha interior habitat, assuming a 100 m buffer at edge of forest.	N	Habitat not present.
Savannah	Prairie Grasses w/ trees	TPS1, TPS2, TPW1, TPW2, CUS2	A Savannah is a tallgrass prairie habitat that has tree cover of 25 – 60%. <50% cover of exotic species.	N	Habitat not present.
Tallgrass Prairie	Prairies Grasses dominate	TPO1, TPO2	An open Tallgrass Prairie habitat has < 25% tree cover. Less than 50% cover of exotic species.	N	Habitat not present.
Other Rare Vegetation Communities		Provincially Rare S1 - S3 veg. comm. are listed in Appendix M of SWHTG.	Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	N	Habitat not present.
Specialized Habitat for Wildlife					
Waterfowl Nesting Area	Ducks	Upland habitats adjacent to: MAS1 to MAS3, SAS1, SAM1, SAF1, MAM1 to MAM6, SWT1, SWT2, SWD1 to SWD4 (>0.5 ha open water wetlands, alone or collectively).	Extends 120 m from a wetland or wetland complex. Upland areas should be at least 120 m wide. Wood Ducks and Hooded Mergansers use cavity trees (>40 cm dbh).	N	Negligible natural upland areas adjacent to wetlands.
Bald Eagle & Osprey Nesting, Foraging and Perching Habitat	Osprey, Bald Eagle	FOD, FOM, FOC, SWD, SWM, SWC directly adjacent to riparian areas	Nesting areas are associated with waterbodies along forested shorelines, islands, or on structures over water.	N	No suitable habitat is present (no forested areas adjacent to waterbodies)
Woodland Raptor Nesting Habitat	Barred Owl. **Hawks:** N. Goshawk, Cooper's, Sharp-shinned, Red-shouldered, Broad-winged.	Forests (FO), swamps (SW), and conifer plantations	>30 ha with > 10 ha interior habitat.	N	No suitable habitat present (no large forests)
Turtle Nesting Areas	Midland Painted Turtle **Special Concern:** Snapping Turtle, Northern Map Turtle	Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within: MAS1 to MAS3, SAS1, SAM1, SAF1, BOO1	Nest sites within open sunny areas with soil suitable for digging. Sand and gravel beaches.	N	No suitable habitat was observed by either Palmer or GEI.
Seeps and Springs	Wild Turkey, Ruffed Grouse, Spruce Grouse, White-tailed Deer, Salamander spp.	Seeps/Springs are areas where ground water comes to the surface.	Any forested area within the headwaters of a stream/river system. **(2 or more confirms SWH type).**	N	No seeps or springs observed.
Amphibian Breeding Habitat (Woodland)	Woodland Frogs and Salamanders	FOC, FOM, FOD, SWC, SWM, SWD	Open water wetlands, pond or woodland pool of >500 m^2 within or adjacent to wooded areas. Permanent ponds or holding water until mid-July preferred.	N	No amphibian breeding habitat within woodlands.

SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Additional Notes and Species Observations
Amphibian Breeding Habitat (Wetlands)	Toads, Frogs, and Salamanders	SW, MA, FE, BO, OA and SA. Typically isolated (>120m) from woodland ecosites, however larger wetlands may be adjacent to woodlands.	Open water wetland ecosites >500m^2 isolated from woodland ecosites with high species diversity. Permanent water with abundant vegetation for bullfrogs.	N	Open water wetlands contained insufficient numbers of amphibians.
Woodland Area-Sensitive Bird Breeding Habitat	Birds (area-sensitive species)	FOC, FOM, FOD, SWC, SWM, SWD	Large mature (>60 years) forest stands/woodlots >30 ha. Interior forest habitat >200m from forest edge.	N	No listed area-sensitive forest birds were recorded on the property.
Habitat of Species of Conservation Concern					
Marsh Bird Breeding Habitat	Wetland Birds	MAM1 to MAM6, SAS1, SAM1, SAF1, FEO1, BOO1 **Green Heron**: SW, MA and CUM1	Wetlands with shallow water and emergent vegetation. Gr. Heron @ edges of these types w/ woody cover.	N	None of the species listed in the Ecoregion criteria were recorded on or immediately adjacent to the subject property.
Open Country Bird Breeding Habitat	Upland Sandpiper, Grasshopper Sparrow, Vesper Sparrow, N. Harrier, Savannah Sparrow, **Short-eared Owl (SC)**	CUM1, CUM2	Grassland/meadow >30 ha. Not being actively used for farming. Habitat established for 5 years or more.	N	Neither Upland Sandpiper (UPSA) nor Northern Harrier (NOHA) were observed in recent years by SLR on the Prologis property. GEI records of a passing NOHA are not relevant to SWH status which in this category applies to breeding birds. While UPSA was observed twice by GEI several years ago, there is negligible to no suitable habitat on the Prologis property and as mentioned this species, has not been observed in recent years. The Vesper Sparrows and Savannah Sparrows were observed through the edges of the agricultural field. While Vesper Sparrow is less common, Savannah Sparrows are abundant throughout southern Ontario in almost any type of medium to large field (agricultural row crop, old field, grassland, pasture etc.), not just grasslands. In our professional opinion, this species should not be included in this category as it's habitat tolerance is so broad and the species so common. Also, importantly, the SWH criteria indicates that this SWH is 'Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e. no row cropping or intensive hay or livestock pasturing in the last 5 years)'. Thus the specified SWH habitat type is not present on the property, and Open Country Bird Breeding Habitat SWH is not present.
Shrub/Early Successional Bird Breeding Habitat	**Brown Thrasher + Clay-coloured Sparrow (indicators),** Field Sparrow, Black-billed Cuckoo, E. Towhee, Willow Flycatcher, Yellow-breasted Chat, Golden-winged Warbler	CUT1, CUT2, CUS1, CUS2, CUW1, CUW2	Large field areas succeeding to shrub and thicket habitats > 10 ha. Areas not actively used for farming in the last 5 years.	N	No habitat present.
Terrestrial Crayfish	Chimney or Digger Crayfish; Devil Crayfish or Meadow Crayfish	MAM1 to MAM6, MAS1 to MAS3, SWD, SWT, SWM. CUM1 sites with inclusions of the aforementioned.	Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish (typc. protected by wetland setbacks).	Y	GEI observed terrestrial crayfish chimneys in three locations on the subject property at the interface of the north and east wetlands and the agricultural fields. Thus, they have considered SWH and Palmer has carried this forward.

SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Additional Notes and Species Observations
Special Concern and Rare Wildlife Species	Any species of concern or rare wildlife species	Any ELC code.	Presence of species of concern or rare wildlife species.	Y	Snapping Turtle: A Snapping Turtle was observed in the wetland containing the SAS1-1 (pond in southwest). This wetland (SAS1-1/SWT2-2/MAM2-2) has been considered SWH for this reason. Eastern Wood-Pewee: Single pewee's were observed in two locations early in the breeding season. These individuals may or may not have been breeding on site (they would generally be heard later in June if breeding). Although a common species, we have conservatively considered any ELC forest community with a single pewee to be SWH. Thus, the FOD8 forest re is SWH for this species. Monarch: GEI considered the MAM2-10/MAM2-2 adjacent to the property on the east side as SWH due to obervations of Monarch and presence of milkweed.
Animal Movement Corridors					
Amphibians	Amphibians	all ecosites assoc. w/ water	When Breeding Habitat - wetland confirmed	N	Minimal frog breeding habitat on the subject property.
Deer Movement	White-tailed Deer	all forested ecosites	When Deer Wintering Habitat confirmed	N	No deer wintering habitat.
Exceptions for Ecoregion 6E					
Mast Producing: 6E-14	Black Bear	Forested Ecosites	>30 ha w/ mast producing species: Cherry (berries), Oak, Beech (nuts).	N	Not applicable to site.
Leks: 6E-17	Sharp-tailed Grouse	CUM, CUS, CUT	Grassland/meadow >15 ha adjacent to shrublands, >30 ha adjacent to woodlands. Low agricultural intensity.	N	Species not in range.

Appendix H Observed Natural Heritage Features – Terrestrial (GEI 2023 CEISMP)

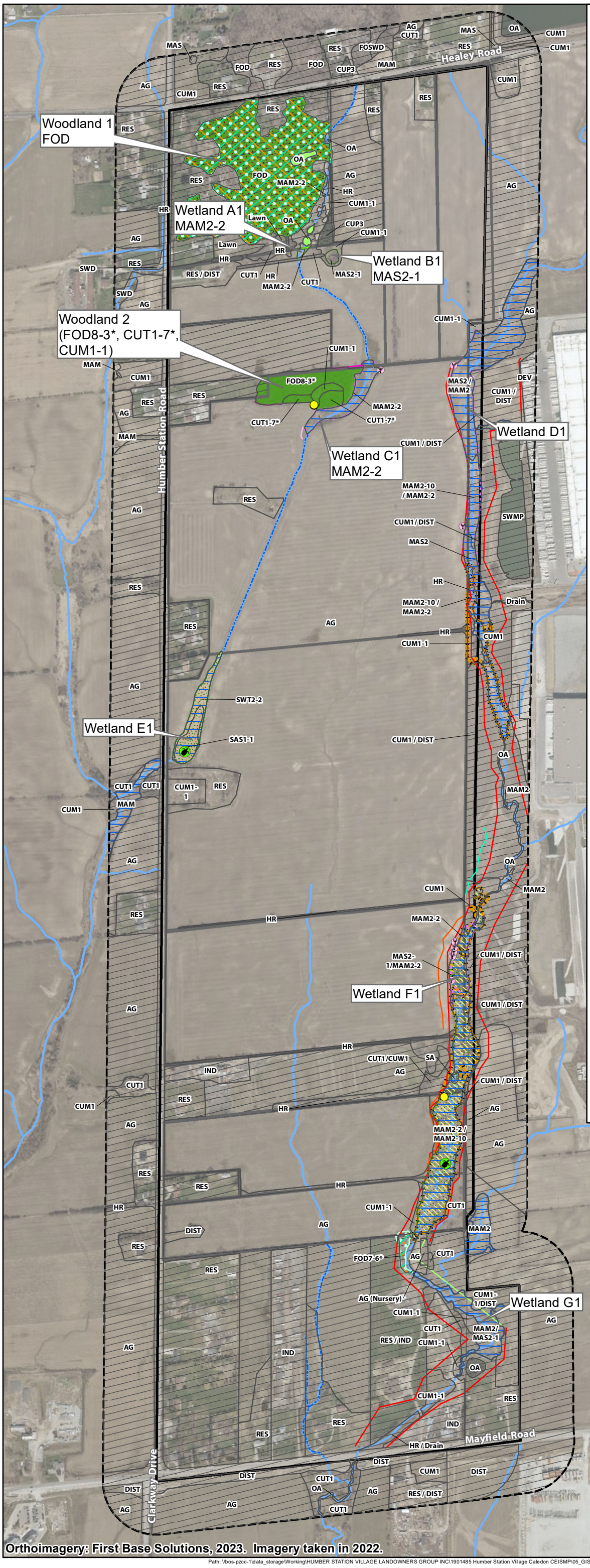
Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025



ELC Legend

CUM1	Mineral Cultural Meadow
CUM1-1	Dry Moist Old Field Meadow
CUP	Plantation
CUP3	Coniferous Plantation
CUT	Cultural Thicket
CUT1	Mineral Cultural Thicket
CUT1-1	Sumac Cultural Thicket
CUT1-7*	Buckthorn Cultural Thicket
FOD	Deciduous Forest
FOD7-6*	Fresh-Moist Manitoba Maple Lowland Deciduous Forest
FOD8-3*	Fresh-Moist Basswood Deciduous Forest
MAM	Meadow Marsh
MAM2	Mineral Meadow Marsh
MAM2-2	Reed-canary Grass Mineral Meadow Marsh
MAM2-10	Forb Mineral Meadow Marsh
MAS	Shallow Marsh
MAS2	Mineral Shallow Marsh
MAS2-1	Cattail Mineral Shallow Marsh
OA	Open Aquatic
SAS1-1	Pondweed Submerged Shallow Aquatic
SWD	Deciduous Swamp
SWT2-2	Willow Mineral Thicket Swamp

AG	Agricultural
DIST	Disturbed
H	Hedgerow
IND	Industrial
Lawn	Lawn
Pond	Pond
RES	Residential

**Not included in Southern Ontario ELC Field Guide.*

- Study Area
- 120 m Adjacent Lands
- Participating Properties
- Non-participating Properties
- Ecological Land Classification
- Watercourse/Drainage
- Significant Woodland
- Significant Wetland (GEI Consultants Ltd.)
- Snapping Turtle Observation
- Terrestrial Crayfish Chimney Observation
- Replacement Habitat Structure for Barn Swallow
- Top of Bank Estimate Based on LiDAR (GEI)
- Top of Stable Slope (GEI)
- Unconfined Meanderbelt (GEI)
- Creek Bank (Staked on October 19, 2021 by TRCA and GEI)
- Dripline (Staked on October 19, 2021 by TRCA and GEI)
- Hydrologic Edge of Wetland (Staked on October 19, 2021 by TRCA and GEI)
- Top of Bank (Staked on October 19, 2021 by TRCA and GEI)
- Wetland (Staked on October 19, 2021 by TRCA and GEI)
- Terrestrial Crayfish Significant Wildlife Habitat
- Monarch Butterfly Significant Wildlife Habitat
- Yellow Banded Bumblebee Significant Wildlife Habitat
- Eastern Wood Peewee Significant Wildlife Habitat
- Snapping Turtle Significant Wildlife Habitat
- Candidate Seeps and Springs Significant Wildlife Habitat
- Candidate Bat Maternity Colonies Significant Wildlife Habitat
- Candidate Habitat for Species at Risk Bats
- Candidate Turtle Over-Wintering Habitat Significant Wildlife Habitat
- Candidate Amphibian Breeding Habitat (Wetland) Significant Wildlife Habitat
- Feature Proposed for Realignment

NOTES:

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2025.
3. Orthoimagery © First Base Solutions, 2025. Imagery taken in 2022.

Project 1901485

Humber Station, Town of Caledon, ON

Figure 4a
Observed Natural Heritage Features - Terrestrial

0 100 Meters

1:8,500

GEI Consultants

Orthoimagery: First Base Solutions, 2023. Imagery taken in 2022.

Appendix I MECP Correspondence (Redside Dace and SAR Bats)

Revised Environmental Impact Study

12519 and 12713 Humber Station Road, Caledon – Issued for SPA Resubmission

Prologis Property

SLR Project No.: 243.V24265.00000

August 11, 2025

How to Complete an Information Gathering Form under the *Endangered Species Act, 2007* as Amended

June 2025

On June 5, 2025, the Province of Ontario made amendments to the *Endangered Species Act, 2007*, that include changes to the requirements for issuing a permit for activities that impact species at risk or their habitat. This document provides information on how to use the existing Information Gathering Form under the amended legislation.

Purpose of the Information Gathering Form

An Information Gathering Form is used by individuals or organizations applying for a permit under the *Endangered Species Act, 2007*, as amended, to provide important information about a proposed activity impacting species at risk or their habitat. This information is used to support a Minister's decision on the issuance of a permit.

Together with the application form (C-Permit Application Form), an Information Gathering Form collects details from applicants on activities that may adversely effect species or their habitat protected under the *Endangered Species Act, 2007* to inform whether the proposed activity is likely to require an authorization.

Authorizations under the *Endangered Species Act, 2007*, are only required where impacts contravene sections 9 and 10 of the amended Act. There may be times where an applicant completes a thorough species at risk screening, including relevant field assessments and surveys, and definitively determines there is no evidence of species at risk or their habitat on or near the proposed activity site, or the activity can be completely avoided, and concludes that an authorization under the amended *Endangered Species Act, 2007,* is not required. In this case, the applicant does not need to submit the Information Gathering Form or screening results to the ministry, but it is recommended that screenings, assessments, and rationale for how prohibited impacts will be avoided be thoroughly documented and retained for possible future reference.

How to use the form

Applicants or their representatives should continue to use and follow the instructions of the Information Gathering Form that was available prior to the *Endangered Species Act, 2007,* being amended with the following adjustments and considerations:

- References throughout the form to the Ministry of Natural Resources should be understood to refer to the Ministry of the Environment, Conservation and Parks.

- **Section 1**, page 2, under *Species at Risk Field Surveys*, asks *"Has MNR determined whether species at risk surveys are needed?"*

This field does not need to be completed.

The Ministry does not provide information related to species at risk location data, except for Caribou (boreal population). Individuals carrying out an activity are responsible for determining whether species at risk or their habitat are present on or around the site of the activity, and ultimately ensuring their actions do not contravene the amended *Endangered Species Act, 2007*.

It is recommended that applicants contact the Natural Heritage Information Centre at nhicrequests@ontario.ca for species at risk location data relevant to their project location and surrounding area.

For activities proposed within or near Caribou (boreal population) distribution, please contact the ministry at SAROntario@ontario.ca for Caribou (boreal population) protected habitat information.

- **Section 4**, Table 3, pages 13 and 14, asks for a "*Description of habitat features on site"* and "*How and when the species is (or may be) using the habitat to carry out its life process"*.

  Please note that some of the examples provided in these sections no longer align with the new definition of habitat under the amended *Endangered Species Act, 2007*.

  It is recommended that applicants refer to the new habitat definition in section 2(1) of the amended Act to support determinations of whether an activity is likely to damage or destroy habitat. Note that the new definition does not include habitat used exclusively for foraging or for travelling between dwelling places as identified in the definition. Only features within the scope of the new habitat definition in the amended Act need to be listed.

- **Section 7**, *Submission Information* lists outdated contact information.

  This section includes outdated contact information. Please ensure all correspondence is submitted to the Ministry of the Environment, Conservation and Parks at SAROntario@ontario.ca.

Submitting the form

The Information Gathering Form can be submitted in advance of the C-Permit Application Form, if applicants are looking for upfront guidance, or along with the C-Permit Application Form and any supplementary information, to SAROntario@ontario.ca. The ministry's technical staff will review the application documents and provide information on the next steps in the permit application process.

Rosalind Chaundy

From: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>
Sent: June 27, 2025 4:00 PM
To: Rosalind Chaundy
Subject: RE: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF
Attachments: IGF_Amended_ESA_Guidance June 2025.pdf

Hi Rosalind,

Yes, Devon left MECP earlier this month. I am taking over most of her files.

You may find some of the information in the attached note helpful.

It remains the proponent's responsibility to comply with the *Endangered Species Act, 2007* (ESA).

Kind regards,

Aurora McAllister (she/her) | Management Biologist – Species at Risk | Permissions | Species at Risk Branch | Ministry of the Environment, Conservation & Parks |

From: Rosalind Chaundy <Rosalind.Chaundy@slrconsulting.com>
Sent: Thursday, June 26, 2025 3:34 PM
To: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>
Subject: FW: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hi Aurora,
I'm trusting that no bat acoustic surveys are required this or any year for the shrub area removal proposed adjacent to the 'Northern Woodland'.
Thanks so much,
Rosalind

Rosalind Chaundy M.Sc.F
Senior Ecologist

O +1 905 415 7248
M +1 437 342 0793
E Rosalind.Chaundy@slrconsulting.com

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

From: Rosalind Chaundy <Rosalind.Chaundy@slrconsulting.com>
Sent: June 20, 2025 12:09 PM
To: McAllister, Aurora (MECP) <aurora.mcallister@ontario.ca>
Subject: FW: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hi Aurora,
Are you able to answer my question in the next couple of days? It looks like Devon has left MECP.
I would really appreciate it if you could.
Thanks
Rosalind

Rosalind Chaundy M.Sc.F
Senior Ecologist

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M +1 437 342 0793
E Rosalind.Chaundy@slrconsulting.com

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directly.

From: Rosalind Chaundy
Sent: June 20, 2025 12:05 PM
To: Fowler, Devon (MECP) <devon.fowler@ontario.ca>
Subject: FW: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hi Devon,
Sorry to bug you. But are you able to confirm that we do not need bat acoustic surveys this year in the 'north woodland' area as my understanding is that no suitable SAR bat habitat will be removed for the channel re-alignment. This vegetation is planned to be removed in the fall.
Thanks
Rosalind

From: Rosalind Chaundy <Rosalind.Chaundy@slrconsulting.com>
Sent: June 16, 2025 9:58 AM
To: Fowler, Devon (MECP) <Devon.Fowler@ontario.ca>; Joel Davey <Joel.Davey@slrconsulting.com>; Carly Houghton <Carly.Houghton@slrconsulting.com>
Cc: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>; Jason Cole <Jason.Cole@slrconsulting.com>; Canejo, Carlos <ccanejo@prologis.com>
Subject: RE: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hi All,
Resending this without the IGF as MECP rejected the first version due to file size.
Rosalind

Hello Devon,
Please find attached our Bat Memo response to your questions (in the March 4 email below) regarding SAR bat at the 12519 & 12713 Humber Station Road property.
I've created a bat memo which hopefully is a clearer method of providing the information, although I've also attached a revised IGF.

I have been tardy in my response to you, however if you could confirm that we do not require any acoustic surveys in the 'north woodland', as soon as possible that would be helpful, as we don't want to miss the survey window this June should it be needed, as the owner plans on removing the adjacent buckthorn thicket for the channel re-alignment before June 2026.
All the best
Rosalind

Rosalind Chaundy M.Sc.F
Senior Ecologist

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M +1 437 342 0793
E Rosalind.Chaundy@slrconsulting.com

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

From: Fowler, Devon (MECP) <Devon.Fowler@ontario.ca>
Sent: April 7, 2025 6:12 PM
To: Joel Davey <Joel.Davey@slrconsulting.com>
Cc: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>; Rosalind Chaundy <Rosalind.Chaundy@slrconsulting.com>; Jason Cole <Jason.Cole@slrconsulting.com>; Michael Roy <mroy@slrconsulting.com>
Subject: RE: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hi Joel,

Rosalind Chaundy

From: Fowler, Devon (MECP) <Devon.Fowler@ontario.ca>
Sent: April 7, 2025 6:12 PM
To: Joel Davey
Cc: McAllister, Aurora (MECP); Rosalind Chaundy; Jason Cole; Michael Roy
Subject: RE: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Joel,

MECP Permissions Staff have reviewed the Technical Memo, provided by SLR Consulting (Canada) Ltd. (SLR) on March 24, 2025, the Environmental Impact Assessment (SLR 2024), and other supplementary reports provided on the Town of Caledon webpage for the Humber Station Employment Area Secondary Plan to assess the potential impact of the proposed development (12519 & 12713 Humber Station Road) on Redside Dace.

Based on our review of the project documentation, the ministry does not agree with SLR's conclusion that the headwater drainage feature (HDF3), including the associated wetlands, are not regulated Redside Dace habitat per the definition of contributing habitat provided in Section 29 of O. Reg. 832/21. That being stated, the conclusions that SLR has made on behalf of Prologis Canada Holding - that the proposed channel realignment and wetland relocation and compensation will not result a contravention of section 9 nor 10 of the ESA in regard to Redside Dace - appear reasonable and valid. Review of the proposed natural channel and wetland compensation design substantiates that the contributing function of the headwater drainage and wetland features will remain post development. Therefore, an authorization will not be required.

We note that SLR, on behalf of Prologis Canada Holding, has committed to mitigation measures being implemented as part of the project to ensure that unanticipated impacts to Redside Dace and their habitat do not occur. We encourage SLR and Prologis Canada Holding to carry out such mitigation measures and other best management practices as it deems appropriate.

Should any of the project activities change, please notify MECP immediately to obtain advice on whether the changes require authorization under the ESA. Failure to carry out these projects as described could potentially result in contravention of the ESA. Please be advised that it is your responsibility to be aware of and comply with all other relevant provincial or federal requirements, municipal by-laws or required approvals from other agencies.

Nothing further is required from MECP Permissions with respect to Redside Dace.

As you mentioned in your email, the requested information regarding SAR bats is still outstanding.

Sincerely,

Devon Fowler
A/Management Biologist | Permissions Section, Species at Risk Branch
Ministry of the Environment, Conservation & Parks | Ontario Public Service

705-427-2409 | devon.fowler@ontario.ca

Ontario

Taking pride in strengthening Ontario, its places and its people

From: Joel Davey <Joel.Davey@slrconsulting.com>
Sent: Monday, April 7, 2025 11:23 AM
To: Fowler, Devon (MECP) <Devon.Fowler@ontario.ca>
Cc: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>; Rosalind Chaundy <Rosalind.Chaundy@slrconsulting.com>; Jason Cole <Jason.Cole@slrconsulting.com>; Michael Roy <mroy@slrconsulting.com>
Subject: Re: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Good morning, Devon.

Hope you had a nice weekend.

Just following up on our March 24th email regarding the HDF-3 feature with the 12519 & 12713 Humber Station lands.

Please let us know if you have any other questions or require any additional information.

Kind regards,
Joel

Joel Davey
Senior Aquatic Ecologist

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SLR Consulting (Canada) Ltd.
16 Robert Boyer Lane, Bracebridge, ON, Canada P1L 1R9

SLR | Follo

From: Joel Davey
Sent: Monday, March 24, 2025 3:38 PM
To: Fowler, Devon (MECP)
Cc: McAllister, Aurora (MECP); Rosalind Chaundy; Jason Cole; Michael Roy
Subject: Re: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Good afternoon, Devon.

Further to your March 4th email for the 12519 & 12713 Humber Station Road project site, please find attached a memorandum detailing the form and function of HDF-3, and its overall relation to downstream aquatic habitats.

Please review and let us know if you have any questions. Please be advised that we are currently working with GEI for data related to SAR bats, and our response is forthcoming.

Kind regards,
Joel

Joel Davey
Senior Aquatic Ecologist

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E Joel.Davey@slrconsulting.com

SLR Consulting (Canada) Ltd.
16 Robert Boyer Lane, Bracebridge, ON, Canada P1L 1R9

From: Fowler, Devon (MECP)
Sent: Tuesday, March 4, 2025 5:56 PM
To: Joel Davey
Cc: McAllister, Aurora (MECP); Rosalind Chaundy; Jason Cole; Michael Roy
Subject: RE: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hi Joel,

MECP Permissions Staff have reviewed the IGF and supplementary reports submitted for the above-mentioned project. We offer the following:

Redside Dace

- The ministry agrees with the assessment of function for HDF-8 in the context of the feature not meeting the regulated habitat definition per Section 29 of O. Reg. 832/21.
- Upon internal consultation, it has been confirmed that the habitat regulation does not set a limit in distance when evaluating the function of a potential feature in providing contributing habitat. If the feature is a stream, permanent or intermittent headwater drainage feature, groundwater discharge area or wetland that augments or maintains the baseflow, coarse sediment supply or surface water quality of a part of a stream or other watercourse (provided it has an average bankfull width < 7.5 m) that is designated as occupied or recovery Redside Dace habitat, it should be considered contributing habitat. Please provide an assessment of the form and function of HDF-3 in providing contributing habitat as in accordance with the habitat regulation.

SAR bats

Newly listed species:

- On January 27, 2025, Eastern Red Bat (*Lasiurus borealis*), Hoary Bat (*Lasiurus cinereus*) and Silver-haired Bat (*Lasionycteris noctivagans*) were listed on the Species at Risk List in Ontario (https://www.ontario.ca/laws/regulation/080230) as endangered. Therefore, within the IGF, please considered these species in the summary of SAR and their habitats found at or near the proposed activity location and in the assessment of impacts.

Bat Habitat Assessment:

- Tri-colored bats will tend to roost in dead and living leaf clusters of oak and maple trees, were these features considered and assessed during the bat habitat surveys?
- Eastern Small-footed myotis will tend to choose rock features over trees for roosting habitat, were these features considered and assessed during the bat habitat surveys?
- An assessment of bat habitat completed within the CUW1-1 community south of the HDF-3 pond (east of Humber Station Road)?
- Impacts to the FOD8 community are unclear within the IGF and the EIS. The EIS states that the proposed development will impact approximately 0.33 ha of the FOD8 community – will this removal include any suitable habitat trees?

Acoustic Monitoring:

- Eight years have passed since the acoustic monitoring was conducted; therefore, the results are no longer current. Please provide a rational as to why data from 2017 should be considered valid in your assessment of species absence/ presence.
- Why did the acoustic monitoring of FOD8 community only occur over six nights when 10 nights of monitoring has been the standard since 2015?
- The EIS states that a bat habitat structure assessment was completed in April 2017 and August 2022 and that acoustic point count surveys were completed in June 2017 by "*two individuals standing on opposite sides of the structure with the detector held above their heads for 10 minutes*". The EIS states these surveys were completed following "*MNRF survey guidelines as outlined in Bats and Bat Habitats: Guidelines for Wind Power Projects (Ontario Ministry of Natural Resources, 2011), consultation with the MNRF, and professional experience*". However, in 2017, guidance provided by MNRF promoted the use of exit surveys to assess the use of anthropogenic structures for roost habitat. Exit survey protocol included monitoring of potential exit holes or gaps for 30 minutes before dusk to 60 minutes after dusk over two nights under appropriate weather. Please provide rational and/ or the agency correspondence that supports the survey approach that was taken in 2017.

Let me know if you have any questions or require further clarification.

Sincerely,

Devon Fowler
A/Management Biologist | Permissions Section, Species at Risk Branch

Ministry of the Environment, Conservation & Parks | Ontario Public Service

705-427-2409 | devon.fowler@ontario.ca

Ontario

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From: Joel Davey <Joel.Davey@slrconsulting.com>
Sent: Tuesday, February 4, 2025 2:48 PM
To: Species at Risk (MECP) <SAROntario@ontario.ca>
Cc: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>; Rosalind Chaundy <rosalind.chaundy@slrconsulting.com>; Jason Cole <jason.cole@slrconsulting.com>; Fowler, Devon

(MECP) <Devon.Fowler@ontario.ca>; Michael Roy <mroy@slrconsulting.com>
Subject: Re: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Good afternoon, MECP.

Thank you for the confirmation email.

We are looking to schedule a meeting as soon as possible, in light of critical development milestones that are currently sitting idle with the Humber Station property. The proponent currently has a signed grading permit with the Township (attached), and a commitment for material delivery to begin grading operations.

The SAR component, through our discussions with GEI, is the last critical component that needs to be addressed.

Please let us know if you have availability for a meeting at your earliest convenience. We thank you for your attention to this file.

Kind regards,

Joel

Joel Davey
Senior Aquatic Ecologist

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E Joel.Davey@slrconsulting.com

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From: Species at Risk (MECP) <SAROntario@ontario.ca>
Sent: Monday, February 3, 2025 10:27 AM
To: Joel Davey <joel.davey@slrconsulting.com>
Cc: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>; Rosalind Chaundy <rosalind.chaundy@slrconsulting.com>; Jason Cole <jason.cole@slrconsulting.com>; Fowler, Devon (MECP) <Devon.Fowler@ontario.ca>
Subject: RE: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Hello Joel,

Thank you for your IGF submission to the Species at Risk Branch. Please use this email as receipt of your submission dated January 31, 2025

Your file is in queue for a biologist to review, and they will reach out to you directly with comments. Please note that it may take a few weeks to receive a response back as we are experiencing a high

volume of requests. If you have a critical decision date, please provide detailed justification and any supporting documentation. This will help us understand the urgency and context of your request.

Thank you for your patience.

Kind regards,

Species at Risk Branch

From: Joel Davey <NAITNotifications@slrconsulting.com>
Sent: Friday, January 31, 2025 5:21 PM
To: Species at Risk (MECP) <SAROntario@ontario.ca>
Cc: McAllister, Aurora (MECP) <Aurora.McAllister@ontario.ca>; rosalind.chaundy@slrconsulting.com; jason.cole@slrconsulting.com; Fowler, Devon (MECP) <Devon.Fowler@ontario.ca>
Subject: 2008102 - 12519 & 12713 Humber Station Road - Species at Risk Technical Memo and IGF

Good afternoon,

Please find link for a technical memorandum and IGF relating to Species at Risk considerations for the property located at 12519 & 12713 Humber Station Road, in the Town of Caledon.

Please review and let us know if you have any questions.

Kind regards,

Joel Davey

SLR Consulting Ltd. (Canada)

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Files attached to this message

Filename	Size
2025-01-31_Humber Station_IGF_form_FINAL_summary.pdf	37.2 MB
20250131_Humber Station_RSD Memo_Rev0.pdf	1.23 MB

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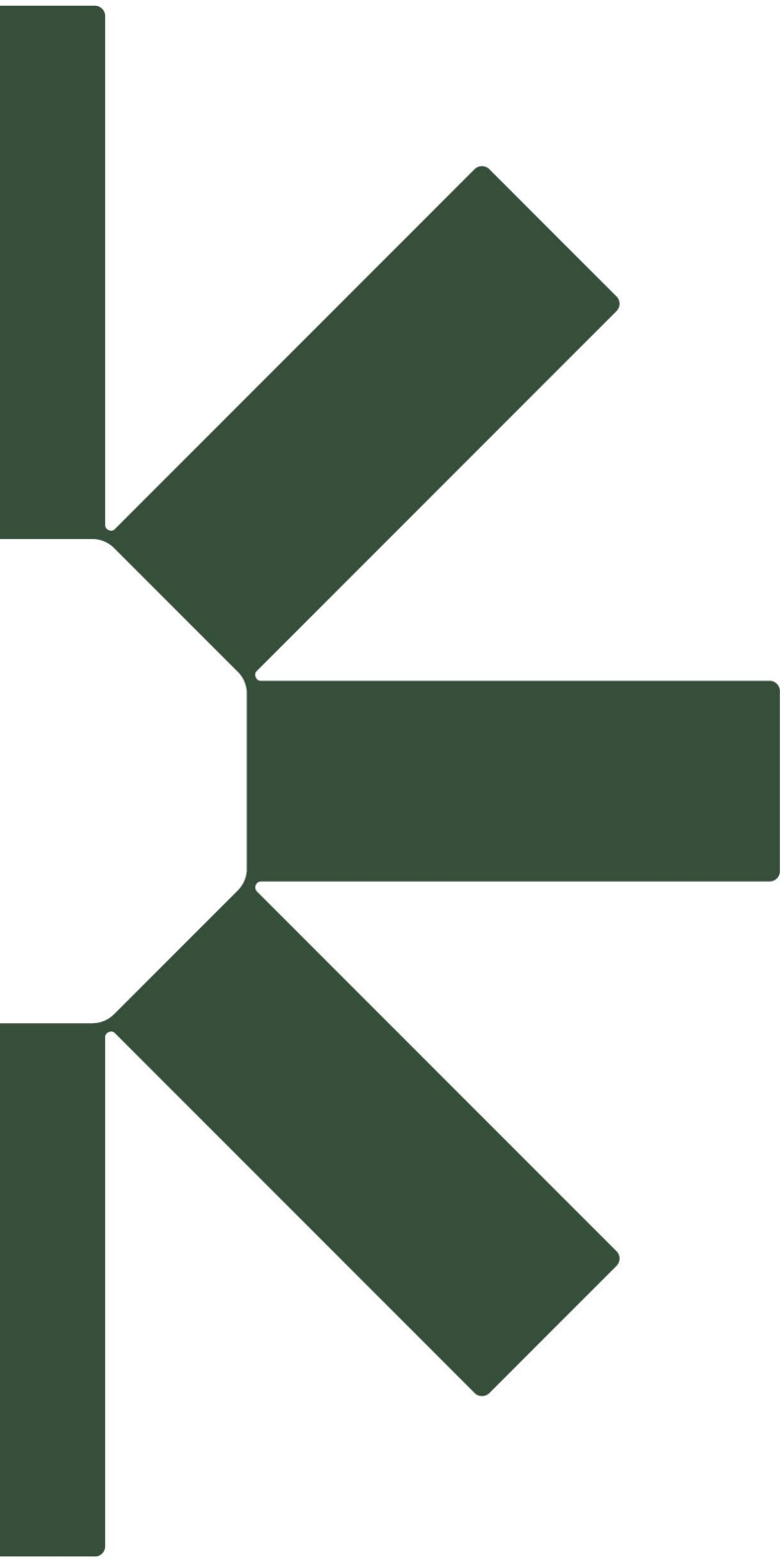

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