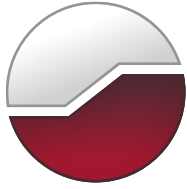




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**Environmental Impact Statement
Proposed Zoning-By Law Amendment
3043 Dunning Road
City of Ottawa, Ontario**



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Submitted to:

Laplante Poultry Farms Ltd.
3043 Dunning Road
Sarsfield, Ontario
K0A 3E0

Environmental Impact Statement
Proposed Zoning-By Law Amendment
3043 Dunning Road
City of Ottawa, Ontario

January 8, 2025
Project: 100117.056

EXECUTIVE SUMMARY

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Laplante Poultry Farms Ltd. to complete an Environmental Impact Statement (EIS) for the approximately 1.7 hectare (ha) property located on Part of Lot 7, Concession 4, municipally addressed as 3043 Dunning Road, in the Geographic Township of Cumberland, City of Ottawa, Ontario. The proponent is seeking the necessary approvals to support a proposed Zoning By-law Amendment for the creation of an Agricultural Special Exception Zone. This EIS has been completed in support of the above proposed re-zoning and was completed in accordance with all federal, provincial and municipal policies and guidelines, as applicable.

In support of this EIS, a desktop review and a single field investigation were completed to identify the presence or absence of natural heritage features and species at risk (SAR) on-site. The field investigation was completed in the fall of 2023. The focus of the site investigation was to describe, in general, the natural and physical setting of the subject property with a focus on confirming the presence or absence of natural heritage features and potential SAR or their habitat as identified in the desktop review.

Following completion of the desktop review and site investigations, the following natural heritage features were identified on-site or within the study area: watercourse and fish habitat. Potential habitat was identified on-site for little brown myotis, Eastern small-footed myotis, and Tri-colored bat. No other evidence of SAR or SAR habitat were observed during the investigation.

As no in-water work is proposed as part of the development, potential impacts to the natural heritage features were primarily associated with indirect impacts to fish habitat. Indirect impacts to aquatic habitats are associated with alterations to water quality through increased nutrient and sediment loading.

Potential impacts to natural heritage features on-site are likely to be mitigated through the implementation of development envelopes and setbacks from natural heritage features. Impacts to fish habitat can be mitigated through a 30 metre (m) setback from the on-site Drain, and additional plantings to revegetate the area with tree plantings. Impacts to significant wildlife habitat and SAR habitat can be mitigated through adherence to timing windows for vegetation removal.

Additionally, to provide protection to potential SAR and their habitat on-site, reptile and amphibian exclusion fencing should be installed around all future construction areas prior to any development or site alteration, to prevent the immigration of SAR turtles and other wildlife into the construction area. Should any SAR be discovered throughout the course of any development on-site, operations should stop and the species at risk biologist with the local MECP district should be contacted immediately for further direction. Furthermore, to ensure compliance with applicable legislation, all best management practices and adherence to vegetation clearing for birds and

bats, outlined in Section 7 should be followed to ensure no negative impacts occur to natural heritage features on-site.

The proposed project complies with the natural heritage policies of the Provincial Planning Statement and the City of Ottawa Official Plan. No negative impacts to identified natural heritage features or their ecological functions are anticipated as a result of the proposed re-zoning as long as all mitigation measures in Section 7 are enacted and best management practices followed.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Purpose	1
1.2	Objective.....	1
1.3	Physical Setting	2
1.3.1	Land Use Context	2
2.0	METHODOLOGY	3
2.1	Desktop Review	3
2.2	Field Investigations	3
2.2.1	Ecological Land Classification.....	3
2.3	Data Analysis.....	4
3.0	EXISTING ENVIRONMENT	5
3.1	Ecoregion	5
3.2	Study Area Land Use.....	5
3.2.1	Beckett’s Creek Subwatershed Study	6
3.3	Landforms, Soils and Bedrock Geology	6
3.4	Surface Water, Groundwater and Fish Habitat.....	7
3.5	Vegetation Communities	7
3.6	Wildlife	8
4.0	NATURAL HERITAGE FEATURES.....	9
4.1	Significant and Local Wetlands	9
4.2	Significant Woodlands	9
4.3	Significant Valleylands	10
4.4	Significant Areas of Natural and Scientific Interest.....	10
4.5	Significant Wildlife Habitat.....	10
4.5.1	Habitats of Seasonal Concentrations of Animals.....	10
4.5.2	Rare Vegetation Communities	11
4.5.3	Specialized Habitats for Wildlife	11
4.5.4	Habitats of Species of Conservation Concern	11
4.5.5	Animal Movement Corridors.....	12
4.6	Fish Habitat.....	12
4.7	Species at Risk.....	13
5.0	PROPOSED PROJECT	14
6.0	IMPACT ASSESSMENT	15
6.1	Significant Wildlife Habitat.....	15

6.2	Fish Habitat.....	15
6.3	Species at Risk.....	16
6.3.1	Bobolink.....	16
6.3.2	Eastern Meadowlark.....	17
6.3.3	Eastern Small-footed Myotis.....	18
6.3.4	Little Brown Myotis.....	18
6.3.5	Tri-colored Bat.....	19
6.4	Cumulative Impacts.....	19
7.0	RECOMMENDED AVOIDANCE AND MITIGATION MEASURES.....	20
7.1	Fish Habitat.....	20
7.2	Species at Risk.....	22
7.2.1	Eastern Small-footed Myotis, Little Brown Myotis & Tri-colored Bat.....	22
7.3	Wildlife.....	22
7.4	Best Practice Measures for Mitigation of Cumulative Impacts.....	23
7.5	Beckett’s Creek Subwatershed Study.....	23
8.0	CONCLUSIONS.....	24
9.0	LIMITATION OF LIABILITY.....	25
10.0	REFERENCES.....	26

LIST OF APPENDICES

Appendix A	Report Figures
Appendix B	Site Photographs
Appendix C	Report Summary Tables

1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by J.L. Richards & Associates Limited (JLR) on behalf of their client, Laplante Poultry Farms Ltd., to complete an Environmental Impact Statement (EIS) for the property municipally addressed as 3043 Dunning Road, on Part of Lot 7, Concession 4, Geographic Township of Cumberland, City of Ottawa, Ontario (hereafter referred to as “the subject property”). The location of the subject property is illustrated on Figure A.1 in Appendix A.

1.1 Purpose

It is understood by GEMTEC that Laplante Poultry Farms Ltd. is seeking to support a proposed re-zoning of the 1.7 ha subject property. The zoning amendment would see the creation of an Agricultural Special Exception Zone to permit future agricultural use. The City has provided a study and plan identification list outlining the various accompanying deliverables required for the project to proceed. As part of this list, an Environmental Impact Study has been identified as a requirement to support the Zoning By-law Amendment. Further, based on *Section 4.7 – Environmental Protection* of the City of Ottawa Official Plan (Ottawa, 2022) an EIS is required showing that any future proposed development will not negatively impact any potential natural heritage features, which may be present within the study area. The study area is defined as the property boundary and the adjacent lands encompassing an area of 120 m beyond the property boundary. The subject project and the extents of the study area are illustrated on Figure A.2 in Appendix A.

1.2 Objective

The 2024 Provincial Planning Statement (MMAH, 2024) issued under Section 3 of the Planning Act states that “development and site alteration shall not be permitted in: habitats of species at risk, significant wetlands, significant woodlands and significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.” Similarly, the 2024 Provincial Planning Statement dictates that “development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.”

The objective of the work presented herein is twofold; 1) to identify and evaluate the significance of any natural heritage features, as defined in the Provincial Planning Statement (MMAH, 2024), on the subject property and within the broader study area and; 2) to assess the potential impacts from the proposed re-zoning and potential future development on any natural heritage features identified, and to recommend appropriate and defensible mitigation measures to ensure the long-term protection of any natural heritage features identified.

To meet these objectives, the EIS presented herein has been completed in accordance with the following provincial and municipal regulations, policies and guidelines:

- Provincial Planning Statement (MMAH, 2024);
- Endangered Species Act (Ontario, 2007);
- Conservation Authorities Act (Ontario, 1990);
- Natural Heritage Reference Manual (OMNR, 2010);
- City of Ottawa Official Plan (Ottawa, 2022); and
- City of Ottawa EIS Guidelines (Ottawa, 2023)

1.3 Physical Setting

The subject property is located on Part of Lot 7, Concession 4, Geographic Township of Cumberland, City of Ottawa, Ontario. The subject property currently consists of a light industry commercial community within a greater study area of agricultural land use.

The subject property is bound to the north and to the east by 3105 Dunning Road. To the west the site is bound by Dunning Road, and to the south by 3085 Dunning Road.

1.3.1 Land Use Context

The subject property is situated within a larger agricultural area. The existing land use designation from the City of Ottawa is general rural area. The City of Ottawa zoning by-law is agricultural zone (AG[537r]).

2.0 METHODOLOGY

2.1 Desktop Review

A desktop information gathering exercise was completed to aid in the scoping of field investigations and to gather information relating to natural heritage features which may be present on the subject project or within 1 km of the subject property. An additional component of the desktop review was to assess the potential presence of SAR to occur on the subject property or within the study boundary based on a review of publicly accessible occurrence records and a review of SAR habitat requirements and range maps.

Information regarding the potential presence of natural heritage features and SAR within the vicinity of the site was obtained from the following sources:

- Make a Map: Natural Heritage Areas (OMNRF, 2014a)
- Land Information Ontario (OMNRF, 2011);
- City of Ottawa Official Plan (City of Ottawa, 2022)
- Ontario Geological Survey (OGS, 2019);
- Fisheries and Oceans Canada SAR Maps (DFO, 2019);
- Natural Heritage Information Centre Biodiversity Explorer (OMNRF, 2013);
- Breeding Bird Atlas of Ontario (Cadman et al., 2007)
- Ontario Herpetofaunal Atlas (Oldham and Weller, 2000);
- Wildlife Values Area (OMNRF, 2020a);
- Wildlife Values Site (OMNRF, 2020b);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019); and
- Rideau Valley Conservation Authority (RVCA) GeoPortal (undated).

2.2 Field Investigations

A single field investigation was undertaken to describe, in general, the natural and physical setting of the subject property with a focus on identifying natural heritage features and any potential SAR or their habitat that may exist at the subject property.

The field investigation was completed on November 2, 2023, from 10:30 to 13:00. Conditions during the site investigation were as follows: 11°C, partly cloudy (40% cloud cover), Beaufort wind 2, no precipitation.

2.2.1 Ecological Land Classification

Vegetation communities on the subject property were delineated during the desktop review stage of this EIS using publicly available air photos and confirmed in the field on November 2, 2023, following the Ecological Land Classification System for Southern Ontario (Lee et al., 2008). Vegetation communities were confirmed in the field by employing the random meander

methodology while documenting dominant vegetation species within the various vegetation community forms.

2.3 Data Analysis

An evaluation of the significance of natural heritage features, the sensitivity of identified flora and fauna and the potential impacts posed by the proposed development was undertaken through an analysis of desktop and field investigation data using the approaches and criteria outlined in the following documents:

- Natural Heritage Reference Manual (OMNR, 2010);
- Significant Wildlife Habitat Technical Guide (OMNR, 2000);
- Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015a); and
- Significant Wildlife Habitat Mitigation Support Tool (OMNRF, 2014b).

3.0 EXISTING ENVIRONMENT

3.1 Ecoregion

The site is situated Ecoregion 6E-11 (Lake Simcoe-Rideau), which extends from Lake Huron in the west to the Ottawa River in the east. The climate of Ecoregion 6E is categorized as humid, high to moderate temperate ecoclimate with a mean annual temperature range between 4.9°C to 7.8°C with annual precipitation ranging between 759 mm to 1,087 mm (Crins et al., 2009).

The eastern portion of the Ecoregion, which the subject property is located, is underlain by glaciomarine deposits as a result of the brief post-glacial incursion of salt water from the Champlain Sea along the St. Lawrence Valley. This Ecoregion falls with Rowe's (1972) Great Lakes-St. Lawrence Forest Region, including its Huron-Ontario and Upper St. Lawrence sections, and a small part of the Middle Ottawa Forest section (Crins et al., 2009).

3.2 Study Area Land Use

Figure 1 below provides an illustration of the temporal changes in land use within the study area from 1976, 1999, 2011, and 2023 aerial imagery taken from Google Earth and GeoOttawa.

In 1976, the subject property is occupied primarily by agricultural fields, similar to present day configuration. The surrounding study area is composed entirely of open agriculture. A house and an agricultural building are present on the subject property, which appear to be consistent with present day buildings.

By 1999, the subject property has undergone development associated with the conversion of open agriculture fields to a light industry commercial community and the addition of a new agricultural building. The buildings on-site in 1999 reflects the current day development extents. The greater study area remains in much the same configuration, with some minor expansion of agricultural building infrastructure and residential development on neighboring properties.

By 2011, the subject property and greater study area remains largely in the same configuration as in 1999.

By 2023, the subject property and the greater study continue to remain in the same configuration as in 2011.



Figure 1 – Temporal Changes in Land Use within Study Area

3.2.1 Beckett’s Creek Subwatershed Study

The Beckett’s Creek Subwatershed Study (City of Ottawa, 2023) was completed to examine the existing conditions of the area and to identify any needed actions to improve its environmental health and condition over the long term. The Beckett’s Creek subwatershed encompasses an area of approximately 6,453 ha, including the eastern part of the Village of Cumberland, extending southwards to Colonial Road in the Village of Sarsfield, west to the O’Toole Road/Regimbald Road intersection, and east to Joanisse Road. The Beckett’s Creek Subwatershed Study (BCSWS) identifies opportunities and constraints for improvement of the Beckett’s Creek Watershed while providing a series of Best Management Practices (BMPs) that may be implemented in order to protect, enhance or restore the environment. The desktop review has identified a watercourse within the study area, mapped on the BCSWS as the Jules Porvin Municipal Drain.

3.3 Landforms, Soils and Bedrock Geology

The topography of the subject property is mostly flat. The entire property occurs at approximately 85 mASL. A slight graded slope of less than a meter is present centrally on the property southwest to Dunning Road.

One topographical landform, as mapped by Chapman and Putnam (1984) has been described on the subject property, clay plains of the Ottawa Valley Clay Plains physiographic region.

The Ontario Geological Survey (OGS, 2019) identifies one surficial soil unit on the subject property, fine-textured glaciomarine deposits composed of silt and clay, minor sand and gravel.

Bedrock on the site is composed of the Ottawa Group, comprised of limestone, dolostone, shale, arkose, and sandstone.

3.4 Surface Water, Groundwater and Fish Habitat

Surface water features identified on-site during the desktop review and confirmed during the field investigation include a watercourse and two drainage ditches. As mentioned in Section 3.2.1 above, the watercourse is mapped by the BCSWS as the Jules Potvin Municipal Drain (Drain). The two on-site drainage ditches are not considered watercourses by the RVCA and CA definition, the RVCA considers these drainage ditches based on correspondence between the RVCA and JLR. No provincially significant or local unevaluated wetlands are present on-site or within the study area. Photos of surface water features are provided in Appendix B.

The Jules Potvin Municipal Drain (herein referred to as The Drain) originates approximately 650 m south of the site where it serves as a drainage point of the surrounding agricultural lands. The Drain enters the study area from the southeast, follows the eastern property boundary and then discharges into Becketts Creek just north of the study area. The Drain was observed to have an approximate width of 2 – 3 m, depths between 10-30 cm, and slow to stagnant flow conditions. The banks of the Drain were notably steep, with entrenchment of about 2 m on either side.

The two drainage ditches displayed similar characteristics, with average widths of 0.8 m, overgrown with reed vegetation, and between 3-5 cm of water with intermittent dry spots. One drainage ditch was observed along the northern property boundary from Dunning Road to the Drain. The second drainage ditch follows the southern property boundary, from the Drain to the midpoint of the subject property.

A fisheries assessment was not conducted as part of this EIS. However, based on observations made during the site investigation and observed connectivity to Becketts Creek, it is assumed that the Drain provides permanent fish habitat. Due to the limited hydrology of the on-site drainage ditches, the ditches are not considered to provide permanent fish habitat but may contribute to base flow conditions for downstream habitat during spring freshet and following major precipitation events.

Groundwater investigations were not completed in support of this EIS.

3.5 Vegetation Communities

Vegetation communities on-site were confirmed by GEMTEC in 2023, following protocols utilized in the Southern Ontario Ecological Land Classification System (Lee et al., 2008). Vegetation at the site represents that of a light industry commercial land use.

The commercial – light industry community (CVC_2) was observed across the entire 1.7 ha property. Vegetation within this community was nearly entirely manicured lawn. Other common species included dandelion (*Taraxacum sp.*), clover (*Trifolium sp.*), common vetch (*Vicia sativa*),

and burdock (*Arctium sp.*). The drainage ditches and areas around the drainage ditches were occupied by cattails (*Typha sp.*), horsetail (*Equisetum sp.*), nightshade (*Solanaceae sp.*), and bramble (*Rubus sp.*). Some scattered Manitoba maples (*Acer negundo*) were present along the Drain. Two rows of white spruce (*Picea glauca*) were present within the southern portion of the community. The northern portion of the property has an agricultural building occupying 0.26 ha.

3.6 Wildlife

Wildlife observed on-site and within the study area during field investigations completed in 2023 are summarized in Table C.1 in Appendix C.

4.0 NATURAL HERITAGE FEATURES

Natural heritage features are defined in the PPS as “features and areas, including *significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian shield, habitats of endangered species and threatened species, significant wildlife habitat and significant areas of natural and scientific interest*, which are important for their environmental and social values as a legacy of the natural landscape of an area”.

4.1 Significant and Local Wetlands

As described in the Natural Heritage Reference Manual (OMNR, 2010), wetlands mean “lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface.” While *significant* in regards to wetlands means “an area identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.”

No provincially significant or local unevaluated wetlands were identified on-site or within the study area during the desktop review, nor were they identified during the field investigation. As such, provincially significant and local unevaluated wetlands are not discussed or evaluated further in this EIS.

4.2 Significant Woodlands

Significant woodlands are defined in the natural heritage reference manual (OMNR, 2010) as “an area which is 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.”

At the local scale, significant woodlands are defined and designated by the local planning authority. Generally, most planning authorities have defined significant woodlands as any woodland that contains any of the four criteria listed in Section 7.2 of the natural heritage reference manual (OMNR, 2010), including: woodland size, ecological functions, uncommon characteristics and economic and social functional values. Furthermore, the City of Ottawa provides a supplementary document *Significant Woodland: Guidelines for Identification, Evaluation, and Impact Assessment* (Ottawa, undated) to evaluate woodlands and ensure compliance with the city’s policies.

As outlined in Section 3.5 above, the site is primarily a light industry commercial property surrounded by open agriculture. No woodland or forest communities have been identified on-site or within the study area during the desktop review or site investigation. As such, significant woodlands are not present on-site or within the study area and they are not discussed or evaluated further in this EIS.

4.3 Significant Valleylands

Valleylands are defined in the natural heritage reference manual (OMNR, 2010) as ‘a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of time’. The identification and evaluation of significant valleys lands in Ontario is based on the recommended criteria from the MNRF and is the responsibility of local planning authorities.

In Southern Ontario, conservation authorities have identified valleylands as part of their regulation mapping (i.e., floodplain mapping); however, where valleys lands have not been defined, their physical boundaries are generally determined as the ‘top-of-bank’ or ‘top-of-slope’ associated with a watercourse. For less well-defined valleys, the physical boundary may be defined by riparian vegetation, flooding hazard limits, ordinary high water marks or the width of the stream meander belt (OMNR, 2010).

As discussed in Section 3.2, the site has a mostly flat topography, and no valleylands or floodplains were identified on-site during the desktop review or the site investigations. As such, significant valleylands are not discussed or evaluated further in this EIS.

4.4 Significant Areas of Natural and Scientific Interest

The MNRF identifies two types of areas of natural and scientific interest (ANSI) in Ontario: life sciences ANSIs typically represent significant segments of Ontario’s biodiversity and natural landscapes, while earth science ANSIs typically represent significant examples of bedrock, fossils or landforms in Ontario (OMNR, 2010).

No ANSI have been identified on-site or adjacent to the site during the desktop review or during site investigations. Therefore, ANSI are not discussed or evaluated further in this EIS.

4.5 Significant Wildlife Habitat

The natural heritage reference manual (OMNR, 2010), in combination with the significant wildlife habitat technical guide (MNRF, 2000) and the significant wildlife habitat ecoregion criterion schedules (MNRF, 2015) were used to identify and evaluated potential significant wildlife habitat on-site. The significant wildlife habitat is broadly categorized as habitats of seasonal concentration areas of animals, rare vegetation communities, specialized habitats for wildlife, habitats of species of conservation concern and animal movement corridors. With the exception of rare vegetation communities, Tables C.2, C.3, C.4 and C.5 in Appendix C, provide the screening rationale for each category of significant wildlife habitat, respectively.

4.5.1 Habitats of Seasonal Concentrations of Animals

Seasonal concentration areas are habitats where large numbers of species congregate at one particular time of the year. The significant wildlife habitat technical guides (OMNR, 2000) and significant wildlife habitat ecoregion criterion schedules (OMNRF, 2015a) identify 12 types of

seasonal concentration habitats that may be considered significant wildlife habitat. These 12 types of seasonal habitat are presented in Table C.2 in Appendix C, including a brief description of the rationale as to why they are or are not assessed further in this EIS.

Following review of Table C.2 in Appendix C, no habitats of seasonal concentrations of animals have been identified on-site or within the study area. As such, habitats of seasonal concentrations of animals are not discussed or evaluated further in this EIS.

4.5.2 Rare Vegetation Communities

Rare vegetation communities in the province are described generally as those with an S1 to S3 ranking by the NHIC, and typically include communities such as sand barrens, alvars, old growth forests, savannahs and tallgrass prairies.

The vegetation communities identified on-site and described in Section 3.4 of this report are not ranked by the NHIC as S1, S2 or S3 and are therefore not considered to be rare vegetation communities. As such, rare vegetation communities are not discussed or evaluated further in this EIS.

4.5.3 Specialized Habitats for Wildlife

Specialized wildlife habitats are microhabitats that provide a critical resource to some groups of wildlife. The significant wildlife habitat technical guide (OMNR, 2000), defines eight specialized habitats that may constitute significant wildlife habitat, these eight types of specialized wildlife habitats are evaluated in Table C.3 in Appendix C.

Following review of Table C.3 in Appendix C, no specialized habitats for wildlife have been identified on-site or within the study area. As such, specialized habitats for wildlife are not discussed or evaluated further in this EIS.

4.5.4 Habitats of Species of Conservation Concern

Provincial rankings are used by the Natural Heritage Information Centre to set protection priorities for rare species, similar to those described in Section 4.5.2 above for vegetation communities. Provincial rankings (S-ranks), are not legal designations such as those used to define the various protection statuses of species at risk, they are only intended to consider factors within the political boundaries of Ontario that might influence a particular species abundance, distribution or population trend.

Based on the guidance provided in the Significant Wildlife Habitat Ecoregion Criterion Schedules (MNRF, 2015), when a plant or animal element occurrence is recorded for any species with an S-rank of S1 (extremely rare), S2 (very rare), S3 (rare to uncommon) or SH (historically present), the corresponding vegetation ecosite is considered to provide *candidate* habitat for species of conservation concern and further consideration within the EIS is warranted.

The Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015), provides five general habitat types known to support a wide range of species of conservation concern in Ontario. The five general habitat types for Ecoregion 6E-11 are provided in Table C.4 in Appendix C, including a brief rationale as to why they are or are not considered further in this EIS. Following review of Table C.4 in Appendix C, no habitats of species of conservation concern has been identified on-site or within the study area and they are not discussed or evaluated further in this EIS.

4.5.5 Animal Movement Corridors

Animal movement corridors are elongated areas used by wildlife to move from one habitat to another and allow for the seasonal migration of animals (OMNRF, 2015). The Significant Wildlife Habitat Ecoregion Criterion Schedules for Ecoregion 6E-11 (OMNRF, 2015), identifies two types of animal movement corridor: amphibian movement corridors and deer movement corridors. As per guidance presented in MNRF, 2015, animal movement corridors should only be identified as significant wildlife habitat when a *confirmed or candidate* significant wildlife habitat has been identified by the MNRF district office or by the regional planning authority.

Following review of Table C.6 in Appendix C, no animal movement corridors have been identified on-site. Furthermore, the MNRF has not identified any animal movement corridors on the publicly available data sets for wildlife values area (OMNRF, 2020a) or wildlife values site (OMNRF, 2020b). The subject property does not fall within a natural linkage area as identified by the City of Ottawa Natural Linkage Analysis (City of Ottawa, 2011). As such, animal movement corridors are not discussed or evaluated further in this EIS.

4.6 Fish Habitat

The protection of fish and fish habitat is a federal responsibility and is administered by the Department of Fisheries and Oceans Canada (DFO). Fish habitat as defined in the Fisheries Act (Canada, 1985) means, “spawning grounds and nursery, rearing food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

When development is unable to avoid resulting in the harmful alteration, disturbance or destruction of fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under the Fisheries Act is required for the project to proceed.

A fisheries assessment was not conducted as part of this EIS. As mentioned in Section 3.3, only the Jules Porvin municipal drain is assumed to provide direct fish habitat. The drainage ditches on-site were not found to provide direct fish habitat due to lack of sufficient water depth, water permanency and lack of flow/connectivity to downstream habitat. Both the Drain and the ditches are likely to contribute to baseflows of downstream fish habitat during the spring freshet or other large storm events.

Impacts to fish habitat from the proposed development are discussed in Section 6.

4.7 Species at Risk

The probability of occurrence for species at risk to occur on-site and within the broader study area was determined through the desktop review stage of this EIS, as described in Section 2.1, and through the site specific surveys conducted as part of this EIS, outlined in Section 2.2.

Table C.6 in Appendix C, provides a summary of all species at risk which were determined to have the potential to occur on-site or within the broader study area, their protection status under the provincial Endangered Species Act (Ontario, 2007), their regional distribution, their probability of occurrence and a brief rationale of that probability. Impacts to endangered or threatened SAR determined to have a moderate or high potential to occur on-site or within the broader study area are discussed further in the Section 6.3.

5.0 PROPOSED PROJECT

The proposed project assessed for potential impacts on the natural heritage features determined to be present within the broader study area includes a proposed Zoning By-law Amendment for an existing 1.7 ha parcel, addressed as 3043 Dunning Road, Ottawa, Ontario. The proposed zoning amendment would see the zoning change from Agricultural Resource Area to an Agricultural Special Exception Zone, to permit future agricultural use on-site. The area to be rezoned under the zoning by-law amendment is illustrated on Figure A.2.

The act of rezoning the property parcel from Agricultural Resource Area to an Agricultural Special Exception Zone is not expected to result in any physical alteration to the subject property.

However, future development on the severed parcel may include vegetation removal, excavation for the installation of a septic system, well installation, and general landscaping.

Further, it is understood that the activities carried out through the zoning change will lead to a minor increase in noise generation and air pollutants. However, impacts related to noise and air pollutant generation are anticipated to be negligible given the surrounding agricultural and light industry land use.

Potential environmental impacts from the proposed project are discussed in relation to potential future development in Section 6 below.

6.0 IMPACT ASSESSMENT

Potential impacts to natural heritage features on-site and within the broader study area are assessed for direct, indirect and cumulative effects based on the proposed project outlined in Section 5. Natural heritage features identified in Section 4 of this report as present or likely to be present are discussed in the subsections below.

Potential effects to the environment of the site from the proposed development outlined in Section 5 include: a minor increase in impervious surface, minor increase in stormwater generation, short-term increases in sedimentation and/or erosion, increased noise generation, and increased human presence.

6.1 Significant Wildlife Habitat

The potential presence of *candidate* and *confirmed* significant wildlife habitat on-site and within the study area was evaluated in Section 4.5. As a result of this assessment, significant wildlife habitats were determined to be absent on-site and within the study area and as such, they are not discussed or evaluated further in this EIS.

6.2 Fish Habitat

According to the Provincial Planning Statement (MMAH, 2024), “development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.” Fish habitat as defined in the Fisheries Act (Canada, 1985) means “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

In 2019, changes were made to the Fisheries Act, broadening the protection for fish and fish habitat. Under the new Fisheries Act, protection is afforded to all fish and fish habitat, not just those that support either a recreational, commercial, or Aboriginal fishery. Under the Fisheries Act, work that is conducted in or near waterbodies must avoid “the death of fish, other than by fishing” (Canada, 1985). Furthermore, the new Fisheries Act states that work must avoid “the harmful alteration, disruption or destruction (HADD) of fish habitat” (Canada, 1985).

When activities are unable to avoid or mitigate harm to fish or fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under Subsection 35 (2) of the Fisheries Act is required for the project to proceed without contravening the Act.

The proposed re-zoning and future development are not anticipated to require any in-water work, and are not in close proximity to the on-site Drain or drainage ditch; thus, they are not anticipated to be directly impacted.

As such, potential impacts to fish habitat are anticipated to be indirect in nature. Potential indirect impacts to water quality and fish habitat from the proposed development may include increased overland flow and concomitant sediment transport caused by an increase in impervious surface area, increased nutrient and/or contaminant loading through both overland and subsurface pathways resulting from landscaping practices. Avoidance and mitigation measures intended to protect fish and fish habitat from negative impacts are discussed in Section 7.

6.3 Species at Risk

As outlined in the Endangered Species Act (Ontario, 2007), only species listed as threatened or endangered and their general habitat receive automatic protection. When a species-specific recovery strategy is developed, a specific habitat regulation will be established, which eventually replaces the automatic habitat protection. Species of special concern and their habitat do not receive protection under the ESA.

Potential impacts associated with the proposed project to threatened or endangered species identified as having a moderate or high potential to occur on-site in Section 4.7, are discussed on a species-by-species basis in the subsections below.

6.3.1 Bobolink

Bobolink (*Dolichonyx oryzivorus*) are small, omnivorous songbirds with large, somewhat flat heads, short necks and short tails. The male bobolink has a white back, black underside and a straw-yellow coloured patch on the back of the head. Female bobolinks have a non-descript buff and brown plumage not unlike most species of sparrows.

In Ontario, bobolink are restricted to southern Ontario and occur south of the Highway 17 corridor between North Bay and Sault Ste. Marie. Scattered populations exist in correlation with Clay Belt areas in Timiskaming, Cochrane, and Thunder Bay areas. Between the first and second breeding bird atlas, the probability of bobolink observations declined by 28% province wide (Cadman et al., 2007).

Bobolink breed primarily in hayfields and other grasslands with tall vegetation that provides cover for nests which are established on the ground (Cadman et al., 2007). The bobolink is generally sensitive to vegetation structure and composition in its habitat that are generally found in old (> 8 years old) forage crops. Abundance and density are positively correlated with a moderate litter depth, high lateral litter cover, high grass-to-legume rations, an abundance of small shrubs and a high percentage of forb cover (COSEWIC, 2010). Bobolinks typically avoid nesting in habitats that are dominated by overly dense shrub vegetation with an overly deep litter layer or a high percentage of bare soil (COSEWIC, 2010).

Bobolink was not observed during the site investigation. The NHIC indicates the occurrence of the species within 1 km of the subject property. No suitable habitat is present directly on-site.

Targeted breeding bird surveys were out of scope for this EIS, as such the presence or absence of bobolink within the study area could not be confirmed. However, the site lacks suitable tall grass habitat on-site and the immediately adjacent open agriculture fields are planted with corn and soy, which does not provide suitable habitat for bobolink. Given the above, bobolink habitat is not considered present on-site or within study area. As such, bobolink or their habitat are not anticipated to be impacted by the proposed development and they are not discussed or evaluated further in this EIS.

6.3.2 Eastern Meadowlark

Eastern meadowlark (*Sturnella magna*) is a chunky, medium-sized grassland songbird, with a short tail, and a long spear-shaped bill. The colour pattern of the species is pale brown marked with black, the underside is bright yellow and a bold black 'V' pattern across the chest.

The eastern meadowlark was once well established in southern Ontario, however, due to the natural succession of abandoned agricultural fields transitioning back to forested habitat on the Canadian shield and through the northern portion of the Lake Simcoe-Rideau region, along with intensive farming practices and expanding of urbanization in southwestern and eastern Ontario, the eastern meadowlark has suffered significant habitat loss (Cadman et al., 2007). Between the first and second breeding bird atlas, the probability of observation declined by 13% province wide (Cadman et al., 2007). The current distribution of eastern meadowlark is concentrated through the Lake Simcoe-Rideau region, primarily from Kingston to Lake Simcoe.

The eastern meadowlark prefers native grassland, pasture and savannah habitat; however, it is known to use a variety of anthropogenic grassland habitats including hayfields, weedy meadows, young orchards, grain fields and herbaceous fence rows (COSEWIC, 2011). Preferred grassland habitat typically contains moderately tall (25 to 50 cm) grass species with abundant litter cover, with a high proportion of grass, moderate to high forb density a low percent of shrub cover (typically <5%) and low percent cover of bar ground (COSEWIC, 2011).

Eastern meadowlark was not observed during the site investigation. The NHIC indicates the occurrence of the species within 1 km of the subject property. No suitable habitat is present directly on-site.

Targeted breeding bird surveys were out of scope for this EIS, as such the presence or absence of eastern meadowlark within the study area could not be confirmed. However, the site lacks suitable tall grass habitat on-site and the immediately adjacent open agriculture fields are planted with corn and soy, which does not provide suitable habitat for eastern meadowlark. Given the above, eastern meadowlark habitat is not considered present on-site or within the study area. As such, eastern meadowlark or their habitat are not anticipated to be impacted by the proposed development and they are not discussed or evaluated further in this EIS.

6.3.3 Eastern Small-footed Myotis

Eastern small-footed myotis (*Myotis leibii*) is the smallest (typically 3-5 g), insectivorous bat found in Ontario. The fur of an eastern small-footed myotis is golden-brown in colour, with a distinct black mask across the face. The eastern small-footed myotis is very similar in appearance to the little brown myotis and is distinguishable by their small foot and keeled calcar (Fraser, MacKenzie & Davy, 2007).

The eastern small-footed myotis is found throughout eastern North America. In Ontario the species has been observed in the areas south of Lake Superior across to the Ontario-Quebec border (Humphrey, 2017).

Eastern small-footed myotis overwinter primarily in caves and abandoned mines with low humidity and temperatures and stable microclimates (Humphrey, 2017). In comparison to other Ontario bat species, they are able to tolerate much colder temperatures, drier conditions and draftier locations for hibernating (Humphrey, 2017). During the spring and summer months, they utilize a variety of habitats for roosting, including under rocks or rock outcrops, in buildings, under bridges, or in caves, mines or hollow trees (Ontario, 2019a).

Although the site does not provide potential bat SWH, given the availability of open habitat and anthropogenic buildings on-site and within the study area, there is a potential for eastern small-footed myotis to occur on the property, primarily for foraging or non-maternal roosting. Impacts to eastern small-footed myotis are primarily associated with encroachment and increased wildlife-human interaction. Mitigation measures intended to protect eastern small-footed myotis from impacts of the proposed development are discussed in Section 7.

6.3.4 Little Brown Myotis

Little brown myotis (*Myotis lucifugus*) is a small (typically 4-11 g), insectivorous bat. The fur of a little brown myotis is bi-coloured; fur is a glossy brown with a darker coloured base. The tragus of the little brown myotis is long and thin, with a rounded tip (Fraser, MacKenzie & Davy, 2007).

In Canada, little brown myotis occur throughout all of the provinces and territories (except Nunavut), with its range extending south through the majority of the United States as well. In Ontario, the little brown myotis is widespread in southern Ontario and has been found as far north as Moose Factory and Favourable Lake (Ontario, 2019b).

Little brown myotis overwinter in caves and abandoned mines, they require highly humid conditions and temperatures that remain above the freezing mark (Ontario, 2019b). During the summer months, maternity colonies are often located in buildings or large-diameter trees. Little brown myotis roost in trees and buildings. Foraging occurs over water and along waterways, forest edges and in gaps in the forest. Open fields and clear-cuts are not typically utilized for foraging (COSEWIC, 2013b).

Although the site does not provide potential bat SWH, given the availability of open habitat and anthropogenic buildings on-site and within the study area, there is a potential for little brown myotis to occur on the property, primarily for foraging or non-maternal roosting. Impacts to little brown myotis are primarily associated with encroachment and increased wildlife-human interaction. Mitigation measures intended to protect little brown myotis from impacts of the proposed development are discussed in Section 7.

6.3.5 Tri-colored Bat

Tri-colored bat (*Perimyotis subflavos*) is a small (typically 5-7 g), insectivorous bat. The fur is uniformly coloured on the ventral and dorsal sides, however when parted fur shows three distinct colour bands. The base of the hair is blackish, with a blonde middle and brownish tip. The snout of the tri-coloured bat is also distinct, with swollen bulbous glands present (Fraser, MacKenzie & Davy, 2007).

In Canada, the tri-colored bat has only been recorded in southern parts of Nova Scotia, New Brunswick, Quebec and central Ontario. In Ontario it occurs primarily from the southern edge of Lake Superior across to the Ontario-Quebec border and south (COSEWIC, 2013).

Tri-colored bat overwinter in in caves or mines, and have very rigid habitat requirements; they typically roosting the deepest parts where temperatures are the least variable, and have the strongest correlation with humidity levels and warmer temperatures (COSEWIC, 2013). In the spring and summer, tri-colored bat utilizes trees, rock crevices and buildings for maternity colonies. Foraging is mainly done over watercourses and streamside vegetation (COSEWIC, 2013).

Although the site does not provide potential bat SWH, given the availability of open habitat and anthropogenic buildings on-site and within the study area there is a potential for tri-colored bat to occur on the property, primarily for foraging or non-maternal roosting. Impacts to tri-colored bat are primarily associated with encroachment and increased wildlife-human interaction. Mitigation measures intended to protect tri-colored bat from impacts of the proposed development are discussed in Section 7.

6.4 Cumulative Impacts

Potential cumulative impacts associated with the proposed project include a minor increase in storm water generation, and a minor loss of manicured lawn habitat of little ecological value.

Cumulative impacts to the natural environment at the site due to increased human presence are expected to be negligible given the nature of the development, an abattoir within an existing agricultural building.

Cumulative impacts such as those listed above can be mitigated by implementing the proposed setbacks and recommended mitigation measures outlined in Section 7 below.

7.0 RECOMMENDED AVOIDANCE AND MITIGATION MEASURES

The following avoidance and mitigation measures have been recommended by GEMTEC in order to minimize or eliminate potential environmental impacts identified in Section 6.

For the purpose of this report, a setback is defined as the minimum required distance between any structure, development or disturbance and a specified line. A buffer, for the purpose of this report, is defined as the area located between a natural heritage feature and the prescribed setback. For the purpose of the following subsections, buffers should be located between natural heritage features and lands subject to development or alteration, be permanently vegetated by native or non-invasive, self sustaining vegetation and protect the natural heritage feature against the impact of the adjacent land use.

Vegetated buffers, particularly buffers that are vegetated with a mix of grassy herbaceous vegetation and shrubby or woody vegetation are most effective in mitigating impacts associated with anthropogenic activities in adjacent lands (Beacon, 2012). In the subsections below, where possible, literature references for studies used as the basis of the recommended buffer widths are provided.

7.1 Fish Habitat

No negative impacts on fish habitat are anticipated as a result of this project if all compensation and mitigation measures recommended below are enacted and best management practices followed.

Watercourse buffer widths have a moderate risk of not providing adequate mitigation for water quality impacts and for human disturbance/land use change impacts at widths between 11 m and 30 m and high risk at widths of less than 5 m to 10 m. Watercourse buffer widths have a low risk of not providing adequate mitigation for core habitat protection at widths between 11 m and 30 m and high risk at width of less than 5 m to 20 m (Beacon, 2012). In consideration of the on-site Drain and the nature of the proposed development, a minimum 30 m setback from the Drain is recommended and is sufficient to protect the watercourse and its associated habitat. No new development, site alteration or vegetation removal is permitted within the 30 m setback. Given the drainage ditches on-site do not provide fish habitat, have little ecological value, and are not considered watercourses as per discussion with the RVCA, no setback is required. The above recommendations are in line with best practices described in the Beckett's Creek subwatershed study (City of Ottawa, 2023b).

The following mitigation measures are provided by GEMTEC in order to minimize or eliminate potential impacts to fish and fish habitat, as summarized above. General mitigation measures recommended for the protection of water quality and fish habitat include:

- Buffers should be comprised of a mixture of native and non-invasive, self-sustaining trees, shrubs, and tall grasses.
- All future development and construction activities within the study area, including ditching, culvert installation, erosion and sediment control and storm water management should be completed in accordance with the Ontario Provincial Standard Specification 182 and OPSS 805.
- No in-water work is anticipated as part of this project.
- Site grading plans should direct runoff to roadside ditches and not towards adjacent surface water features.
- Silt fencing should be installed along all setbacks to provide visual demarcation of the setbacks and to prevent machinery encroachment and sediment transport.
- Install and maintain effective sediment and erosion control measures before starting work around water.
- Schedule work to avoid wet, windy and rainy periods.
- When native soil is exposed, sediment and erosion control work in the form of heavy-duty sediment fencing shall be positioned along the down gradient edge of any construction envelopes adjacent to waterbodies.
- Operate machinery on land, above the high-water mark, in a manner that minimizes disturbance to the banks and bed of the watercourse.
- In order to protect fish habitat from contamination, it is recommended that all machinery be maintained in good working condition and that all machinery be fueled a minimum of 30 m from the high-water mark.
- Any temporary storage of aggregate material shall be set back from the water's edge by no less than 40 m and be contained by heavy-duty silt fencing.
- Maintain as much permeable surface area as possible in future development plans to limit the generation of stormwater runoff.

Additional tree plantings along the two drainage ditches on-site is not feasible due to the proximity of this area to the building on-site. Due to the nature of the building (poultry barn), additional vegetation plantings adjacent to the building, have the potential to attract rodents and mammals which can be detrimental to the operation of the facility (if they were to enter the facility). To compensate for this, additional tree plantings are proposed to occur along the Jules Potvin Municipal Drain adjacent to the existing laneway, in order to provide shade and cooling effects to the drain, and any inputs from the drainage ditches. Fast-growing, large canopy trees, that do not produce mast (to avoid attracting rodents/mammals) such as Manitoba maple, American elm, ash family (red ash or white ash), and the poplar, aspen and cottonwood family (trembling aspen, eastern cottonwood, and largetooth aspen) are recommended. Trees that fruit (e.g. apples, cherries, hawthorns, etc.) or produce edible nuts (e.g. oaks, walnuts, hickories, sugar maple, etc.) should be avoided to avoid attracting rodents.

7.2 Species at Risk

7.2.1 Eastern Small-footed Myotis, Little Brown Myotis & Tri-colored Bat

As no critical habitat (i.e. overwintering caves or crevasses, or maternity roost colonies) were identified on-site, in accordance with MECP best management practices, to protect roosting and foraging bats, tree removal where required shall take place outside of the spring and summer active season (typically March 15 to November 30), when bats are more likely to be using forest habitat. If vegetation clearing cannot avoid the active season, then consultation with the MECP is needed to determine whether the project will require an authorization.

To further protect bat species during vegetation removal, trees and vegetation (during the appropriate timing window) should be cleared in stages, working from the outer edge, in towards the centre, in order to provide wildlife in the forest time to migrate out.

In GEMTECs experience on similar projects and consultation with the MECP for properties of similar size and scale, the above mitigation/avoidance measures are sufficient to ensure no negative impacts to SAR bats. In eastern Ontario habitat is not a limiting factor, as such the MECP recommends the use of avoidance timing window for clearing of trees (>10cm in diameter) in order to avoid impacts to SAR bat species. As long as timing windows can be adhered to, the project will not impact SAR bats, and it is GEMTECs opinion that no further consultation with the MECP is required.

Should any components of the proposed project require tree clearing within between March 15 and November 30, further consultation with the MECP is required.

7.3 Wildlife

The following avoidance and mitigation measures are provided in effort to minimize impacts to on-site and off-site wildlife:

- To protect wildlife during construction, construction should be completed in accordance with the best practices outlined in Protocols for Wildlife Protection During Construction, from the City of Ottawa (Ottawa, 2015).
- Vegetation removal should occur outside of March 15 to November 30 to avoid the key breeding bird period, active turtle season, and bat summer active season. The timing windows provides protection of migratory birds, SAR turtles, roosting bats and avoids contravention of the Migratory Bird Convention Act and Endangered Species Act. If vegetation clearing activities must take place during the aforementioned timing window than a nest survey and site sweep shall be conducted by a qualified professional to ensure no impacts to birds or turtles. If vegetation removal has the potential to impact SAR bats (i.e. vegetation removal within contiguous forested tracts) consultation with the MECP is required to determine whether the project will require an authorization.

- Installation of silt fence barriers around the entire development envelope to prohibit the emigration of wildlife into the construction area, silt fencing should be checked daily and following each precipitation event.
- Perform daily pre-work sweeps of the construction area to ensure no species at risk are present and to remove any wildlife from inside the construction area.
- Should any species at risk be discovered throughout the course of the proposed works, the species at risk biologist with the local MECP district shall be contacted immediately and operations ceased to avoid any negative impacts to species at risk or their habitat until further direction is provided by the MECP.

7.4 Best Practice Measures for Mitigation of Cumulative Impacts

The following best practice measures are provided for the mitigation of cumulative impacts resulting from general construction and development activities;

- To protect trees identified to be retained during construction, the Critical Root Zone (CRZ) should be identified and fenced. The CRZ is defined as 10 cm from the base of the tree for every centimetre in diameter of the tree trunk measured at breast height.
- Maintain as much permeable surface as possible in future development plans to minimize the generation of stormwater runoff.
- In effort to offset the effect of vegetation clearing, consideration should be given to landscape planting with native tree species indicative of the Great Lakes – St. Lawrence Forest Region, such as white cedar, white spruce, red maple, and bur oak.

7.5 Beckett's Creek Subwatershed Study

As the site contains the Headwater Drainage Features (HDFs), watercourses or wetlands, accordingly BMPs relating to watercourse buffers and stream restoration apply to the proposed development. As outlined by Beckett's Creek Subwatershed BMPs, the recommended setback of 30 metres and maintenance of a vegetated buffer composed of native woody, riparian vegetation should be adhered to where possible. As mentioned in Section 7.1, a 30 metre buffer is recommended to protect the Drain identified within the study area, which will satisfy the BMP outlined in the Beckett's Creek Subwatershed study.

8.0 CONCLUSIONS

The proposed project supported by this EIS is a proposed Zoning By-Law Amendment for the 1.7 ha subject property, addressed as 3043 Dunning Road, Ottawa, Ontario. The zoning amendment would require an adjustment of land use to an Agricultural Special Exception Zone, to permit future agricultural use on-site.

Based on the results of the impact analysis, impacts to the natural environment are anticipated to be negligible. Provided that mitigation measures recommended in Section 7 are implemented as proposed, no significant residual negative impacts are anticipated from the proposed future project.

Following review of the information pertaining to the natural heritage features of the site, the following general conclusions are provided by GEMTEC in regards to the Environmental Impact Statement.

- No significant negative impacts to natural heritage features identified on-site, including significant wildlife habitat, from future development are anticipated.
- The proposed project complies with the natural heritage policies of the Provincial Planning Statement.
- The proposed development complies with the natural heritage policies of the City of Ottawa Official Plan.

9.0 LIMITATION OF LIABILITY

This report and the work referred to within it have been undertaken by GEMTEC Consulting Engineers and Scientists Ltd (GEMTEC), and prepared for Laplante Poultry Farms Ltd. and is intended for the exclusive use of Laplante Poultry Farms Ltd.. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC, Laplante Poultry Farms Ltd.. Nothing in this report is intended to provide a legal opinion.

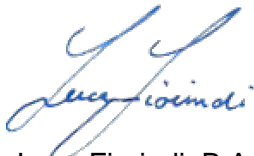
The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This report has been prepared for the application noted and it is based, in part, on visual observations made at the site, all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions, or portions of the site that were unavailable for direct investigation.

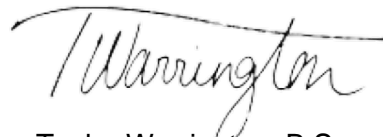
Should new information become available during future work or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,



Luca Fiorindi, B.A., G.Cert.
Jr. Biologist



Taylor Warrington, B.Sc.
Biologist

10.0 REFERENCES

- Beacon Environmental. 2012. Ecological Buffer Guideline Review – Prepared for Credit Valley
- Cadman M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier. 2007. Atlas of the Breeding Birds of Ontario, 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature. Toronto.
- Canada, Government of (Canada). 1985. Fisheries Act. R.S.C. 1985, c. F-14.
- Chapman, L.J., and Putnam, D.F. 1984. The Physiography of Southern Ontario. Ontario Geological Survey, Special Volume 2.
- COSEWIC. 2011. COSEWIC assessment and status report on the Eastern Meadowlark *Sturnella magna* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 40 pp. (Species at risk public registry).
- COSEWIC. 2013. COSEWIC assessment and status report on the Little Brown Myotis *Myotis lucifugus*, Northern Myotis *Myotis septentrionalis* and Tri-coloured Bat *Perimyotis subflavus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxiv + 93 pp.
- COSEWIC. 2022. COSEWIC assessment and status report on the Bobolink *Dolichonyx oryzivorus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 60 pp. (Species at risk public registry).
- Crins, J., William., P. A. Grey, P. W. Uhlig, and M.C. Wester. 2009. The Ecosystems of Ontario, Part I: Ecozones and Ecoregions. Ontario Ministry of Natural Resources, Peterborough, Ontario.
- Department of Fisheries and Oceans (DFO). 2019. Aquatic Species at Risk Map. Viewed online: July , 2023. Available online: <http://www.dfo-mpo.gc.ca/species-especies/sara-lep/map-carte/index-eng.html>
- Dobbyn, J.S. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists, Toronto.
- Fraser E., MacKenzie, A., and Davy, C. 2007. Photo Field Guide to the Bats of Ontario. Published by St. Thomas Field Naturalists Club Incorporated.
- Humphrey, C. 2017. Recovery Strategy for the Eastern Small-footed Myotis (*Myotis leibii*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario. Vii + 76 pp.
- Lee, H. T. 2008. Draft Southern Ontario Ecological Land Classification. Ministry of Natural Resources: London, Ontario.

Oldham, M.J and W.F. Weller. 2000. Ontario Herpetofaunal Atlas.

Ontario, Government of (Ontario). 2019a. Eastern small-footed Myotis. Viewed online: November, 2023. Available online: <https://www.ontario.ca/page/eastern-small-footed-myotis>

Ontario, Government of (Ontario). 2019b. Little Brown Myotis. Viewed online: November, 2023. Available online: <https://www.ontario.ca/page/little-brown-myotis>

Ontario, Government of (Ontario). 2019c. Northern Myotis. Viewed online: November, 2023. Available online: <https://www.ontario.ca/page/northern-myotis>

Ontario, Government of (Ontario). 1990. Conservation Authorities Act. R.S.O. 1990. Chapter C.27. Last amendment: 2011, C.9 Sched. 27, S. 22.

Ontario Legislative Assembly. 2007. Endangered Species Act.

Ontario Ministry of Municipal Affairs and Housing (MMAH). 2024. Provincial Planning Statement – Under Planning Act, Toronto. May.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2018. Natural Heritage Information Request Guide.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2015a. Significant Wildlife Habitat Ecoregion 6E Criterion Schedules.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2014a. Make a Map: Natural Heritage Areas.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2014b. Significant Wildlife Habitat Mitigation Support Tool.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2013. Natural Heritage Information Centre (NHIC) Biodiversity Explorer.

Ontario Ministry of Natural Resources (OMNR). 2011a. Bats and Bat Habitats Guidelines for Wind Power Projects. Second Edition.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2011b. Land Information Ontario (LIO).

Ontario Ministry of Natural Resources (OMNR). March 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition.

Ontario Ministry of Natural Resources (OMNR). 2005 Natural Heritage Information Centre. Ontario Odonata Atlas.

Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Technical Guide.

Ontario Geological Survey 2019. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV

Ontario Nature, 2019, Ontario Reptile and Amphibian Atlas. Viewed online: Viewed online July, 2023. Available online:

<https://www.ontarioinsects.org/herp/index.html?Sort=1&area2=squaresCounties&records=all&myZoom=5&Lat=42.95&Long=-81.01>

Ottawa, City of (Ottawa). Undated a. City of Ottawa Natural Landscape Linkage Analysis. Document 11.

Ottawa, City of (Ottawa). Undated b. Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment. Draft. Ottawa, City of (Ottawa). 2023, Environmental Impact Statement Guidelines – 3rd Edition. June.

Ottawa, City of (Ottawa). 2023a, Environmental Impact Statement Guidelines – 3rd Edition. June.

Ottawa, City of (Ottawa). 2023b, Beckett's Creek – Subwatershed Study. February 2023.

Ottawa, City of (Ottawa). 2022, City of Ottawa Official Plan.

Ottawa, City of (Ottawa). 2015. City of Ottawa Protocol for Wildlife Protection During Construction. August 2015. Rowe, J.S. 1972. Forest Regions of Canada. Canadian Forestry Service Publication no. 1300. Publishing Division, Information Canada .



APPENDIX A

Report Figures

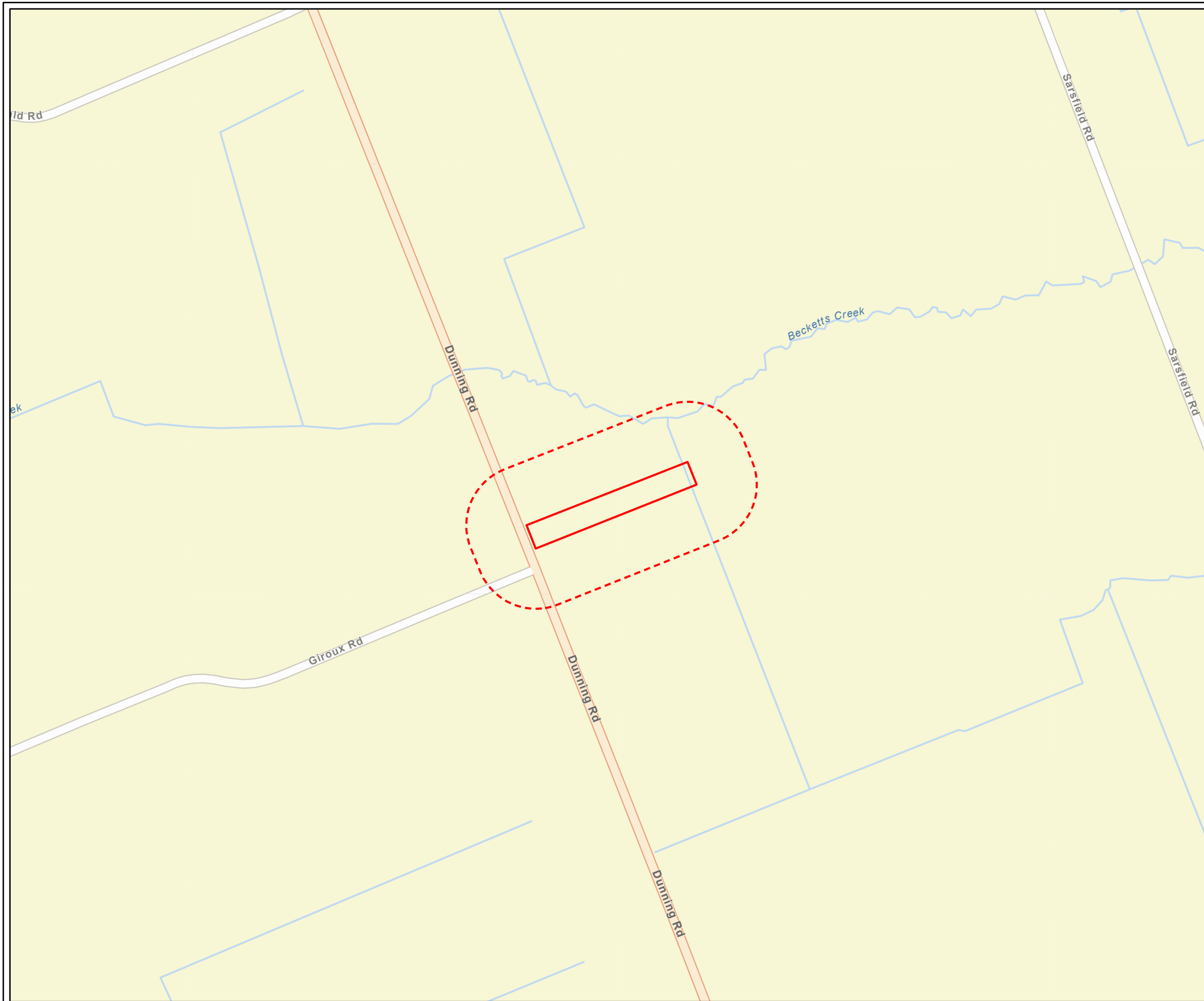
Figure A.1 – Site Location

Figure A.2 – Site Layout

Figure A.3 – Vegetation Communities

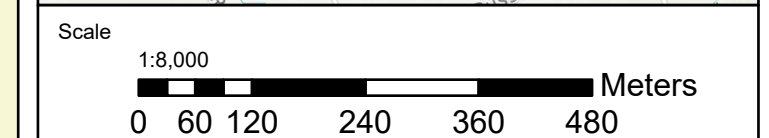
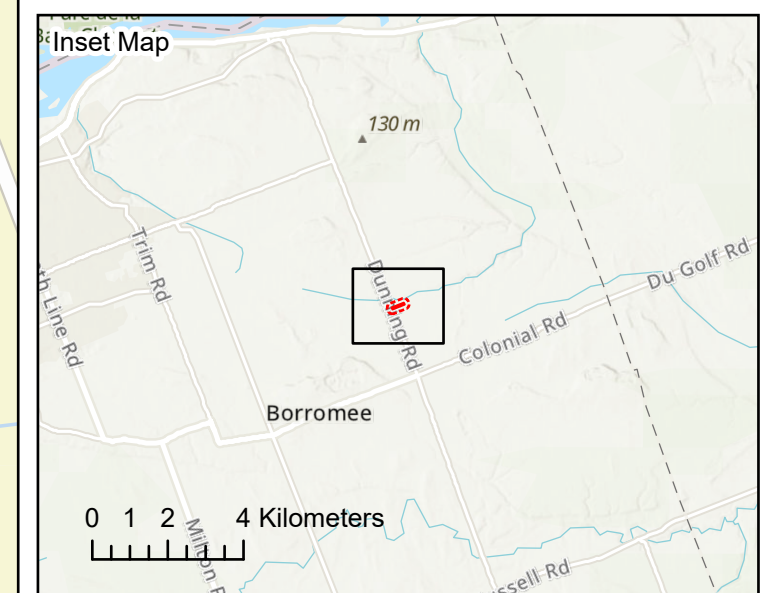
Figure A.4 – Natural Heritage Features

Figure A.5 – Mitigation Measures



Legend

- Property Boundary
- Study Area



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Client: Laplante Poultry Farms Ltd.	Project: 100117.056
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Location
**3043 Dunning Road
Ottawa, Ontario**

Drwn By: E.P.	Chkd By: T.W.	Site Location
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Date: February 2024	Rev. 0	Figure: A.1
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Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Topographic Map: City of Ottawa, Province of Ontario, Esri Canada, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada
World Street Map: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Ville de Gatineau, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada



Legend

- Property Boundary
- Study Area
- Drainage Ditch
- Fish Habitat

Scale		1:2,000	
		Meters	
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Client:		Project:	
Laplante Poultry Farms Ltd.		100117.056	
Location			
3043 Dunning Road Ottawa, Ontario			
Drwn By:	Chkd By:	Site Layout	
E.P.	T.W.		
Date: February 2024		Rev.	
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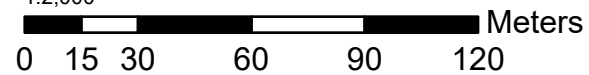

Coordinate System: NAD 1983 UTM Zone 18N
 Service Layer Credits: City of Ottawa 2022 Imagery:
 Hybrid Reference Layer: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Ville de Gatineau, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCAN, Parks Canada



Legend

- Property Boundary
- Study Area
- Drainage Ditch
- Fish Habitat
- Vegetation Community

CVC_2: Commercial Light Industry

Scale		1:2,000	
		Meters	
		32 Steacie Drive, Ottawa, ON K2K 2A9 T: (613) 836-1422 www.gemtec.ca ottawa@gemtec.ca	
Client:		Project:	
Laplante Poultry Farms Ltd.		100117.056	
Location			
3043 Dunning Road Ottawa, Ontario			
Drwn By:	Chkd By:	Vegetation Communities	
E.P.	T.W.		
Date: February 2024		Rev.	Figure: A.3
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Coordinate System: NAD 1983 UTM Zone 18N
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Legend

- Property Boundary
- Study Area
- Drainage Ditch
- Fish Habitat

Scale		1:2,000	
		Meters	
		32 Steacie Drive, Ottawa, ON K2K 2A9 T: (613) 836-1422 www.gemtec.ca ottawa@gemtec.ca	
Client:		Project:	
Laplante Poultry Farms Ltd.		100117.056	
Location 3043 Dunning Road Ottawa, Ontario			
Drwn By:	Chkd By:	Natural Heritage Features	
E.P.	T.W.		
Date: February 2024		Rev.	Figure: A.4
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Coordinate System: NAD 1983 UTM Zone 18N
 Service Layer Credits: City of Ottawa 2022 Imagery:
 Hybrid Reference Layer: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Ville de Gatineau, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCAN, Parks Canada



Legend

- Property Boundary
- Study Area
- Drainage Ditch
- Fish Habitat
- 30 m Setback

Scale		1:2,000	
		Meters	
		32 Steacie Drive, Ottawa, ON K2K 2A9 T: (613) 836-1422 www.gemtec.ca ottawa@gemtec.ca	
Client:		Project:	
Laplante Poultry Farms Ltd.		100117.056	
Location			
3043 Dunning Road Ottawa, Ontario			
Drwn By:	Chkd By:	Mitigation Measures	
E..P.	T.W.		
Date: February 2024		Rev.	Figure: A.5
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APPENDIX B

Site Photographs



Photograph 1 – Commercial – Light Industry
(CVC_2)



Photograph 2 – Commercial – Light Industry
(CVC_2)



Photograph 3 – Commercial – Light Industry
(CVC_2)



Photograph 4 – Agricultural Building



Photograph 5 – Drainage Ditch



Photograph 6 – Drainage Ditch



Photograph 7 – Fish Habitat – Municipal Drain



Photograph 8 – Fish Habitat – Municipal Drain



APPENDIX C

Report Summary Tables

TABLE C.1
SUMMARY OF WILDLIFE OBSERVED ON-SITE AND ADJCENT TO SITE

Common Name	Scientific Name	S-Rank	Evidence
Avian Species			
American crow	<i>Corvus brachyrhynchos</i>	S5	Heard calling
American tree sparrow	<i>Spizelloides arborea</i>	S5	Heard calling
Black-capped chickadee	<i>Poecile atricapillus</i>	S5	Heard calling
Blue jay	<i>Cyanocitta cristata</i>	S5	Heard calling
Canada goose	<i>Branta canadensis</i>	S5	Heard calling
Common raven	<i>Corvus corax</i>	S5	Heard calling
Dark-eyed junco	<i>Junco hyemalis</i>	S5	Heard calling
Song sparrow	<i>Melospiza melodia</i>	S5	Heard calling
Mammalian Species			
Eastern chipmunk	<i>Tamias striatus</i>	S5	Heard calling

Notes:

* Denotes a Species at Risk

Subnational Conservation Status Ranks:

S1 - Critically Imperilled, at very high risk of extirpation, very few populations or occurrences or very steep population decline

S2 - Imperiled, at high risk of extirpation, few populations or occurrences or steep population decline

S3 - Vulnerable, at moderate risk of extirpation, relatively few populations or occurrences, recent and widespread population decline

S4 - Apparently Secure, at a family low risk of extirpation, many populations or occurrences, some concern for local population decline

S5 - Secure, at very low or no risk of extirpation, abundant populations or occurrences, little to no concern for population decline

Qualifiers:

S#B - Conservation status refers to the breeding population of the species

S#N - Conservation status refers to the non-breeding population of the species

S#M - Migrant species, conservation status refers to the aggregating transient population of the species

**TABLE C.2
SCREENING RATIONALE FOR HABITATS OF SEASONAL CONCENTRATION AREAS**

Wildlife Habitat	Further Considered in EIS	Rationale
Waterfowl Stopover and Staging Areas	No	The site is mapped within a large patch of waterfowl staging area however, no suitable ELC codes on-site to support aquatic or terrestrial habitat.
Shorebird Migratory Stopover Area	No	Site does not contain appropriate ELC code to support shorebird migratory stopover habitat. High quality shorebird stopover habitat is extremely rare and typically has a long history of use.
Raptor Wintering Area	No	Site lacks appropriate combination of upland and forest ELC communities.
Bat Hibernacula	No	Cave and crevice habitat is not present on-site or within the study area.
Bat Maternity Colonies	No	No forested ecosites on-site or within study area to support bat maternity roost colonies.
Turtle Wintering Area	No	Observations from the 2023 field investigations revealed the on-site ditch and watercourse to have insufficient depths throughout the season to support turtle overwintering. No indicator turtle species were observed during the 2023 field investigation.
Reptile Hibernaculum	No	No structures such as large rock piles, bedrock outcrops, and crevices have been identified on-site. Further, no indicator snake species were observed during the 2023 field investigation.
Colonial Bird Nesting Habitat	No	No suitable habitat on-site or within study area to provide colonial bird nesting habitat.
Migratory Butterfly Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Landbird Migratory Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Deer Yarding Areas and Winter Congregation Areas	No	Suitable coniferous forest stands are not present on-site. As outlined in the the Significant Wildlife Habitat Criteria Schedules (OMNRF, 2015) winter deer yards and deer management are an MNR responsibility. Based on review of publically available data from the OMNRF on Land Information Ontario Geo-hub, no Stratum I deer yards, Stratum II deer yards, or winter congregation areas have been identified on-site or within the broader study area. The closest deer yard to site is a patch of Stratum II deer yard located approximately 1.5km west of the site. The site does not fall within a City of Ottawa Natural Landscape Linkage or Core Natural Area.

**TABLE C.3
SCREENING RATIONALE FOR SPECIALIZED WILDLIFE HABITATS**

Specialized Wildlife Habitat	Further Considered in EIS	Rationale
Waterfowl Nesting Area	No	No suitable wetland habitat adjacent to upland habitat present on-site.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No	No suitable combination of forest habitat adjacent to open water habitat within study area.
Woodland Nesting Raptor Habitat	No	No forest habitat present within study area to support presence of woodland nesting raptor habitat.
Turtle Nesting Habitat	No	The site lacks suitable wetland habitat adjacent to open areas to provide turtle nesting habitat.
Seeps and Springs	No	Neither seeps nor springs were identified on-site.
Woodland Amphibian Breeding Habitat	No	The site lacks suitable aquatic habitat adjacent to woodlands to support woodland amphibian breeding.
Wetland Amphibian Breeding Habitat	No	Site lacks suitable wetland habitat to support wetland amphibian breeding.
Woodland Area-Sensitive Bird Breeding Habitat	No	No contiguous forest habitat within study area to support woodland area-sensitive bird breeding habitat.

**TABLE C.4
SCREENING RATIONALE FOR HABITATS OF SPECIES OF CONSERVATION CONCERN**

Habitats for Species of Conservation Concern	Further Considered in EIS	Rationale
Marsh Breeding Bird Habitat	No	No suitable wetland habitat present on-site to support marsh breeding bird habitat.
Open Country Breeding Bird Habitat	No	No suitable meadow or field habitat within the study area to support open country breeding bird habitat.
Shrub/Early Successional Breeding Bird Habitat	No	No suitable cultural thicket, shrub or woodland habitat within study area to support succession breeding bird habitat.
Terrestrial Crayfish Habitat	No	Terrestrial crayfish are only found within southwestern Ontario (MNRF, 2012).
Special Concern and Rare Wildlife Species	No	The NHIC indicates the presence of wood thrush within 1 km of site, however no suitable habitat on-site. No other publicly available databases contained occurrence data for species of special concern within 1 km of site. No species of special concern were observed on-site.

**TABLE C.5
SCREENING RATIONALE FOR ANIMAL MOVEMENT CORRIDORS**

Animal Movement Corridor	Further Considered in EIS	Rationale
Amphibian Movement Corridor	No	No confirmed wetland amphibian breeding habitat has been identified on-site.
Deer Movement Corridor	No	No winter deer yards have been identified on-site by the OMNRF.

**TABLE C.6
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	ESA Status	Habitat Use	Probability of Occurrence On-Site or Within Study Area	Rationale
Avian				
Bank Swallow	Threatened	Colonial nester, burrows in eroding silt, to sand banks, sand pit walls, etc.	Low	No suitable sandy bank or pit habitat present on-site.
Barn Swallow	Special Concern	Nests in barns and other semi-open structures. Forages over open fields and meadows.	Low	Suitable nesting habitat may be present on-site and within the study area. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Bobolink	Threatened	Nests in dense tall grass fields and meadows, low tolerance for woody vegetation.	Moderate	Suitable grassland habitat may be present in greater study area. Adjacent agriculture to the north planted with corn and soy. NHIC indicates occurrence within 1 km of site. Species not encountered during field investigation.
Canada Warbler	Special Concern	Prefers wet forests with dense shrub layers	Low	No suitable wet forest with dense shrub layer present on-site.
Cerulean Warbler	Threatened	Prefers mature deciduous forest habitat.	Low	No suitable mature deciduous forest present within the study area.
Chimney Swift	Threatened	Nests in traditional-style open brick chimneys.	Low	Suitable anthropogenic structures may be present within study area. No occurrence records within 1 km of site. Species not encountered during field investigation.
Common Nighthawk	Special Concern	Nests in a variety of open sites: beaches, fields and grave rooftops.	Low	Suitable open habitat present on-site within the cultural meadow. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Eastern Meadowlark	Threatened	Nests and forages in dense tall grass fields and meadows, higher tolerance to woody vegetation.	Moderate	No suitable grassland habitat within study area to support species presence. Adjacent agriculture planted with corn and soy. NHIC and eBird indicate occurrence record on-site. Species not encountered during the field investigation.
Eastern Whip-poor-will	Threatened	Nests on the ground in open deciduous or mixed woodlands with little underbrush, and bedrock outcrops.	Low	No woodlands on-site to support species presence.
Eastern Wood-Pewee	Special Concern	Woodland species, often found near clearings and edge habitat.	Low	Potentially suitable wooded hedgerow habitat present on-site and within the study area. No occurrence records within 1 km of site. Species was not encountered during the field investigation.
Evening Grosbeak	Special Concern	Nests in trees or large shrubs, preference to large coniferous forests, will use deciduous. Overwinters in Ottawa.	Low	Site does not provide suitably sized wooded habitat to support Evening grosbeak presence. Recent eBird occurrence record on-site. Species was not encountered during the field investigation.
Golden Eagle	Endangered	Nests on remote, bedrock cliffs, overlooking large burns, lakes or tundras	Low	No suitable cliff habitat adjacent to open field habitat present on-site.
Golden-winged Warbler	Special Concern	Ground nesting, edge species. Breeds in successional scrub habitats surrounded by forests.	Low	No suitable scrub habitat present within study area.
Grasshopper Sparrow	Special Concern	Ground-nesting grassland species. Prefers fields with low sparse vegetation on sand, alvars or poor soils.	Low	Suitable grassland habitat may be present in greater study area. Adjacent agriculture to the north planted with corn and soy. NHIC indicates occurrence within 1 km of site. Species not encountered during field investigation.
Henslow's Sparrow	Endangered	Prefers open, moist, tallgrass fields.	Low	Suitable open, moist, tallgrass fields are not present within the study area or on-site.
Least Bittern	Threatened	Prefers marshes, shrub swamps, usually near cattails	Low	No suitable wetland habitat on-site.
Loggerhead Shrike	Endangered	Prefers grazed pastures with short grass and scattered shrubs, especially hawthorn.	Low	Site lacks suitable grazed pasture habitat conditions. Preferred hawthorn vegetation not observed during the field investigations.
Olive-sided Flycatcher	Special Concern	Forest edge species, forages in open areas from high vantage points in trees.	Low	Suitable wooded hedgerow habitat present on-site. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Peregrine Falcon	Special Concern	Nests on cliffs near water and on more anthropogenic structures such as tall buildings, bridges, and smokestacks.	Low	No suitable cliff habitat occurs on-site or within study area.
Red-headed Woodpecker	Special Concern	Prefers open deciduous woodlands, particularly those dominated by oak and beech.	Low	No suitable forest habitat on-site to support species presence.
Rusty Blackbird	Special Concern	Wet wooded or shrubby areas (nests at edges of Boreal wetlands)	Low	Site lacks suitable wet habitat to support rusty blackbird presence.

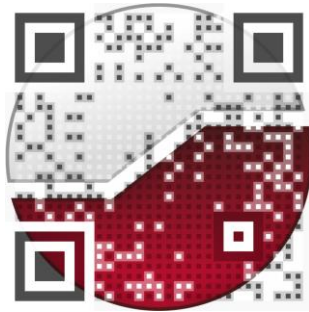
**TABLE C.6
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	ESA Status	Habitat Use	Probability of Occurrence On-Site or Within Study Area	Rationale
Short-eared Owl	Special Concern	Ground nester, prefers open habitats, fields and marshes.	Low	Potentially suitable open field habitat present on-site. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Wood Thrush	Special Concern	Prefers deciduous or mixed woodlands.	Low	Site does not provide suitably sized wooded habitat to support wood thrush presence. NHIC occurrence record within 1 km of site. Species was not encountered during the field investigation.
Mammalian				
Eastern small-footed Myotis	Endangered	Roosts in rock crevices, barns and sheds. Overwinters in abandoned mines. Summer habitats are poorly understood in Ontario, elsewhere prefers to roost in open, sunny rocky habitat and occasionally in buildings (Humphrey, 2017).	Moderate	No on-site structures for roosting by Eastern small-footed Myotis. Potentially suitable anthropogenic structures adjacent to site.
Little Brown Myotis	Endangered	Maternal colonies known to use buildings, may also roost in trees during summer. Affinity towards anthropogenic structures for summer roosting habitat and exhibit high site fidelity (Environment Canada, 2015).	Moderate	No on-site structures for roosting by Little Brown Myotis. Potentially suitable anthropogenic structures adjacent to site.
Northern myotis (Northern Long-eared Bat)	Endangered	Occurs throughout eastern North America in associated with Boreal forests. Roosts mainly in trees, occasionally anthropogenic structures during summer (Environment Canada, 2015). Overwinters in caves and abandoned mines.	Low	Species affinity is for Boreal forests and species rarely roosts in anthropogenic structures.
Tri-colored Bat	Endangered	Roosts in trees, rock crevices and occasionally buildings during summer. Overwinters in caves and mines.	Moderate	No on-site structures for roosting by Tri-coloured bat. Potentially suitable anthropogenic structures and foliage within adjacent wooded areas.
Reptilian				
Blanding's Turtle	Threatened	Inhabits quiet lakes, streams and wetlands with abundant emergent vegetation. Frequently occurs in adjacent upland forests.	Low	No suitable aquatic habitat on-site to support Blanding's turtle. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Eastern Musk Turtle	Special Concern	Wetlands. Highly aquatic habitats.	Low	No suitable aquatic habitat on-site to support Eastern musk turtle. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Eastern Ribbonsnake	Special Concern	Marshy edges of wetlands and watercourses.	Low	No suitable wetland or riparian habitat on-site to support Eastern ribbonsnake. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Northern Map Turtle	Special Concern	Highly aquatic species, found only in lakes and large rivers.	Low	No suitable aquatic habitat to support Northern map turtle. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Snapping Turtle	Special Concern	Highly aquatic species, found in a wide variety of wetlands, water bodies and watercourses.	Low	No suitable aquatic habitat on-site to support snapping turtle. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Spotted Turtle	Endangered	Secretive wetland species.	Low	No suitable wetland habitat on-site. No occurrence records for species within 1 km of site. Species not encountered during the field investigations.
Wood Turtle	Endangered	Primarily terrestrial forest species. Associated with clear, gravelly streams.	Low	Site lacks suitable combination of stream and terrestrial forest habitat. No occurrence records within 1 km of site. Species not encountered during the field investigations.
Plants				
American Ginseng	Endangered	Rich, moist, relatively mature deciduous forests.	Low	No suitable habitat to support American ginseng on-site or within study area.
Black Ash	Endangered	Predominantly a wetland species, found in swamps, floodplains and fens.	Low	No suitable habitat to support black ash presence on-site or within study area.
Butternut	Endangered	Inhabits a wide range of habitats including upland and lowland deciduous and mixed forests.	Low	No suitable habitat to support butternut presence on-site or within study area.
Lichens				

**TABLE C.6
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	ESA Status	Habitat Use	Probability of Occurrence On-Site or Within Study Area	Rationale
Pale-bellied Frost Lichen	Endangered	Grows on the bark of hardwood trees such as white ash, black walnut, American elm and ironwood. Can also be found growing on fence posts and boulders.	Low	Species believed to be extirpated from the Ottawa area.
<i>Fish</i>				
American Eel	Endangered	Primarily nocturnal, hiding in soft substrate or submerged vegetation during the day.	Low	No suitable fish habitat on-site or within the study area.
Bridle Shiner	Special Concern	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	No suitable fish habitat on-site or within the study area.
Channel Darter	Threatened	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	No suitable fish habitat on-site or within the study area.
Lake Sturgeon	Endangered	Large lakes and rivers. Forages in cool water, 4-9m deep over soft substrates. Spawns in shallower, fast-flowing areas over rocks or gravel.	Low	No suitable fish habitat on-site or within the study area.
Northern Brook Lamprey	Special Concern	Prefers shallow areas with warm water. Larvae burrows in soft substrate for up to 7 years.	Low	No suitable fish habitat on-site or within the study area.
River Redhorse	Special Concern	Prefers fast-flowing, clear rivers over rocky substrate	Low	No suitable fish habitat on-site or within the study area.
Silver Lamprey	Special Concern	Larvae live 4-7 years in burrows, preference to soft substrate.	Low	No suitable fish habitat on-site or within the study area.
<i>Insects</i>				
Bogbean Buckmoth	Endangered	Preferred food plant is bog bean, present in a variety of wetlands including bogs, swamps and fens.	Low	Preferred wetland habitat is not present on-site.
Gypsy Cuckoo Bumble Bee	Endangered	Inhabits a wide range of habitats: open meadows, agricultural and urban areas, boreal forests and woodlands.	Low	Currently the only known population is in Pinery Provincial Park
Monarch Butterfly	Special Concern	Caterpillars require milkweed plants confined to meadow and open areas. Adult butterflies use more diverse habitat with a variety of wildflowers	Moderate	Suitable foraging habitat present on-site. Milkweed observed during the field investigations.
Mottled Duskywing	Endangered	Larval food plant (New Jersey Tea) found in sandy areas and alvars.	Low	Sandy areas and alvars not present in the study area.
Nine-spotted Lady Beetle	Endangered	Habitat generalist	Low	No recent occurrence reports in the area, thought to be locally extirpated
Rusty-patched Bumble Bee	Endangered	Habitat generalist	Low	Currently the only known population is in Pinery Provincial Park
Traverse Lady Beetle	Endangered	Habitat generalist	Low	No new records of Traverse Lady Beetle in Ontario, species thought to be absent in former habitats.
West Virginia White Butterfly	Special Concern	Requires mature moist deciduous woods with larval host plant toothwort.	Low	Necessary vegetation and toothwort plant not present on-site or within study area
Yellow-banded Bumble Bee	Special Concern	Habitat generalist; mixed woodlands, variety of open habitat	Moderate	Suitable foraging habitat present on-site. Species not observed during the field investigation.

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environmental
field services
materials testing

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