Golden Leaf Agrivoltaics Inc.

Natural Heritage Assessment – Environmental Impact Study DRAFT

Golden Leaf Agrivoltaics Project, Prince Edward County, Ontario

Our File: 26-3072

November 2026

Submitted by
Dillon Consulting Limited

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November 17, 2026

Golden Leaf Agrivoltaics Inc. c/o Compass Greenfield Development Inc.
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Attention: Jonathan Cheszes, President

Natural Heritage Assessment Draft Environmental Impact Study Report for Golden Lead Agrivoltaics Project

Dillon Consulting Limited (Dillon) is pleased to provide the draft Environmental Impact Study Report for the Golden Lead Agrivoltaics Project.

Sincerely,

Dillon Consulting Limited

DRAFT

David (Dave) Restivo, BSc. (Hons), EP
Partner

MM:ic

Our file: 26-3072

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Acronyms, Abbreviations, Definitions

COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
EIS	Environmental Impact Study
ELC	Ecological Land Classification (System)
END	Endangered
EOS	Evaluation of Significance
LIO	Land Information Ontario
MECP	Ministry of the Environment, Conservation and Parks
MNR/MNRF	Ministry of Natural Resources (formerly Ministry of Natural Resources and Forestry)
MWac	Megawatts alternating current
NHA	Natural Heritage Assessment
NHIC	Natural Heritage Information Centre
O. Reg	Ontario Regulation
REA	Renewable Energy Approval
SAR	Species at Rick
SARA	Species at Risk Act
SC	Special Concern
SCA	Species Conservation Act
SCC	Species of Conservation Concern
SRank	Species Subnational Conservation Rank
SWH	Significant Wildlife Habitat
THR	Threatened

Executive Summary

Project Overview

Golden Leaf Agrivoltaics Inc. is proposing the Golden Leaf Agrivoltaics Project, a proposed Class 3 ground mounted solar facility with a capacity of up to 13.2 Megawatts alternating current (MWac). The Project is proposed on private land in the Township of Drummond-North Elmsley, Ontario.

Regulatory Context and Purpose

Dillon Consulting Limited was retained to conduct a Natural Heritage Assessment (NHA) Environmental Impact Study (EIS) for the proposed Golden Leaf Agrivoltaics Project. This report has been prepared in accordance with Sections 37 and 38 of Ontario Regulation *(O. Reg.) 359/09* to support the project's Renewable Energy Approval (REA) application, adhering to the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026).

The purpose of this EIS is to assess potential negative environmental effects of the proposed project on natural features, provincial parks, or conservation reserves. It outlines mitigation measures and monitoring plans to address potential impacts associated with the construction, installation, operation, use, modification, and decommissioning of the renewable energy facility.

1.0 Introduction

Goldenleaf Agrivoltaics Inc. (Golden Leaf Agrivoltaics) proposes to develop a Class 3 ground-mounted solar facility (the Projec) with a maximum nameplate capacity up to 13.2 Megawatts alternating current (MWac), which consists of solar panels and associated equipment and infrastructure located on private land in the Township of Drummond-North Elmsley, Ontario (the Project Location; **Figure 1**). Figures are provided in appended to this report.

The Project will require approval under *Ontario Regulation (O. Reg.) 359/09 - Renewable Energy Approval* (REA Regulation) under Part V.0.1 (specifically Sections 47.1 to 47.7) of the Ontario *Environmental Protection Act*. The REA process replaces previous requirements for several approvals under (among others) the *Environmental Assessment Act*, *Planning Act* and *Environmental Protection Act*. The *O. Reg. 359/09* requires that all renewable energy projects conduct an environmental impact study (REA Regulation, Sections 37 and 38).

This Natural Heritage Assessment (NHA) Environmental Impact Study (EIS) Report was prepared in partial fulfillment of the regulatory requirements for the REA process. Additional details regarding records review, site investigation results, evaluation of significance results will be provided under separate covers, including the NHA Records Review, NHA Site Investigation Report and NHA Evaluation of Significance Reports. A written attestation, in the form set out in the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026), that the EIS report has been prepared by a qualified professional in accordance with any requirements for the report set out in the O. *Reg. 359/09* and Natural Heritage Assessment Guide has been provided with the NHA reports.

Discussion of fish habitat, water bodies and other information needs are included under separate cover(s) in compliance with the REA and other applicable provincial and federal legislation and regulations.

A list of REA checklist requirements per *O. Reg. 359/09* pertaining to the NHA Environmental Impact Study Report are provided in **Table 1**.

Table 1: Checklist for Requirements under Ontario Regulation 359/09 NHA Environmental Impact Study

Required Documentation	Location in Report
[1] Prohibitions restricting development in listed natural features do not apply if the applicant submits an environmental impact study report prepared in accordance with the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026), that,	
Identifies and assesses any negative environmental effects of the project on a natural feature, provincial park or conservation reserve	**Section 9.0**, **Table 10;** **Section 10.0, Table 11**
Identifies mitigation measures in respect of any negative environmental effects	**Table 11**
Describes how the environmental effects monitoring plan set out in paragraph 4 of item 4 of Table 1 (in *Ontario Regulation 359/09*) addresses any negative environmental effects	**Section 10.0, Table 11;** **Section 12.0**
Describes how the construction plan report prepared in accordance with Table 1 addresses any negative environmental effects	**Section 10.0, Table 11;** **Section 12.0**

[1] This description has been modified from what is provided in Sections 37 and 38 of *Ontario Regulation 359/09* and outlined in the *Natural Heritage Assessment Guideline for Renewable Energy Projects* (MNRF, 2026). For a full description, please refer to the regulation.

Additional information about the Project can be found in the *Construction Plan Report, Design and Operations Report* and the *Project Description Report*. Technical studies associated with the REA requirements have been completed. In addition to this report the draft REA submission package includes:

- Project Description Report;
- Archaeological Assessment Report(s):
  - Protected Properties / Cultural Heritage Self-Assessment;
  - Cultural Heritage Assessment Report (required if a potential heritage resource is identified).
- Construction Plan Report.

- Design and Operations Report:
  - Noise Assessment Report;
  - Stormwater Management and Erosion Control Plan;
  - Environmental Effects Monitoring Plan (EEMP);
  - Post Construction Monitoring Plan (potentially integrated into the EEMP);
  - Emergency Response and Communications Plan (ERCP).
- Decommissioning Plan Report;
- Water Assessment Report and Water Body Report (if required);
- Natural Heritage Assessment Reports:
  - Records Review;
  - Site Investigation;
  - Evaluation of Significance.
- Consultation Report;
- Supporting Documents.

2.0 The Proponent

Golden Leaf Agrivoltaics Inc. (Golden Leaf Agrivoltaics) is the proponent partnership between Compass Greenfield Development Inc. (Compass) and Algonquins of Pikwakanagan First Nation (AOPFN) responsible for the development and permitting of the Elmbrook Golden Leaf Agrivoltaics Project (the Project) renewable energy facility. Compass is a renewable and clean energy developer, investor and asset manager working across Canada. Compass advances greenfield development opportunities for solar and battery energy storage (Compass Greenfield, 2026).

Compass is coordinating and managing the approvals process for the Project. The contact at Compass is:

Full Name of Company:	*Golden Leaf Agrivoltaics Inc.*
Prime Contact:	*Bhavin Mistry, Senior Manager, Development*
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Dillon Consulting Limited (Dillon) has been retained by Elmbrook Agrivoltaics to prepare this EIS for the Project. The primary contact at Dillon is:

Full Name of Company:	*Dillon Consulting Limited*
Prime Contact:	*Dave Restivo, Partner*
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3.0 Project Location

The proposed Class 3 Solar Facility is to be located within the Township of Drummond-North Elmsley, Ontario. The Project Location is generally bounded by Drummond Concession 1 to the north and Churchill Road to the east (**Figure 1**[1]).

Specifically, it will be contained within three privately-owned land parcels: Lot 17, Concession 10 (Property Identification Number (PIN) - 05232-0010) and Lot 16, Concession 10 (PINs - 05232-0237 & 05232-0238), with the approximate centroid at the following geographic coordinates:

- Latitude: 44°55'5.358"N;
- Longitude: 76°11' 9.924''W.

As defined under *O. Reg. 359/09*, the Project Location encompasses all land, buildings, and structures in, on, or over which the renewable energy facility is located (including temporary laydown areas and access roads). The term "Project Location" is defined *in O. Reg. 359/09* to be "a part of land and all or part of any building or structure in, on or over which a person is engaging in or proposes to engage in the Project". Project components, including solar panels and electrical facilities such as inverters, transformers, substations and electrical collector lines; as well as Project access roads will be located on private land.

Figure 1 illustrates the general Project Location. **Figure 2** delineates the precise Project Location boundaries alongside the 50 m Site Investigation Area.

[1] All figures are appended.

4.0 Summary of Natural Heritage Assessment

An evaluation of significance was completed according to Section 27 of *O. Reg. 359/09*. This evaluation was preceded by a records review and site investigation, as per Sections 25 and 26 of *O. Reg. 359/09*, respectively. A summary of natural features detailed in previous reports is outlined in **Table 2**. This table summarizes the results of all NHA work completed for the Project and identifies all natural features within the Project Location and/or surrounding 50 m, including those that have been identified as significant, during the NHA process and require an EIS.

Table 2: Summary of Natural Heritage Assessment

Natural Feature	Distance Between Natural Feature and Project Location (m)	Summary of Natural Heritage Evaluation*			EIS Required?
		Identified During Records Review?	Identified, Verified or Refined During Site Investigation?	Evaluation of Significance Results	
Woodlands					
A	50	Yes	Verified/Refined	Not Significant	N
B	Within	Yes	Verified/Refined	Significant	Y
Wildlife Habitat					
Specialized Habitat for Wildlife					
Woodland Raptor Nesting Habitat	Within	No	Identified	Not Significant	N
Habitat of Species of Conservation Concern					
Open Country Bird Breeding Habitat	Within	No	Identified	Significant	Y

Natural Feature	Distance Between Natural Feature and Project Location (m)	Summary of Natural Heritage Evaluation*			EIS Required?
		Identified During Records Review?	Identified, Verified or Refined During Site Investigation?	Evaluation of Significance Results	
Special Concern and Rare Wildlife Species					
Eastern Wood-Pewee	Within	No	Identified	Not Significant	N
SAR Bats	Within	No	Identified	Significant	Y

*An evaluation would not be required if the natural feature is located entirely within the 50 m setback and it is assumed significant (i.e., studies to verify provincial significance will not be undertaken or wildlife habitat has been deemed largely unimpacted by the development of a solar facility).

5.0 Environmental Impact Study Purpose

The completion of an NHA EIS Report in accordance with procedures established under Sections 37 and 38 of *O. Reg. 359/09* allows project components to be constructed within the prescribed setback (i.e., within 120 metres) of a significant natural feature, provincial park, or conservation reserve, or within 50 m of specific features where permitted by regulation. In accordance with Section 38 of *O. Reg. 359/09* and the *Natural Heritage Assessment Guide for Renewable Energy Projects (Third Edition, 2026)*, this EIS Report addresses the following requirements:

- Identification and assessment of negative environmental effects of the Project on a natural feature (including wetlands), provincial park or conservation reserve.
- Identification of mitigation measures in respect of negative environmental effects.
- Description of how the environmental effects monitoring (mitigation) plan (including in the Design and Operations Report) addresses negative environmental effects.
- Description of how the Construction Plan Report addresses negative environmental effects.

The objective of this NHA EIS Report will be to fulfill the requirements of Sections 37 and 38 for the significant/treated as significant natural features identified in **Table 2** as being within the Project Location or surrounding 50 m setback.

6.0 Rationale for Development within a Setback of a Natural Feature

The location of the Project has been subject to numerous field investigations and a thorough review of constraints to development was undertaken prior to delineating the Project Location. Based on the natural environment information collected, the Project Location was refined to avoid impacts to significant natural heritage features, where possible. The layout of the Project has been developed to prioritize the protection of sensitive features and minimize environmental effects.

7.0 Project Activities

The following subsections outline the Project activities during the construction, operations and decommissioning phases. **Table 3** outlines the construction schedule and expected operational date for this Project. It is expected that the Project will remain operational for a period of at least 20 years. However, it is possible that the Project would remain operational for a longer period of time due to the lifecycle of facility components along with repowering of the generating equipment and/or receiving a subsequent form of power purchase agreement.

Table 3: Anticipated Duration of Construction Activities

Construction Activity	Estimated Timing
Pre-Construction Activities	Prior to construction commencement
Site Preparation and Environmental Protection Measures	Q3-Q4 2027
Access Roads, Laydown Areas and Temporary Facilities	Q4 2027
Perimeter Fence Construction	Q4 2027
Array and Equipment Foundation Installation	Q4 2027-Q2 2028
Racking System Installation and Module Installation	Q2-Q3 2028
Electrical Collection System Installation	Q2-Q3 2028
SCADA, communications, and Monitoring System Installation	Q3 2028
Commissioning, Testing, and Energization	Q4 2028
Hot Commissioning and Performance Testing	Following energization
Restoration and Demobilization	Following construction completion

7.1 Construction

It is anticipated that construction would last approximately 12 to 18 months. Pending receipt of all necessary approvals and permits, construction is tentatively scheduled to begin in fall/winter 2027. It is anticipated construction activities will occur in the relative order in which they are presented in **Table 4**. This information has been summarized from the Project Construction Plan Report. Additional details are provided in the Construction Plan Report.

Pre-construction activities that may be completed in advance of construction include topographic surveys, geotechnical studies, archaeological and cultural heritage assessments and a phase one environmental site assessment.

Table 4: Construction Activities

Activity	Description
Survey and staking of Project Location	At the beginning of the construction phase, the site will be surveyed and staked to delineate the boundaries for fencing, access roads, excavations and foundation locations. Areas to be avoided will be fenced and/or flagged for public safety.
Clearing, ground leveling, compacting and grading	The Project Location will be minimally graded to facilitate construction activities based on a grading plan and a stormwater management (SWM) plan will be implemented to maintain the general off-site drainage patterns as much as possible. Graders, bulldozers, scrapers, soil compactors, dump trucks, wheel loaders and backhoes may be used to prepare the site. Selective clearing of trees and vegetation will be required (as identified in this NHA EIS Report) for installation. Major excavation works or fill placement are not expected for the project. The primary excavation work is likely to be limited to soil removal for building foundations, access roads and digging trenches to run underground electrical cables. Topsoil removed from the permanent access road will be distributed across the project area. Any excess topsoil may be used to infill low-lying areas if appropriate. Temporarily stockpiled topsoil will be stored to minimize erosion from wind and precipitation.
Drainage and erosion control	Based on the results of the NHA and water flow management plans, temporary and/or permanent equipment to manage flow and protect natural features during construction/operation will be installed. Temporary erosion and sediment control (ESC) measures will be installed to protect natural features and other considerations identified in the NHA. Common construction water flow management practices typically

Activity	Description
	include the use of hay bales and silt fence barriers. The temporary control measures will remain installed throughout the construction period and will be routinely inspected by the contractor. Specific details regarding surface drainage and any construction requirements will be established as part of a SWM plan which will be prepared prior to construction and during the detailed design phase of the project. The measures will remain installed throughout the construction period and will be routinely inspected by the contractor.
Installation of perimeter fence and security lighting	Permanent fencing will be installed along the perimeter of the Project Location. The fence will be approximately 1.8 m height with 3-strand barbed wire on top (or as required by the *Electrical Safety Act* (ESA)). A gated entrance will be installed either at the site entrance at Rosseau Crossroad or where the internal access road intersects the temporary construction laydown area. For security and maintenance purposes, lights may be installed near the entrance of the facility and task-specific lights will be provided as necessary. This will be appropriately shielded or directed to avoid impacts to neighbours. They may also use motion-sensors to address potential negative impacts, as necessary.
Installation of water crossings	The design of the Golden Leaf Agrivoltaics Project does not require water crossings and appropriate buffers have been applied to water bodies found within 300 metres of the Project Location.
Construction of access roads and installation of temporary power	A main access road will be needed for construction vehicles and equipment transport. It will also provide long term access to the site for on-going maintenance requirements. This access road will be off Drummond Concession 1, which is a local municipal road. Culverts across any road drainage will be installed if necessary and as required through the municipal approval process. The main access road will be about 5 m wide and will be constructed as appropriate for the project site and engineering design. Internal on-site granular access roads will be developed. The location of the internal access roads and their nature may change. Row to row rack spacing will be large enough such that service vehicles can access modules and wiring for maintenance. The central on-site road will allow a service vehicle to access each inverter station directly. Internal access roads will be approximately 4-5 m wide.

Activity	Description
	During the construction period, the only on-site electricity to be used is a combination of temporary local service and on-site generators. Electricity required for temporary construction offices, lighting and other purposes will be arranged for and obtained from the local electricity provider.
Delineation of temporary storage and construction areas and installation of temporary facilities	Temporary laydown and construction staging areas will be created in the northern portion of the Project Location. These areas will be used for the construction office trailers, portable washrooms, first aid stations, vehicle parking, construction equipment parking, storage sheds, truck unloading/loading, waste disposal pick-up areas, and equipment and material lay-down. After site grading (discussed above) a layer of granular material will be installed to provide an adequate base for construction vehicles, heavy equipment and material laydown. The area may be retained to accommodate vehicle parking for maintenance personnel and equipment storage.
Construction of foundations	The type of support foundation for the inverter units, intermediate transformers and the substation will depend on the results of geotechnical studies and the supplier selected, thus the construction methods may vary. The substation area and inverter unit's areas will be prepared/excavated as needed and foundations for the equipment installed.
Installation of support, racking and PV modules, as well as communication tower	The panels will align in rows and will be mounted on fixed aluminum or steel racking systems which will be attached to galvanized steel support structures. The type of foundations will be determined based on geotechnical studies and final vendor selection. A communication tower will be installed.
Installation of wiring and inverters/transformers	The electricity generated by the PV panels will be in the form of direct current (DC). Inverters will be required to convert the DC output of the PV cells into alternative current (AC) suitable for supplying the electrical grid. DC wiring mounted to the back side of the racks is connected to a combiner box. The underground cables will be installed in trenches by a cable trenching machine or dropped in trenches created by an excavator. Cable Aboveground Bus (CAB) systems will be installed where site conditions do not allow for adequate cable burial depth. Overhead cabling supported by poles will be installed within the Project Location to connect the substation to the point of common coupling, located at the site entrance on Drummond Concession 1.

Activity	Description
	After all major construction activities are complete the components will be tested. If any problems or issues arise, remedial corrections and calibration of equipment will be made prior to start-up.
Remediation and clean-up of work areas	All construction-related waste from the project site will be removed/reused/recycled where applicable once the project is complete. Trucks will be used to remove all non-permanent equipment from the Project Location, along with any debris. The truck(s) will access the site via the permanent access road located off Drummond Concession 1.
Site landscaping and vegetation	Site restoration and reclamation is planned for as much of the Project Location as possible, including along access roads. The restoration and reclamation strategy may include re-contouring of the land to natural drainage patterns (in accordance with a SWM plan), management and replacement of subsoil (if applicable) and topsoil and re-vegetation. Disturbed areas may be seeded with a low-growing species such as clover, or allowed to re-vegetate naturally as needed, to help stabilize soil conditions, enhance soil structure and increase soil fertility.

Construction activities will be conducted by licensed contractors in accordance with required standards and codes and activities will abide by local by-laws and provincial and federal requirements. Construction-related activities will be conducted within the Project Location boundary outlined in **Figure 2**.

Testing and commissioning of the facility will occur over the last few weeks of construction. During construction, if hazardous materials, including fuel, oils or grease will be stored on site, these materials will be stored away from sensitive features and secondary containment used. Disposal of hazardous wastes will only be required in the case of accidental spills and will follow the procedures outlined in the Spills Response Plan in conjunction with the ERCP. Decisions on waste disposal or recycling during and immediately after construction will be made by the on-site contractor who will refer to the *Environmental Protection Act* and associated regulations.

7.2 Operations and Maintenance

The following activities, outlined in **Table 5**, are associated with the operation and maintenance of the solar facility. It will operate year-round and generate electricity during daylight hours only. The amount of daily power generated will depend on the available resource. The Project will be monitored and managed remotely; therefore, minimal on-site activity is required.

This information has been summarized from the Project Design and Operations Report. For additional details, please refer to that report.

Table 5: Operations and Maintenance Activities

Activity	Description
Monitoring and Meter Calibrations	The solar facility will be monitored remotely 24 hours a day to ensure proper power output and to alert the operations staff to potential issues. Most issues can be remotely diagnosed so that the correct individual(s) can be dispatched to the solar facility to correct any problems.
Routine Periodic Maintenance and Inspection of Project Components	Site visits will occur as scheduled to visually inspect the solar facility and monitor that the facility is in proper working order. Activities that will occur during these visits may include data collection, regular maintenance (as described below) and any necessary minor repairs such as replacement of weathered electrical components. Security visits may also occur periodically. Transformers, inverters, solar panel arrays and racking will be visually inspected during scheduled visits.
Access Roads	Routine inspections of access roads may indicate the need for the addition of granular material and/or minor levelling and grading activities. The work is normally accomplished by small-scale equipment such as a skid steer loader.
Lighting	For security and maintenance purposes, task-specific lighting may be installed near the entrance of the facility and task-specific lights will be provided as necessary. These will be appropriately shielded or directed to avoid impacts to neighbours. They may also be motion-sensored to address potential negative effects, as necessary and will be inspected for burned/broken bulbs. Regularly scheduled maintenance will occur.
Cleaning of PV Panels	Cleaning of panels and equipment will take place as required. No water-taking will occur. All water required for panel washing will be trucked to the Project Location. No harmful cleaning solutions of any type will be

Activity	Description
	used to wash the panels. Manual snow clearing may periodically be required.
Periodic Landscape Maintenance	Native vegetation or a crop suitable for grazing may be planted once construction activities are complete. It will be necessary to maintain the land in such a way that vegetation does not shade or in other ways impact the solar panels. Regular scheduled maintenance will also occur to manage weed growth, which may include the use of sheep grazing or established vegetation management zones with meadow or early successional shrub habitat as part of a vegetation management strategy. This will be done in consideration of seasonal limitations outlined in the NHA. It is not anticipated that herbicides will be used to manage vegetation. Regularly scheduled maintenance will occur.
Major Maintenance	Unforeseen, large repairs are not anticipated. Should major maintenance be required it will be performed using existing roads and site access points.
Third Party Inspections and Testing	Activities will be carried out as required by the local utility and other governing bodies in addition to any regularly scheduled inspections and testing.
Traffic	Activities will be carried out as required by the local utility and other governing bodies in addition to any regularly scheduled inspections and testing. No major deliveries are anticipated for maintenance. Minimal vehicle traffic is associated with regular maintenance.
Drainage and Erosion Control	Stormwater runoff at the Project Location will be managed as per a detailed SWM Plan to be developed and implemented by the appropriate engineer and contractor; and this will be done with consideration to maintaining pre-construction drainage patterns and recommendations or limitations outlined in the NHA or Water Reports. Implemented measures will be inspected during routine maintenance.
Waste	During the operation phase, no hazardous materials will be stored on-site except for oil for transformers and small quantities required for facility maintenance. Transformer oil will be adequately contained and accompanied by a Spills Response Plan (in conjunction with the ERCP), which will be developed prior to the start of construction.

7.3 Decommissioning

Through the decommissioning phase of the Project, the site will be returned to a state similar to its pre-construction condition. The installed components will be removed and reused/recycled, where possible. Any remaining materials will be removed and disposed of off-site at an appropriate location. The final decision on waste disposal or recycling will be the responsibility of the on-site contractor who will refer to the *Environmental Protection Act*, or the applicable standards of the day before submitting a Generator Registration Report, or other applicable report, for each type of waste produced at the solar facility.

The decommissioning plan for this Project is based on current procedures and experience. These procedures may be subject to revision based on new experiences and requirements over time. At the time of decommissioning various options and procedures will be re-evaluated to confirm that decommissioning is safe, beneficial to the environment and to landowners. Soil erosion and sedimentation control measures, as well as other mitigation measures used during construction will be re-implemented during the decommissioning phase and until the site is stabilized.

This information has been summarized from the Project Decommissioning Plan Report. Additional details are provided in that report related to decommissioning.

7.3.1 Equipment Dismantling and Removal

After the facility has been disconnected from the utility power grid and all electrical components have been disconnected within the facility, components will be dismantled and removed as outlined in **Table 6**. Decommissioning will be undertaken by licensed subcontractors using similar techniques and equipment as those employed during construction.

Table 6: Equipment Dismantling and Removal

Component	Description
Above-ground Structures	
PV Module Rays, Racking, and Supports	Disconnect all above ground wirings, cables and electrical interconnections. Remove PV modules from racks, temporarily store on-site in delineated area before removal by truck to appropriate facilities. Dismantle and remove all racks and support structures, including extraction of in-ground support structures. Temporarily store on-site before removal by truck to recycling facility.
Inverter Units, Transformers and Switchgear	Disconnect and remove all electrical equipment. Remove inverters and associated components including combiners, low voltage switch gear and medium voltage transformers and transport off-site to appropriate facility. Unbolt substation transformer and remove from the foundation with a crane. If concrete foundations have been used for inverter units or substations, they will be removed.
Access Roads and Other Components	Consult with landowner(s) to determine if access roads should be left in place for their continued use. If one or more access roads are removed after consultation with the landowner(s), the aggregate materials will be excavated by a backhoe/front-end loader, along with any underlying geotextile fabric. All compacted areas will be tilled in a manner adequate to restore the sub-grade material to the proper density and depth, consistent with the surrounding fields. Clean, compatible sub- grade material, followed by topsoil will be applied as necessary. Above ground lines and poles that are not owned by HONI will be removed along with associated equipment (isolation switches, fuses, metering) and holes will be filled in with clean fill or on-site fill. The communication tower will be dismantled and components removed. Removal of the perimeter fencing, followed by removal of fence pole foundations will be completed.
Below-ground Structures	
Underground Cables	Underground electrical lines running between inverters and the substation will be cut and the ends buried to 1 metre below grade and left in place. These lines are inert and will have no negative impacts on the environment, soil and/or cultivation practices.

Component	Description
Equipment Foundations	The substation, inverter units and steel racking for the solar modules will have foundations that require removal. These foundations will likely consist of steel piles but may also include concrete. Other underground infrastructure requiring removal may include concrete protective electrical structures. It is anticipated that structures will be fully removed from the ground and that the affected area shall be backfilled as necessary. If a structure breaks during excavation, any portion below 1.2 metres in depth will remain in place; the portion above 1.2 metres will be removed. Waste concrete will be recycled off-site by a concrete recycler or crushed on-site and used as backfill material. All foundation materials will be removed from the site via truck and managed at appropriate facilities.

7.3.2 Site Restoration

Once the on-site solar equipment is removed, it is expected that the site will be returned to its former use (i.e., rural). Some minor site grading may be required. Site restoration activities will be undertaken in consultation of the landowner where applicable. Where appropriate, vegetation will be re-established and maintain long-term agricultural capability of the lands where applicable.

7.3.3 Managing Excess Materials and Waste

During the decommissioning phase, waste materials will be removed in accordance with applicable local requirements. However, at a minimum, the goal will be to recycle all Project materials, if possible, and to work with local subcontractors and waste firms to segregate material to be recycled. For example, since the mounting racks are made of manufactured metal, it is anticipated that nearly 100% of the above grade metal structures are salvageable.

8.0 Existing Environmental Conditions of Relevant Natural Features

Existing environmental conditions for the Project Location and surrounding areas were determined through the records review, site investigation, and evaluation of significance, which comply with Sections 25, 26 and 27 of *Ontario Regulation 359/09*. Below, a summary of the natural environment associated with the Project Location is provided with a specific focus on natural features of significance that required an EIS. The function, composition, attributes and characteristics that make natural features significant, contribute to their persistence, may be sensitive to development and serve as a good indicator of negative environmental effects are described below.

8.1 Overview

Through the records review, site investigation and evaluation of significance work, it was confirmed that the following natural features either did not occur in the Project Location or prescribed 50 m setback.

- Protected Properties - Provincial Parks and Conservation Reserves;
- Significant ANSI, Life Science;
- Significant ANSI, Earth Science.

8.2 Description of Significant Natural Heritage Features

8.2.1 Wetlands

No wetlands were identified during site investigations.

8.2.2 Woodlands

The boundaries of woodland units in the Project Location and/or within 50 m of the Project Location were delineated using ELC protocol during the site investigation. This delineation reflects the boundaries of the woodland area evaluated as significant (for more information please refer to the *NHA Evaluation of Significance Report*) *and* shown on **Figure 2.**

Table 7 outlines the attributes, composition and function of each applicable significant woodland unit identified during the site investigation and confirms if the woodland was included in the records review or was identified as a result of these site investigations.

Characteristics that contribute to woodland persistence, may be sensitive to development and serve as a good indicator of negative environmental effects are described below in **Table 9**.

Table 7: Significant Woodlands within the Project Location and Surrounding 50 m

Woodland ID No	Size Criterion	Ecological Function Criteria					Uncommon Characteristics	Evaluation of Significance	
	Woodland of Minimum Size* (Significant = ≥50 ha)	Woodland Interior Habitat** of Minimum Size (Significant = ≥8 ha)	Proximity to Other Significant Woodlands (≤30 m) or Habitats^ and Woodland Meets Minimum Size (= ≥10 ha)	Linkage Function and Woodland Meets Minimum Size (= ≥10 ha)	Water Protection Function and Woodland Meets Minimum Size (= ≥4 ha)	Woodland Diversity Representation and Woodland Meets Minimum Size (= ≥10 ha)	Uncommon Characteristics and Woodland Meets Minimum Size (= ≥4 ha)	Significant	Not Significant
A	• 0.89 ha total, 0.034 of which are within 50 m of the Project Location Criteria not met	• 0 ha Criteria not met	• Confirmed habitat for SCC birds Eastern Wood-pewee • Does not meet minimum size criteria. Criteria not met	• The woodland is mapped as 'natural corridor and linkage' as shown on Schedule C of the Township of Drummond/North Elmsley Official Plan (2025). • Woodland does not provide link between other significant features within 120 m. • Does not meet minimum size Criteria not met	• None observed • Does not meet minimum size Criteria not met.	• This woodland area is composed of the following ELC communities: • Dry-Fresh White Cedar Coniferous Forest (FOCM2-2) • Dominant canopy species include Eastern White Cedar (*Thuja occidentalis*), White Spruce (*Picea glauca*), Eastern Hemlock (*Tsuga canadensis*), and White Elm (*Ulmus americana*).	• None recorded • Meets minimum size Criteria not met		✓

Woodland ID No	Size Criterion	Ecological Function Criteria					Uncommon Characteristics	Evaluation of Significance	
	Woodland of Minimum Size* (Significant = ≥50 ha)	Woodland Interior Habitat** of Minimum Size (Significant = ≥8 ha)	Proximity to Other Significant Woodlands (≤30 m) or Habitats^ and Woodland Meets Minimum Size (= ≥10 ha)	Linkage Function and Woodland Meets Minimum Size (= ≥10 ha)	Water Protection Function and Woodland Meets Minimum Size (= ≥4 ha)	Woodland Diversity Representation and Woodland Meets Minimum Size (= ≥10 ha)	Uncommon Characteristics and Woodland Meets Minimum Size (= ≥4 ha)	Significant	Not Significant
B	The woodland is mapped as a significant woodland as shown on Schedule C of the Township of Drummond/North Elmsley Official Plan (2025). As per Table C3 of the NHAG, Third Edition (MNRF, 2026), woodlands that are mapped and to be determined significant by a planning authority (e.g. municipality) are considered to be significant for the purposes of the Natural Heritage Assessment.							✓	

8.2.3 Wildlife Habitat

The occurrence and boundaries of significant wildlife habitat in the Project Location and/or within the prescribed setback of 50 m from the Project Location were delineated using information collected during the site investigation (e.g. ELC, observation of suitable site characteristics, etc.) and evaluation of significance (e.g., area search surveys, etc.) following criteria outlined in the Significant Wildlife Habitat Technical Guide (MNRF 2000) and Ecoregion 6E Criteria Schedule (MNRF 2015). Wildlife habitats requiring inclusion in this NHA EIS Report are shown in **Figures 3A-B**.

Table 8 outlines the attributes, composition and function of each identified significant/ treated as significant wildlife habitat. Characteristics that contribute to wildlife habitat persistence, may be sensitive to development and serve as a good indicator of negative environmental effects are described below in **Table 9**. General mitigation measures proposed in **Table 10** and **Table 11** will address effects due to construction activities.

Table 8: Significant Wildlife Habitat within the Project Location and Surrounding 50 m

Wildlife Habitat	Definition Criteria for Significant Wildlife Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Relevant Evaluation Criteria Determining Status
				Within Project Location	Within 50 m of Project Location	Not Applicable	Significant	Treated Significant	Not Significant	
Woodland Raptor Nesting Habitat	All natural or conifer plantation woodland/forest stands >30 ha with >10 ha of interior habitat. Wildlife species: Northern Goshawk Cooper's Hawk Sharp-shinned Hawk Red-shouldered Hawk Barred Owl Broad-winged Hawk	ID	ELC*	✓	✓	---	---	---	✓	No raptor nests were observed during field investigations in the Project Location and 50 m setback.
		WRNH	FOCM4-1							
Open Country Bird Breeding Habita (includes Eastern Meadowlark and Bobolink)	Large grassland areas (including natural and cultural fields and meadows) are important to support grassland breeding bird species. Grassland areas > 30 ha, and do not include Class 1 or Class 2 agricultural lands. Habitat does not include fields with row-cropping or intensive hay or livestock pasturing in the last 5 years. This habitat can be found in Meadows (ME). **Species of Conservation Concern:** Grasshopper Sparrow	ID	ELC*	✓	✓	---	✓	---	---	Meadows were observed within the Project Location and 50 m setback that is considered Significant Wildlife Habitat for Open Country Bird Breeding Habitat. Wildlife habitat for Open Country Breeding Bird Habitat (includes habitat for Eastern Meadowlark and Bobolink). Probable breeding of Savannah Sparrow and Bobolink, and possible breeding of Eastern Meadowlark in the MEMM3 and MEMM4 communities at the
		OCBBH	MEMM3, MEMM4							
		OCBB3-5	Dry-Fresh Mixed Meadow (MEMM3)							
		WASBBH1	FODM5-11, FOMM6-1							

Wildlife Habitat	Definition Criteria for Significant Wildlife Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Relevant Evaluation Criteria Determining Status
				Within Project Location	Within 50 m of Project Location	Not Applicable	Significant	Treated Significant	Not Significant	
										Project Location as such this SWH type has been evaluated as significant.
Species of Conservation Concern										
		ID	ELC*	✓	✓	---		---	✓	Forest clearings and edge habitat within forest (FO) and woodland (WO) communities were observed within the Project Location and within the 50 m setback that is candidate Significant Wildlife Habitat for Eastern Wood-pewee. Eastern Wood-pewee was heard calling in the FOCM2-2 and FOCM4-1 communities at the Project Location. Eastern Wood-pewee had possible breeding evidence and not confirmed or probable evidence and therefore is confirmed to be not significant for this SWH type.
Eastern Wood-Pewee	The Eastern Wood-Pewee lives in open, deciduous, mixed or coniferous forest clearings and forest edges predominated by oak with little understory including mature woodlands, roadsides, woodlots, farm woodlots and orchards.	EWP	FOCM2-2, FOCM4-1							

Wildlife Habitat	Definition Criteria for Significant Wildlife Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Relevant Evaluation Criteria Determining Status
				Within Project Location	Within 50 m of Project Location	Not Applicable	Significant	Treated Significant	Not Significant	
SAR Bats	Hoary bat, eastern red bat, and silver-haired bat are migratory "tree bats" that rely heavily on forest foliage and tree cavities for summer roosting and forage near open water and forest edges. Move to southern United States/Mexico during winter. Species rely on a combination of forested landscapes, open water for foraging, and underground cavities like caves or mines for winter hibernation, though each shows distinct preferences for summer roosts and hunting environments. Species prefers mature deciduous or mixed forests. **<u>Species:</u>** Hoary Bat Eastern Red Bat Silver-haired Bat Little Brown Myotis Northern Myotis Eastern Small-footed Myotis Tricolored Bat	ID	ELC*	✓	---	---	✓	---	---	Bat habitat was identified, and indicator species (including Silver-haired Bat/Big Brown Bat and Hoary Bat.) were recorded on a bat detector. Therefore, B1 is significant.
		BAT1 (B1)	FOCM4-1, WODM4-2							

9.0 Environmental Effects of the Project

A summary of the attributes, features, and/or ecological functions that may be sensitive to development for the identified significant natural features is described below in **Table 9**. The features and attributes identified are anticipated to serve as good indicators of negative environmental effects and are to be used as part of the impact analysis. The *Natural Heritage Assessment Guide for Renewable Energy Projects* Table C3 evaluation of significance requirements outlines that if all or part of a renewable energy project is proposed within candidate SWH there is the option available to skip the pre-construction survey and treat the candidate significant wildlife habitat as significant. Key baseline characteristics and ecological function are to inform the preparation of a required EIS (MNR, 2026).

The evaluation of potential impacts, mitigation and residual effects are discussed in **Table 10**.

In general, the mitigation measures have been designed to minimize or eliminate, where possible, the impacts of construction, operations, and decommissioning to the significant natural features.

Table 9: Summary of Key Features and Attributes that may serve as Indicators of Negative Environmental Effects

Natural Feature	Indicator Species	Features/Attributes Necessary for Persistence (Physical and Functional)	Features/Attributes Potentially Sensitive to Development	Good Indicator Features/Species
Woodlands				
B	Native woodland flora, species with high (>7) coefficient of conservation value.	**Physical**: occurrence of large continuous forest unit with low disturbance. **Functional**: provides interior habitat, is adjacent to other significant wildlife habitat, provides habitat for woodland species.	Vegetation along the edge of the feature, interior habitat, woodland species richness.	Woody vegetation along the edge of feature remains in good condition. Persistence/dominance of native tree species. Complex vertical structure and mix of tree ages (heterogeneity). Persistence of interior woodland area and interior woodland habitat.
Wildlife Habitat				
Specialized Habitat for Wildlife				
Open Country Bird Breeding Habitat	Upland Sandpiper Grasshopper Sparrow Vesper Sparrow Savannah Sparrow **Special Concern** Short-eared Owl	**Physical:** Grassland areas (fields and meadows). **Functional**: provides habitat for grassland birds.	Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and	Presence of grassland birds. Species abundance and richness.

Natural Feature	Indicator Species	Features/Attributes Necessary for Persistence (Physical and Functional)	Features/Attributes Potentially Sensitive to Development	Good Indicator Features/Species
	Bobolink Eastern Meadowlark		pasturelands that are at least 5 years or older.	
Special Concern and Rare Wildlife Species				
SAR Bats	Hoary Bat Eastern Red Bat Silver-haired Bat Little Brown Myotis Northern Myotis Eastern Small-footed Myotis Tricolored Bat	**Physical**: Deciduous, mixed or coniferous forests. **Functional**: Provides habitat for SAR Bats	Woodland habitat for SAR bats	Presence of bat woodland habitat.

Table 10: Summary of Effects and Mitigation Measures for Significant Natural Features

Significant or Provincially Significant Natural Feature Affected By Activity	Project Phase & Activity within 50 m of Natural Feature	Physical Impact (Direct)	Functional Effect (Indirect)	Magnitude of Effect	Frequency of Effect	Duration of Effect	Mitigation	Residual Effects
Woodland B SAR Bats	Site Preparation - Vegetation Clearing, Grading and Grubbing Installation of perimeter fencing, access roads and electrical collection system. Once site preparation is complete, installation of other project components is not anticipated to impact natural features. Storage of Materials and Equipment Vehicle/Equipment Operation	Temporary Areas include the laydown area which is 2.29 ha. Permanent Areas include the array fence, array racking layout, interface transformer, overhead line, road and underground cable which is 24.18 ha. 3.44 ha of woodland will be removed for the project layout. Removal or pruning of trees potentially suitable for bat roosting	• Increased vegetation competition due to potential introduction of invasive species. • Loss or degradation of woodland habitat and ecological function. • Disruption to use or avoidance of habitat, and potential localized declines in species richness and abundance due to disturbance during sensitive life processes (e.g., breeding), habitat degradation or rare instances of wildlife mortality. • Short term hydrological changes to surface hydrology and drainage due to soil compaction, exposed soils, etc. • Potential increase in surface water runoff due to grading, soil compaction, ditching, access roads, etc. • Release of dust and soil particles into wildlife habitat.	Medium-High without mitigation. Low frequency with mitigation. Potential during construction, operations and decommissioning. Woodland, Significant Wildlife Habitat, SAR habitat associated with woodland features have the potential to be affected.	Potential during construction, primarily site preparation.	For woodland and associated wildlife habitat, the effect is permanent for removals and temporary during the construction phase until vegetation cover in the Project Location is established. During construction phase. During the operations phase limited materials will be stored at the Project.	• Vegetation Management Zone: Areas where tree canopies and tall woody vegetation are selectively managed or removed/pruned, but where the ground, low understory, root systems, and soil strata remain intact, and no physical grading will occur. Selective limb pruning or tree topping based on the 3:1 ratio (distance from panels to height of vegetation) avoids the total deforestation of the feature edge, preserves root systems and baseline hydrology, mitigates potential soil erosion and maintains mycorrhizal networks. • Pruning Standards: Pruning must adhere to ANSI A300/ISA (International Society for Arboriculture) tree pruning standards performed by a Certified Arborist to prevent tree mortality, disease transmission, or irregular decay. • Retention of Coarse Woody Debris (CWD): Where limbs or hazard trees are topped, leave trimmed woody debris in place on the forest floor to enhance microhabitat for salamanders, invertebrates, and small mammals. • Invasive Species Management: Implement monitoring and spot treatment along the pruned edge to prevent the colonization by opportunistic invasive shrubs. • Limits of construction area to be staked and a fence maintained at this boundary to minimize disturbance to the woodland wildlife habitat. • Implement a SWM Plan and sediment and erosion control plan prior to and during construction to align pre-and post-surface water flow, retention and conveyance conditions. Once implemented, this plan will mitigate the effects of significant changes in water flows to natural features where the Project is operational. • Avoid clearing vegetation during migratory breeding bird and bat seasons to minimize wildlife impacts. Pre-Clearing Sweeps: If clearing must occur during the sensitive windows listed below, a qualified professional must conduct nest searches and bat sweeps within 48 hours prior to starting work:	Woodland/ wildlife habitat/SAR habitat are proposed for removal or disturbance. No residual adverse effects on natural features are anticipated with implementation of mitigation measures. Erosion effects are not anticipated during the operations phase as the Project Location will have permanent vegetation groundcover in disturbed areas. The SWM plan for the project is to include measures to

Significant or Provincially Significant Natural Feature Affected By Activity	Project Phase & Activity within 50 m of Natural Feature	Physical Impact (Direct)	Functional Effect (Indirect)	Magnitude of Effect	Frequency of Effect	Duration of Effect	Mitigation	Residual Effects
		and bird nesting. The vegetation management zone is 1.16ha. Effects include edge and microclimate effects (e.g., increased light penetration and risk of windthrow, invasive species, and desiccation. Displacement of species inhabiting the natural features and loss of habitat. No direct effect on significant natural	• Potential for localized air quality issues from dust and emissions from construction vehicles, machinery and equipment. • Potential for leaks or spills of fuel and other deleterious substances from vehicles and machinery that could affect wetland/woodland wildlife, vegetation or contaminated water and/or soil.			During the operations phase periodic vehicle use for maintenance at the Project.	• Breeding Birds: April 1 to August 31 • Bats (Little Brown Myotis, Northern Myotis, Tri-colored Bat): April 1 to September 30 • Bats (Hoary, Silver-haired, Eastern Red Bat): April 1 to November 30) Buffer Zones: If active nests of species protected under the *Migratory Birds Convention Act* or the *Migratory Bird Regulations* are found, work must cease within a minimum buffer zone. This species-specific buffer will be determined by a qualified professional based on Environment and Climate Change Canada and/or Ministry of Natural Resources (MNR) guidance and must remain in place until the nest has fledged. Work Approval: Clearing may proceed if no nests are detected. Construction on cleared lands may continue during the breeding season once target vegetation has been completely removed. To mitigate the effects on invasive species, the Clean Equipment Protocol for Industry (available from Ontario Invasive Species Plant Council) should be followed for vehicles and equipment moving into and out of the Project Location. • The construction workforce will receive awareness training for wildlife avoidance measures and encounter protocols. • If necessary, wildlife will be relocated to appropriate habitat by a qualified professional trained in the safe handling procedures. • Maximize construction equipment distance from woodland SWH/SCC (SAR) habitat edges and restrict machinery operation to designated construction areas. Do not refuel machinery within 30 m of any significant natural features. • Develop a soil compaction mitigation plan during detailed design to promote stormwater infiltration and formally specify this plan within the final SWM Plan. • Implement soil stabilization, such as re-vegetating with native species, as soon as practical following construction to stabilize soil, restore habitat, and attenuate runoff. Detailed mitigation	mitigate sediment migration and erosion.

Significant or Provincially Significant Natural Feature Affected By Activity	Project Phase & Activity within 50 m of Natural Feature	Physical Impact (Direct)	Functional Effect (Indirect)	Magnitude of Effect	Frequency of Effect	Duration of Effect	Mitigation	Residual Effects
		features adjacent to the Project Location following vegetation clearing within the Project Location.					measures must be developed during detailed design within the (ESC Plan and SWM Plan to prevent off-site runoff throughout the construction period until vegetation is fully established. ESC measures (i.e. silt fence) installed for construction purposes will be monitored regularly to confirm functional issues are identified and resolved in a timely fashion. • The perimeter fencing is to have contact with the ground surface to prevent entry of wildlife at the base. Where it is not feasible for the fence to contact the ground, other measures will be installed to prevent wildlife access under the fence and monitored by a qualified professional. • Access roads located outside of the perimeter fence are to be designed to discourage use of wildlife (e.g. turtle nesting deterred by use of hardeners etc.). • Following the completion of the perimeter fencing, wildlife within the Project Location may be relocated by a qualified professional trained in the safe handling of wildlife. • Storage of hazardous materials and refueling of vehicles/equipment for the Project should not occur within 30 m of significant natural features. • Implement an ERCP for the Project. Secondary containment is to be used for hazardous substances stored in the Project Location. Use controlled work procedures to minimize occurrences of spills. Spills cover release of materials from the Project into the air, water or onto land. Emergency spill kits will be made available at the Project Location at all times should a spill occur. Spills and leaks of deleterious substances must be contained and cleaned up in accordance with Provincial regulatory requirements and reported to the Ontario Spills Action Centre (1-800-268-6060). Maintain a logbook of spills and mitigation measures. • Minimize activities with potential for dust releases, especially during windy and prolonged dry periods.	

Significant or Provincially Significant Natural Feature Affected By Activity	Project Phase & Activity within 50 m of Natural Feature	Physical Impact (Direct)	Functional Effect (Indirect)	Magnitude of Effect	Frequency of Effect	Duration of Effect	Mitigation	Residual Effects
							• Restore disturbed areas as soon as possible to minimize the duration of soil exposure and restore habitat (where applicable). • Inspect and clean all equipment to remove potential invasive species prior to entering the Project Location.	
Open Country Bird Breeding Habitat	No activity within 50 m of the open country bird breeding habitat.	No direct impact on the meadow habitat.	No indirect impacts on the meadow habitat.	N/A	N/A	N/A	Minimize impacts to breeding birds (April 1 to August 31)	N/A

10.0 Environmental Effects Mitigation and Monitoring Plan

The Environmental Effects Mitigation and Monitoring Plan (EEMMP) prepared for the Project outlines the mitigation measures to minimize the environmental effects of engaging the Project (**Table 11**). The mitigation measures outlined in **Table 11** below are in response to the physical impacts and functional effects that have potential to occur during the construction of the facility and are specific to significant natural heritage features outlined in **Table 6**, **Table 7** and **Table 8**. These will form part of the overall EEMMP for the Project in the Design and Operations Report and the Construction Plan Report, as applicable. **Table 11** also summarizes the monitoring plan and monitoring frequency following construction of the facility, as well as contingency measures that will be undertaken if performance objectives are not achieved. **Table 11** should be read in conjunction with **Table 9** and **Table 10** which outline the features and attributes necessary for persistence, features potentially sensitive to development and features that serve as good indicator features or species.

Table 11: Environmental Effects Mitigation and Monitoring Plan

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
Significant Woodlands SAR Birds	Permanent removal or degradation of woodland/wildlife habitat/SAR habitat. Mortality of wildlife species moving across general Project due to increased traffic volumes during construction. Mortality of avian species due to collision with overhead connection lines.	Increased vegetation species competition due to potential introduction of invasive species. Change in surface water/drainage run-off volumes and patterns. Compaction of ground near treed vegetation root zone. Potential changes to water quality. Reduction in quality of habitat.	Persistence of natural features and preserve ecological functions. Retain a modified, structurally continuous canopy edge, and minimize microclimate shifts and interior woodland habitat loss of the retained natural feature. No or minimal sediment deposition. Significant wildlife habitat will continue to meet the criteria for significance post-construction (where retained following construction phase). General connectivity between wetlands, woodlands, and wildlife habitats maintained at a local landscape level.	Compensation for woodland tree removal may be provided as deemed appropriate by a qualified professional if required by approval authorities (e.g. municipality). <u>Vegetation/Habitat Considerations</u> Providing a greater buffer between the Project and adjacent natural areas should be prioritized if there is an opportunity to reduce the Project footprint through detailed design. To mitigate the effects of invasive species, the Clean Equipment Protocol for Industry (available from the Ontario Invasive Plant	Monitor planting area(s) for potential introduction of invasive species. Implement Clean Equipment Protocol for equipment and vehicles. to reduce introduction and spread of invasive species. Monitor ESC measures regularly during site preparation and construction. Monitor exclusion fencing regularly during site preparation and construction and relocate wildlife to suitable habitat where require. Follow recommendations in the SWM Plan	Planting area(s) location monitoring. Invasive species monitoring to occur within Project Location. ESC measures to be monitored where implemented according to the ESC plan. Wildlife monitoring to occur where fencing to exclude wildlife has been installed near significant	A survey for the planting area is to occur during the first growing season after planted. A survey for invasive species to occur during first growing season after Project reaches commercial operation. Monitor ESC measures regularly during construction. ESC monitoring to occur monthly or after rain events 10 mm or greater (within 24 hrs) until	Health monitoring of planting area(s). Comparison of significant habitat persistence and overall health of new woodland edge to determine if mitigation measures were effective.	ESC inspection checklist log compiled for monitoring events. Surface water quality reporting requirements as per SWM Plan and/or the REA issued by the MECP. Post-construction monitoring report to be submitted to MECP, as applicable, outlining the results of the surveys.	If there is low survivorship of plants in planting area(s), replacement may be require based on landscape planting warranty requirements. If invasive species are introduced into the Project Location from construction activities (i.e., species does not already occur in the general area), invasive species management will occur to remove the species and efforts to control further

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				Council) should be followed for vehicles and equipment moving into and out of the Project Location. To minimize clearing or fragmenting the adjacent Significant Woodland, a 1.16 ha Vegetation Management Zone (VMZ) will be established. Governed by a 3:1 setback-to-canopy-height ratio, the VMZ will prohibit grading and physical infrastructure, while minimizing soil compaction and ground disturbance. Rather than clear-cutting, trees encroaching into the 3:1 solar shading angle will be selectively	and/or REA issued by the Ministry of the Environment, Conservation and Parks (MECP) to monitor effectiveness of water flow management measures; ensure flow is free of sedimentation.	wildlife habitat. Monitor for surface water quality at locations identified in the SWM Plan and/or REA issued by the MECP. Post-construction habitat monitoring locations for significant natural features in the same location as pre-construction surveys where significant wildlife habitat is wholly or partially retained following construction.	vegetation is re-established. Wildlife monitoring to determine if species present in construction disturbance area(s) to occur on an ongoing basis throughout the construction phase. Monitor for surface water quality at a frequency and duration identified in the SWM Plan and/or REA issued by the MECP. One year of post-construction			spread will be made. If accidental damage or removal to vegetation occurs beyond the planned removals, re-planting or similar native species may be require if function of the natural feature is compromised as determined by a qualified professional. Consultation to occur with MNR/MECP, as applicable. Repair deficiencies in ESC structures as soon as possible upon notification of breach in ESC structure and/or insufficient

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				pruned or height-reduced under the supervision of an ISA Certified Arborist. Existing understory vegetation, low shrubs, leaf litter, and roots will remain intact to protect woodland edge hydrology and prevent soil destabilization. Cleared lands to be vegetated with native plant species as soon as practical following construction activities to emulate pre-construction conditions to the extent possible. <u>Setbacks</u> For wetlands/wildlife habitats not proposed for removal, setbacks			monitoring for significant wildlife habitat that is wholly or partially retained following construction.			measures based on site conditions. If degradation of natural feature/habitat occurs, appropriate contingency measures will be implemented (e.g. re-establishment of mitigation measures, remediation), depending on the extent of degradation. If performance objectives are not achieved following the first year of post construction monitoring wildlife habitat does not meet the criteria to be considered significant, MECP will be made aware of the monitoring

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				provided below imply the vegetation that exists prior to construction will not be removed during construction to maintain the setback areas as vegetated buffers for the natural features. A minimum 5 m setback to be applied to significant wildlife habitat s adjacent to the Project Location where PV panels are located. A minimum 5 m setback to be applied to significant wildlife habitat areas adjacent to the Project Location where PV panels are located. A minimum 1 m setback is to be applied to access roads. ESC						results, and a year of post-construction evaluation monitoring will occur. The maximum length of time for post-construction monitoring will not exceed three years.

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				Restrict vegetation clearing to lands within the Project Location identified for development. Minimize soil exposure. Install ESC measures based on final Project ESC Plan prior to vegetation clearing, grubbing and grading to prevent mobilization of sediment and other contaminants from the Project Location into the surrounding landscape. ESC measures to remain functioning until vegetation has been re-established. Stormwater Management Develop and implement a SWM Plan (SWM) Plan to facilitate drainage						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				significantly altered from the existing conditions due to road drainage, reduction in surface permeability due to soil compaction, etc. Hydrogeological work to be completed to verify that no significant changes to groundwater characteristics are anticipated as a result of the Project. A plan to address/mitigate soil compaction throughout the Project Location to be developed as part of the detailed design to promote infiltration, where applicable. <u>Vegetation/Habitat Considerations</u> Providing a greater buffer between the Project and						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				adjacent natural areas should be prioritized if there is an opportunity to reduce the Project footprint through detailed design. To mitigate the effects of invasive species, the Clean Equipment Protocol for Industry (available from the Ontario Invasive Plant Council) should be followed for vehicles and equipment moving into and out of the Project Location. <u>Wildlife Considerations</u> The construction workforce will be educated on local wildlife that may be encountered on the Project Location at the time of site orientation. Included in the orientation will be instructions for how to identify						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				and avoid wildlife that may be encountered. A protocol will be provided to contractors to follow in the event that wildlife is encountered. This protocol will include specific measures for dealing with turtles, snakes, breeding birds and other wildlife. Wildlife located within the Project Location will be relocated to an areas outside the Project Location (and into an area of appropriate habitat) as necessary. This will be completed by a professional trained in the safe handing of wildlife. Vehicle speeds restricted to 15 km/hr or less when travelling within the Project						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				Location where PV panels and the substation are proposed. Utilize fencing (e.g. perimeter fencing and/or silt fencing) to deter wildlife from entering the construction site during construction and decommissioning. The perimeter fencing is to have contact with the ground surface to prevent entry of wildlife. Where it is not feasible for the fence to contract the ground, other measures will be installed to prevent wildlife access under the fence. Minimize impacts to breeding birds (April 1 to August 31) and bats (March 1 to November 30).						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				Clearing of vegetation should be outside the breeding bird and bat season windows. Should clearing be required during the breeding bird season, nest searches conducted by a qualified professional must be completed 48 hours prior to clearing activities. If active nests are found of species protected in *Migratory Birds Convention Act* or nests of year round protected species in the Migratory Bird Regulations, works within a buffer (species status dependent, as set by a qualified professional in accordance with guidance provided by Environment Canada and						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				Climate Change and/or MNR) will cease until nest has fledged. If no nests are present, clearing can occur. Prohibitions under the federal *Migratory Bird Convention Act* are to be compiled with. Construction vehicle speeds to be restricted to 20 km/hr on municipal roads adjacent to where wildlife exclusion fencing has been installed (as described in this table). Minimize construction traffic during nighttime hours. Vehicle speeds to be restricted to 15 km/hr or less on the Project site and speed limit signage posted. Access roads located outside of the perimeter						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
				fence are to be designed to discourage use by wildlife (e.g. turtle nesting deterred by use of hardeners, at grade access roads on bedrock etc.). Overhead connection lines and supporting poles to include mitigation measures for reducing collision mortality such as line marking in areas of known high bird activity. Cleared lands to be vegetated with native species as soon as practical following construction activities. Check vehicle for snakes at start of day or if left idle for more than 1 hr.						

Significant Natural Feature	Potential Positive/Negative Environmental Effects		Performance Objective	Environmental Effects Mitigation and Monitoring Plan						Contingency Measures
	Physical	Functional		Mitigation Measure	Monitoring Strategy & Methods	Monitoring Locations	Frequency & Duration	Technical and Statistical Value of Data	Reporting Requirements	
Open Country Bird Breeding Habitat	There is no removal of meadow habitat associated with open country bird breeding habitat.	No direct functional impact on the meadow habitat.	Maintain existing meadow habitat within the 50 m Site Investigation Area.	Minimize impacts to breeding birds (April 1 to August 31)	No monitoring required	N/A	N/A	N/A	N/A	N/A

11.0 Negative Environmental Effects, Design and Operations

The REA regulation requires an environmental effects monitoring plan as a part of the *Design and Operations Report* to demonstrate how negative environmental effects of the Project will be mitigated and set out a program for ongoing monitoring of the effectiveness of the mitigation measures. Through the NHA, the Project Location has been defined to avoid directly impacting significant natural features where possible. During the operations phase of the Project and following the implementation of a SWM Plan for the Project, there are no expected impacts or effects to significant natural features that would require ongoing mitigation measures or monitoring. As such, information relating to significant natural features is not required to be included in the environmental effects monitoring plan for the Project *Design and Operations Report*. Additional mitigation measures proposed to minimize impacts of the facility and not related to significant natural features are summarized in the *Design and Operations Report*.

12.0 Negative Environmental Effects, Construction

The REA regulation requires that a *Construction Plan Report* be prepared to demonstrate how negative environmental effects of construction activities will be mitigated including modifications to construction activities, use of treatment technologies (e.g. Erosion and Sediment Control structures), and scheduling of activities. **Table 11** above provides a description of performance objectives in respect of each negative environmental effect; mitigation measures planned to achieve performance objectives; how the Project is to be monitored; and a contingency plan to be implemented should monitoring reveal that mitigation measures have failed. **Table 11** has been prepared for inclusion in the Project *Construction Plan Report*. Additional mitigation measures proposed to minimize impacts of the facility and not related to natural features are summarized in the *Construction Plan Report*.

13.0 Conclusion

Through a records review, site investigation and natural features evaluation of significance, it was determined that significant natural features exist within the Project Location and/or 50 m setback (see **Figure 2**, and **Figure 3**). As such, an *NHA EIS Report* was required under Sections 37 and 38 of *Ontario Regulation 359/09*. This fourth and final report therefore satisfies the requirements under *Ontario Regulation 359/09* with respect to an NHA. This *NHA EIS Report* demonstrates how negative environmental effects of the Project will be mitigated and sets out a program for ongoing monitoring of the effectiveness of the mitigation measures.

Table 11 above provides a description of performance objectives in respect of each negative environmental effect; mitigation measures planned to achieve performance objectives; how the Project is to be monitored; and a contingency plan to be implemented should monitoring reveal that mitigation measures have failed. The *NHA EIS report* was completed to mitigate potential negative environmental effects to the significant natural features found in association with this Project.

Significant Natural Features associated with the Project has been identified below.

Significant Woodlands

- Woodland B.

Significant Wildlife Habitat:

- Habitat for Species of Conservation Concern:
  - Open Country Bird Breeding Habitat.
- Special Concern and Rare Wildlife Species:
  - SAR Bats.

14.0 References

Ontario Ministry of Natural Resources. 2026. Natural Heritage Assessment Guide for Renewable Energy Projects, Third Edition. April 27, 2026. 116 pgs.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2000. SWH Technical Guide. 151 pgs.

Ontario Ministry of Natural Resources and Forestry. 2014. Significant Wildlife Habitat Mitigation Support Tool. 533 pp.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2015. SWH Criteria Schedules for Ecoregion 6E.

Township of Drummond/North Elmsley. 2024. Township of Drummond/North Elmsley Official Plan. Available from: https://www.dnetownship.ca/component/edocman/official plan/viewdocument/79?Itemid=0

Appendix A

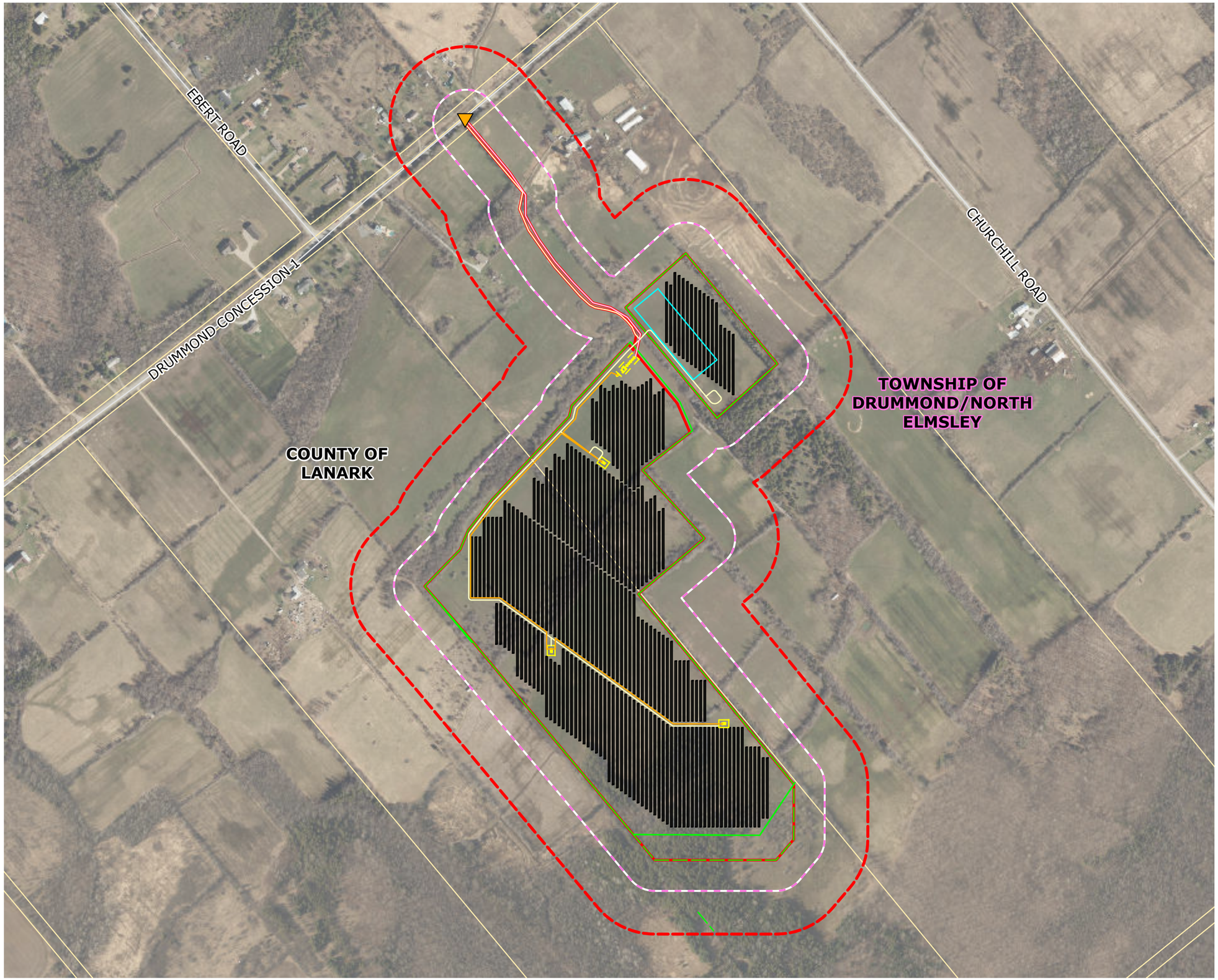
Figures

Golden Leaf Agrivoltaics Project

Environmental Impact Study

Project Location

Figure 1



- Project Location
- Study Area (120 m)
- 50 m Site Investigation Area
- Point of Common Coupling
- Fence
- Interface Transformer
- Inverter
- Laydown Area
- Overhead Line
- Racking
- Road
- Vegetation Management Area
- Underground Cable
- Local Road
- Lot/Concession



Map Drawing Information:
Data Provided by Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Scale 1:6,000

N

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Created By: AEE	Project: 26-3072
Checked By: MM	Status: DRAFT
Map Projection: NAD 1983 UTM Zone 18N	Date: 2026-11-18

DILLON

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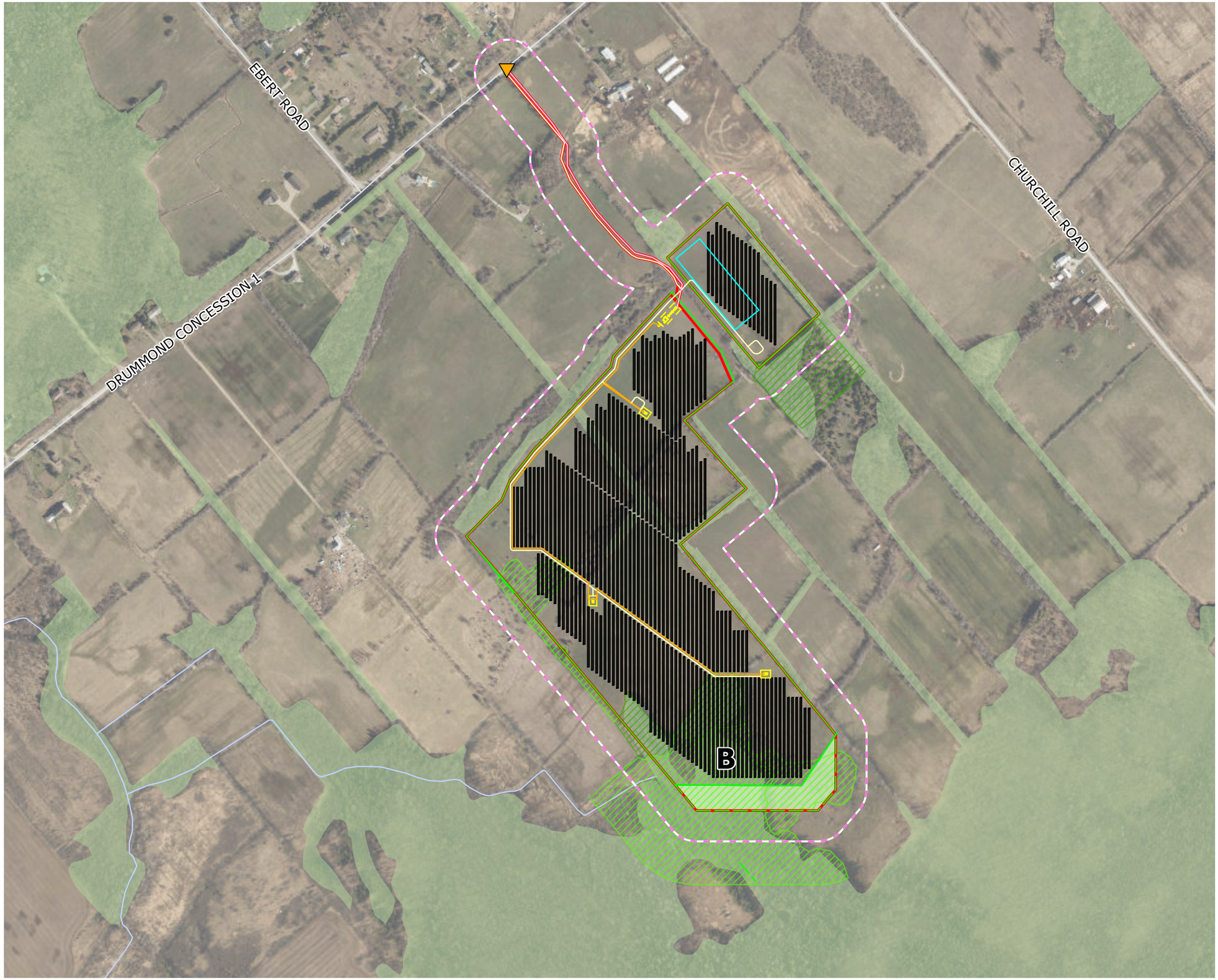

Golden Leaf Agrivoltaics Project

Environmental Impact Study

Significant Woodlands

Figure 2

- Project Location
- 50 m Site Investigation Area
- Point of Common Coupling
- Fence
- Interface Transformer
- Inverter
- Laydown Area
- Overhead Line
- Racking
- Road
- Vegetation Management Area
- Underground Cable
- Local Road
- Watercourse
- Water Body
- Woodland (MNR, 2026)
- Dillon Delineated Woodland-Defined as Forest Under ELC (>60% cover)
- Significant Woodland
- Vegetation Management Zone (Selective Pruning/Topping Only; 3:1 Solar Setback)

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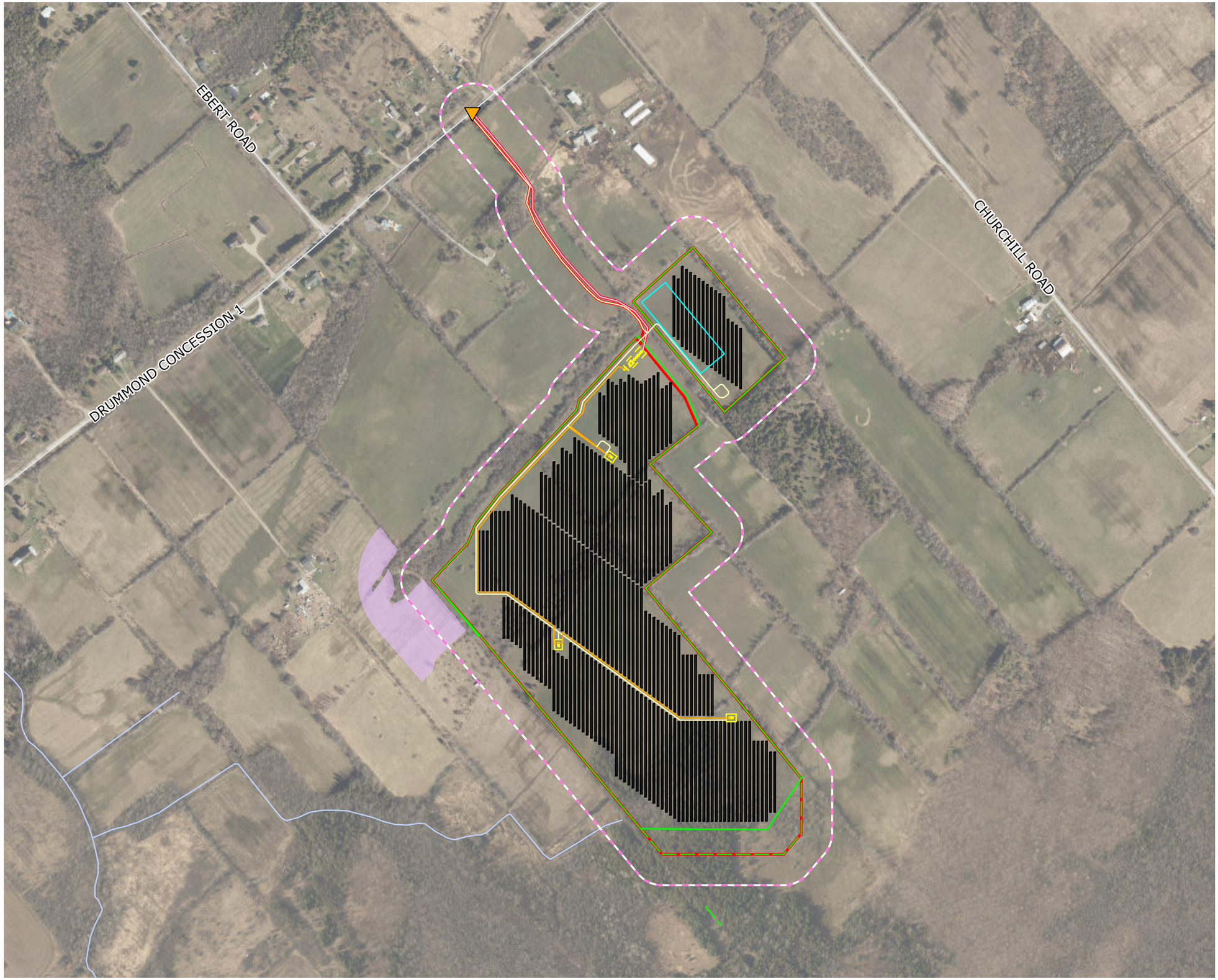
Golden Leaf Agrivoltaics Project

Environmental Impact Study

Significant Open Country Bird Breeding Habitat

Figure 3a



- Project Location
- 50 m Site Investigation Area
- Point of Common Coupling
- Fence
- Interface Transformer
- Inverter
- Laydown Area
- Overhead Line
- Racking
- Road
- Vegetation Management Area
- Underground Cable
- Local Road
- Watercourse
- Significant Open Country Bird Breeding Habitat

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Map Projection: NAD 1983 UTM Zone 18N	Date: 2026-11-18

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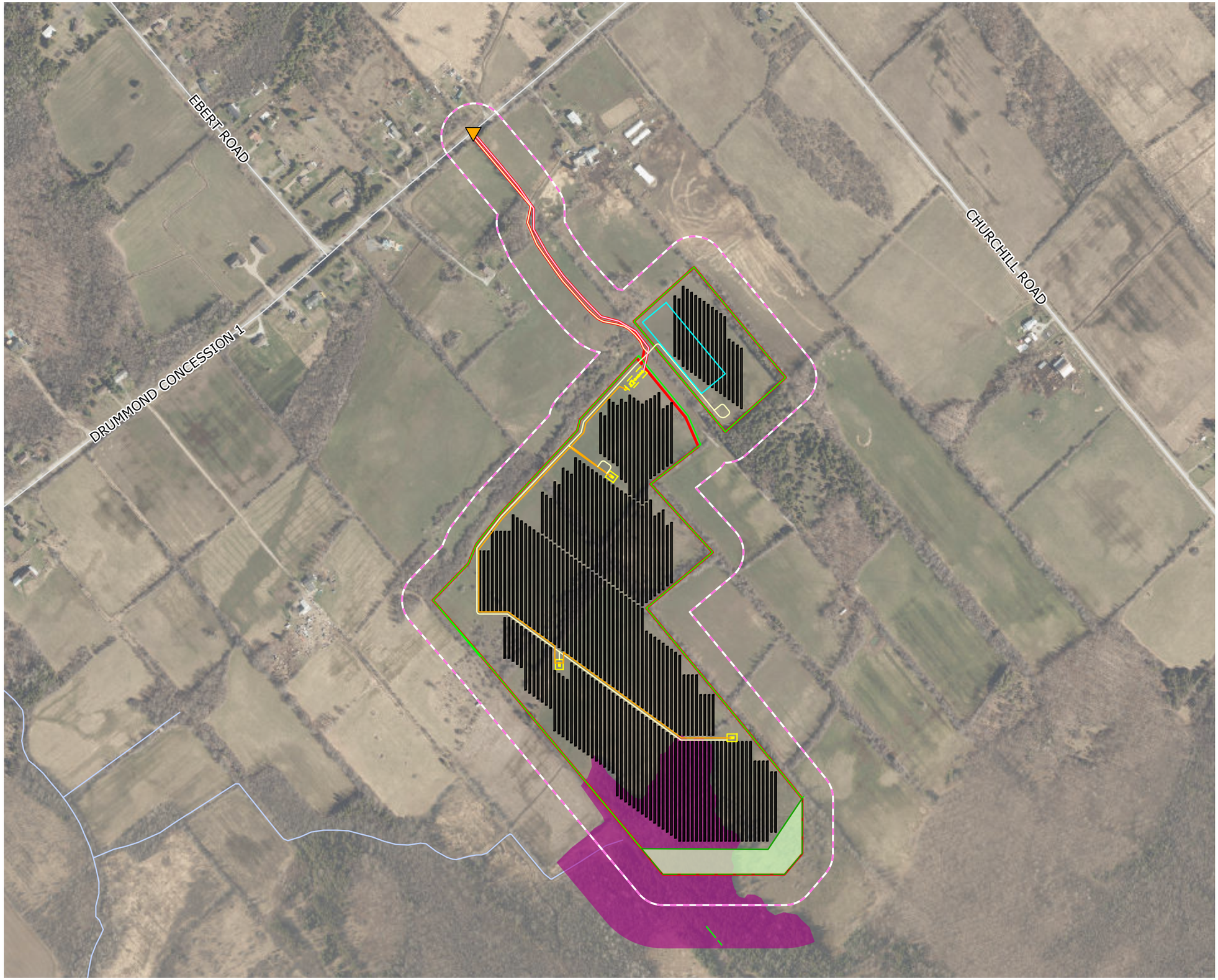
Golden Leaf Agrivoltaics Project

Environmental Impact Study

Significant Special Concern and Rare Wildlife Species - SAR Bats

Figure 3b



- Project Location
- 50 m Site Investigation Area
- Point of Common Coupling
- Fence
- Interface Transformer
- Inverter
- Laydown Area
- Overhead Line
- Racking
- Road
- Vegetation Management Area
- Underground Cable
- Local Road
- Watercourse
- Vegetation Management Zone (Selective Pruning/Topping Only; 3:1 Solar Setback)
- Significant Special Concern and Rare Species - SAR Bats

Map Drawing Information:
Data Provided by Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Scale 1:6,000

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Created By: AEE	Project: 26-3072
Checked By: MM	Status: DRAFT
Map Projection: NAD 1983 UTM Zone 18N	Date: 2026-11-18

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FILE LOCATION: K:\2026\263072\Product\Client\263072_EIS\263072_EIS\263072_EIS.aprx; LAYOUT: 263072_EIS_F3b_Significant Special Concern and Rare Species - SAR Bats

DILLON