REPORT

Scoped Environmental Impact Statement

Concrete Ready-Mix Plant, 424 Hillis Road, Peterborough

Submitted to:

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19 March 2026

Distribution List

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1 INTRODUCTION

WSP Canada Inc. (WSP) was retained by Sunrock Industries Canada ULC (Sunrock) to complete a scoped Environmental Impact Statement (EIS) for a proposed ready-mix concrete (RMC) plant development (the Project) at the Dunford Pit property located at 424 Hillis Road (part Lot 6, Concession 3) in the Township of Selwyn, County of Peterborough, Ontario (the Site; Figure 1). For the purposes of this report, the lands within 120 m ('Adjacent Lands' as per the Provincial Planning Statement 2024) of the Site are considered the Study Area.

This report has been prepared to meet the EIS requirements the County of Peterborough Official Plan (Peterborough 1994) and has been scoped to focus on the potential impact of the Project on the specific items identified in the Terms of Reference (Appendix A).

This EIS focuses on the potential impacts of the construction, maintenance, and operation of the proposed RMC plant on natural heritage features. The Site is subject to an existing *Aggregate Resources Act* (ARA; Ontario 1990a) license (Class A License #3293). Site activities associated with aggregate operations are subject to the Site Plan details (Long Associates 1992) and are not the focus of this EIS. It should be noted that some of the natural features identified within this EIS, are within, or partly within the approved extraction area, and can/may be removed during licenced aggregate activities and are assessed herein under the context of their existing Site Plan approval that supports removal and the requirements of the existing ARA licence. As such this EIS does not deal with the ARA or the ARA licence that has been permitted in the past but rather is based on the County Official Plan requirements for development of the RMC within the aggregate extraction landuse designation.

2 ENVIRONMENTAL POLICY CONTEXT

The Site is in the Township of Selwyn in the County of Peterborough. Documents reviewed to gain an understanding of the natural heritage features and regulations that are relevant to the Site consisted of the following:

- The Provincial Planning Statement (PPS; MMAH 2024)
- The *Fisheries Act* (Canada 1985)
- The *Migratory Birds Convention Act* (MBCA; Canada 1994)
- The *Species at Risk Act* (SARA; Canada 2002)
- The *Endangered Species Act* (ESA; Ontario 2007)
- The County of Peterborough Official Plan (CPOP; Peterborough 1994)
- Township of Selwyn Zoning By-law (Selwyn 2025)
- The Conservation Authorities Act O.Reg. 41/24 (Ontario 1990b)

An overview of the above noted legislation and policy documents is discussed in Sections 2.1 to 2.7.

2.1 Provincial Planning Statement

The PPS (MMAH 2024) was issued under Section 3 of the *Planning Act* (Ontario 1990c). The natural heritage policies of the PPS (Policy 4.1 – Natural Heritage) indicate that:

4.1.4 Development and site alteration shall not be permitted in:

i) Significant wetlands in Ecoregions 5E, 6E and 7E.

ii) Significant coastal wetlands.

4.1.5. Unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions, development and site alteration shall not be permitted in:

iii) Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E.

iv) Significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River).

v) Significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River).

vi) Significant wildlife habitat.

vii) Significant areas of natural and scientific interest.

viii) Coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 4.1.4(b).

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

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

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

4.1.9. Nothing in policy 4.1 is intended to limit the ability of agricultural uses to continue.

Section 4.2 of the PPS protects the quality and quantity of water, including the form and hydrologic function of sensitive surface water features and sensitive ground water features. Focus is given to maintaining hydrologic linkages and functions at the watershed scale to minimize potential negative impacts, including cross-jurisdictional and cross-watershed impacts of development.

The PPS defines "development" as the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the *Planning Act* (Ontario 1990b). "Site alteration" means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a Site.

2.2 Fisheries Act

The purpose of the federal *Fisheries Act* (Canada 1985) is to maintain healthy, sustainable, and productive Canadian fisheries through the prevention of pollution and the protection of fish and their habitat. Under the *Fisheries Act* (Canada 1985), work in and near water must comply with the fish and fish habitat protection provisions of the *Fisheries Act* by incorporating measures to avoid (DFO 2019):

- causing the death of fish
- harmful alteration, disruption, or destruction (HADD) of fish habitat in the work, undertaking or activity

All projects where work is being proposed that cannot avoid impacts to fish or fish habitat require a Fisheries and Oceans Canada (DFO) project review (DFO 2019). DFO will review the project to identify potential risks of the project to the conservation and protection of fish and fish habitat. If potential impacts can be avoided, project approval is not required (DFO 2020). However, if it is determined that the project will result in death of fish or HADD of fish habitat, an authorization is required under the *Fisheries Act*. Proponents of projects requiring a *Fisheries Act* authorization may be required to also submit a habitat offsetting plan, which provides details of how the death of fish and/or HADD of fish habitat will be offset, and outlines associated costs and monitoring commitments. Proponents also have a duty to notify DFO of any unforeseen activities during the project that cause harm to fish or fish habitat.

2.3 Migratory Birds Convention Act

The MBCA (Canada 1994) prohibits the killing or capturing of migratory birds, as well as any damage, destruction, removal or disturbance of active nests. It also allows the Canadian government to pass and enforce regulations to protect various species of migratory birds, as well as their habitats. While Environment and Climate Change Canada (ECCC) can issue permits allowing the destruction of nests for scientific or agricultural purposes, or to prevent damage being caused by birds, it does not typically allow for permits in the case of industrial or construction activities.

In 2022, new Migratory Birds Regulations (MBR) were adopted that afford year-round protection to the nests of sixteen migratory species, until the nest is deemed to be abandoned. Nest abandonment must be reported through the Abandoned Nest Registry, administered by ECCC, if there is a need to damage, disturb, destroy, or remove a nest of a species listed in Schedule 1 of the MBR. The time period to confirm nest abandonment varies by species, and ranges from 12 to 36 months.

2.4 Species at Risk

2.4.1 Species at Risk Act

At a federal level, Species at Risk (SAR) designations for species occurring in Canada are initially determined by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). If approved by the federal Minister of the Environment and Climate Change, species are added to the federal List of Wildlife Species at Risk (Canada 2002). Species that are included on Schedule 1 as endangered or threatened are afforded protection of critical habitat on federal lands under the SARA. On private or provincially owned lands, only aquatic species listed as endangered, threatened or extirpated and migratory birds are protected under the SARA, unless ordered by the Governor in Council.

2.4.2 Endangered Species Act

The purpose of the provincial ESA (Ontario 2007) is to identify provincial SAR, protect those species and their habitats, promote the recovery of those species, and promote stewardship activities to assist in the protection and recovery of SAR. SAR designations for species in Ontario are initially determined by the Committee on the Status of Species at Risk in Ontario (COSSARO), and if approved by the provincial Minister of Environment, Conservation and Parks, species are added to the Species at Risk Ontario (SARO) list, contained in O. Reg. 230/08 (MECP 2026).

The *Protecting Ontario by Unleashing Our Economy Act* ["Bill 5" (Ontario 2025)] received royal assent and became law on June 5, 2025. The Act introduced amendments to the ESA (now in force) and created the *Species Conservation Act*, 2025 (SCA; Ontario 2025). The government is consulting on regulations that need to be in place before the SCA comes into force, at a specific time that is to be determined. The ESA will transition to the SCA through rules set out in a transition regulation.

Subsection 9(1) of the ESA prohibits the killing or harming of species identified as endangered or threatened under the Act. Subsection 10(1)(a) prohibits the damage or destruction of the habitat of species identified as endangered or threatened. The definition of "habitat" was updated in the ESA following the royal assent of Bill 5, to mean:

- In respect to animals, a dwelling-place (nests, dens, etc.) that is occupied or habitually occupied by one or more members of a species for breeding, rearing, staging, wintering, or hibernating, and the immediate surrounding area necessary for breeding, rearing, staging, or hibernation.
- In respect to vascular plant species, the critical root zone surrounding a member of the species.
- In respect of all other species, an area on which any member of a species directly depends in order to carry on its life processes.
- Certain exceptions to the above apply, for example, the existing habitat regulation for black ash remains in force.

The ESA has a permitting process to allow activities to occur that would affect protected species and/or their habitats as well as a registration process for certain activities and species.

2.5 County of Peterborough

The Site is mapped as 'Extractive Industrial' and located within the 'Aggregate Resource Area' designation, per the CPOP (Peterborough 1994). An Official Plan amendment would not be required to accommodate the Project, as accessory concrete plants and rural uses, including small scale industrial uses, are permitted in the Extraction Industrial area.

2.6 Township of Selwyn

The Site is zoned 'Extractive Industrial (M3)' in the Township Zoning By-law (Selwyn 2025). A site-specific zoning bylaw amendment (ZBLA) is required to add the Ready-Mix Concrete Plant as a permitted use in the M3 Zone.

2.7 Otonabee Region Conservation Authority

The Otonabee Region Conservation Authority (ORCA) regulates hazard features under O.Reg. 41/24: Prohibited Activities, Exemptions and Permits under the *Conservation Authorities Act* (Ontario 1990c); however, permits under the *Conservation Authorities Act* are not required for projects under the existing ARA approval.

3 DESCRIPTION OF PROPOSED PROJECT

The Site is currently licensed by the Ministry of Natural Resources (MNR) under the ARA (Class A License #3293) for aggregate pit extraction with a maximum of 127,000 tonnes of aggregate leaving the Site annually. The licenced pit is located to the west of the intersection of Highway 12 and Hillis Rd. The construction of a new RMC plant (Appendix B) is proposed within the licensed pit. The Site is an active gravel extraction site and is zoned accordingly. The entire Project footprint is within the licenced extraction area.

Access to the plant is proposed to be at the existing Site access road, at 424 Hillis Road approximately 395 m west of the centreline of Country Road 12. Operations at the plant are expected to commence in 2026, pending approvals.

3.1 Stormwater Management

For a detailed description of the Stormwater management (SWM) works, refer to the Project Stormwater Management Report (WSP 2026).

The proposed onsite ditches, swales and local intermediate culverts will collect runoff from the undeveloped and the RMC plant non-process water areas and convey them through a main local culvert under the Site access road to be discharged into the existing on site pond. The existing pond is located on the east side, within the extractive portion of the licensed aggregate pit within an area designated as extraction. The proposed ditches/swales will be grass-lined to protect against erosion, and rock check dams will be constructed where applicable, to retain sediments and minimize their amounts reaching the pond. Riprap pads will be constructed at the main culvert outlet and at the mouth of two other clean water diversion ditches, to protect against erosion.

Process water from the area around the plant will be internalized through a negative-slope area and collected within a sump. The collected process water will be recycled into the RMC plant using a suitable pump.

Two water sampling points are proposed at the main culvert outlet and the mouth of the clean water diversion ditch, to monitor the water quality. All water that will enter the existing pond on the Site will be clean and meet the regulatory water quality objectives and will have no negative impact on the available habitat or ecological function of the existing pond. It is anticipated that the existing pond will continue to function after the construction of the RMC plant as under the pre-development conditions.

4 METHODS

4.1 Background Review

The investigation of existing conditions on the Site and in the Study Area included a background information search and literature review to gather data about the local area and provide context for the evaluation of the natural features. This included review of the following resources:

- Natural Heritage Information Centre (NHIC) Make-a-Map geographic explorer for SAR, rare (S1-S3) species reported as occurring in the vicinity of the Site, and natural areas information queries (MNR 2026a)
- Environment and Climate Change Canada (ECCC) SAR Public Registry (ECCC 2026) including COSEWIC status reports, assessments, and recovery strategies
- DFO Aquatic Species at Risk Maps (DFO 2026)
- Breeding Bird Atlas of Ontario (OBBA) (Cadman et al. 2007)

- Atlas of the Mammals of Ontario (Dobbyn 1994)
- Ontario Reptile and Amphibian Atlas (Ontario Nature 2019)
- Bat Conservation International (BCI) range maps (BCI 2026)
- Ontario Butterfly Atlas (Jones et al. 2026)
- eBird species maps (eBird 2026)
- Vascular Plants at Risk (Leslie 2018)
- Land Information Ontario Aquatic Resources Area Layer (MNR 2026b)
- Information contained in natural heritage related map layers from Land Information Ontario (LIO; 2026) and the Ontario Land Cover Compilation (MNR 2026c)
- County of Peterborough Official Plan (Peterborough 1994)
- Available high-resolution aerial imagery and mapping

A geographic query of the MNR Make-a-Map database was conducted to identify element occurrences of any natural heritage features, including wetlands, ANSI, rare vegetation communities and rare species (i.e., S1-S3 species in the NHIC), threatened or endangered species and other natural heritage features within two kilometres (km) of the Site.

4.2 SAR Screening

A SAR screening was completed for the Site and the Study Area, focusing on the review of records and range maps pertaining to species that are designated as threatened, endangered or special concern under the ESA, and species that are protected under Schedule 1 of the SARA. Species with ranges overlapping the Site, or recent occurrence records in the vicinity, were screened by comparing their habitat requirements to habitat conditions at the Site.

The potential for the species to occur was determined through a probability of occurrence. A ranking of low indicates no suitable habitat availability for that species in the Site and no specimens identified. Moderate probability indicates more potential for the species to occur, as suitable habitat appeared to be present on the Site, but no occurrence of the species has been recorded. Alternatively, a moderate probability could indicate an observation of a species, but there is no suitable habitat on the Site. High potential indicates a known species record at the Site or in the vicinity (including during field surveys or background data review) and good quality habitat is present.

Searches were conducted during the field survey for suitable habitats and signs of all SAR identified through the desktop screening. If the potential for the species to occur at the Site was moderate or high, the screening was refined based on the field survey (i.e., habitat assessment).

4.3 Field Survey

The plant communities and wildlife habitat on the Site were characterized during a field survey on 25 November 2025. The purpose of the field survey was to characterize the existing natural features at the Site, and to assist in identifying potential for the Site to support SAR. The focus of the field survey was to:

- Review the vegetation communities present using Ecological Land Classification (ELC) (Lee et al. 1998), to the extent possible based on the field survey.
- Complete a high-level fish habitat assessment of potential fish habitat, if present on the Site.
- Prepare a list of wildlife and dominant plant species observed, to the extent possible based on the field survey.
- Assess the potential for significant natural features, including SAR or their habitats, to be present on the Site and within the Study Area.
- Prepare a photographic inventory of the Site with a focus on natural areas and habitats.

Targeted wildlife surveys and multi-season plant surveys were not conducted on the Site.

5 EXISTING CONDITIONS AND RESULTS

A photographic inventory of the Site is provided in Appendix C.

5.1 Plant Communities

The plant communities on-Site are a mosaic of natural and disturbed communities, with the core of the Site representative of the disturbed nature associated with ongoing extraction activities. A total of 52 plant taxa were documented on-Site with 45 identified to species, based on the results of the single fall field survey. Of the 45 plants identified to species, 28 (59.6%) are native and 19 (40.4%) are alien, with several aggressive alien invasives present [e.g., European reed (*Phragmites australis* ssp*. australis*) and European buckthorn (*Rhamnus cathartica*)].

Within the area of the proposed Project footprint, the Site is primarily disturbed, exposed mineral soil, with small and scattered patches of cultural meadow with plant species typical of disturbed areas (ELC code: DIS/REG). Dominant species observed included viper's bugloss (*Echium vulgare*), Canada bluegrass (*Poa compressa*), tufted vetch (*Vicia cracca*), common mullein (*Verbascum Thapsus*), Canada goldenrod (*Solidago canadensis*), and colt's foot (*Tussilago farfara*). In addition, there is a small patch of immature trees that overlaps the proposed Project footprint, dominated by immature poplar (*Populu*s spp.), with scattered other species such as eastern white cedar (*Thuja occidentalis*). The understory in the treed area is heavily influenced by edge effect, comprised of similar species to the adjacent disturbed areas and meadow patches. This treed area is disconnected from the other forests on the Site by a gravel roadway and is not considered a forest under ELC classification. There are also patches of regenerating thicket throughout the edges of the disturbed areas on the Site, with a mixture of immature and sapling early succession trees and shrubs such as poplars, black locust (*Robinia pseudoacacia*), and European buckthorn (*Rhamnus cathartica*).

Northeast of the proposed Project footprint is an immature Dry to Fresh White Birch – Poplar Mixed Forest (ELC code: FOM5). This forest makes up a notable portion of the eastern half of the Site and extends around to the north end. A notable portion of this forest has a disturbance history, and dominant species varies, including species such as white birch (*Betula papyrifera*), poplars, eastern white cedar, and jack pine (*Pinus banksiana*). Some of the trees within this forest were planted historically.

Near the northeastern corner of the Site, within the FOM5, is a small, semimature White Cedar Organic Coniferous Swamp (ELC code: SWC3-1). This swamp has a closed canopy, and a sparse understory and groundcover with plants such as riverbank grape (*Vitis riparia*), field horsetail (*Equisetum arvense*), and European

buckthorn (*Rhamnus cathartica*). There is very little evidence of flooding or pooling surface water within this relatively dry wetland, likely being restricted to very early spring, if it occurs at all. There are no inflow or outflow, and the wetland is relatively flat, on top of a slope. The substrate was moderately deep organics over sand. It is likely that this wetland is reliant upon the groundwater table.

At the western edge of the Site is a semi-mature to mature Dry to Fresh Sugar Maple – White Ash – Red Oak Deciduous Forest (ELC code: FOD5-8), that is contiguous with additional forest west of the Site. This forest is dominated by sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), and red oak (*Quercus rubrum*), with associates such as black cherry (*Prunus serotina*), and white pine (*Pinus strobus*). The understory of the FOD5-8 was moderate to sparse, with species such as balsam fir (*Abies balsamea*). Most groundcover plants were dormant at the time of the field survey.

At the eastern edge of the Site is a pond feature that is a flooded aggregate pit, created by below-water extraction. There was no obvious outflow from this pond at the time of field survey, and it is not hydrologically connected to any other wetlands or surface water features in the Study Area. Very little vegetation was observed within this feature at the time of the site investigation, other than algae. Riparian plants were abundant including willows (*Salix* spp.), grasses, and sedges (*Carex* spp.), although some portions of the riparian zone were relatively bare mineral soil.

The Study Area was observed via public roads and portions that were visible from the limits of the Site. Overall, it contains similar plant communities as those observed on the Site, in addition to larger agricultural fields, more disturbance areas, residential properties, and a portion of Coniferous Swamp (ELC code: SWC) that is part of the Jackson Creek Wetland Complex. The portion of this wetland that overlaps the Study Area appeared to be palustrine with limited surface water visible from the road, or on imagery.

No SAR, regionally significant, or provincially rare plants or plant communities were identified on the Site, although they may occur in the Study Area.

5.2 Wildlife and Wildlife Habitat

Targeted wildlife surveys were not completed, but a total of 20 species were observed. This is not a fulsome representation of all wildlife species that are likely to occur on the Site. Refer to Appendix D for a list of all species observed. Wildlife observations were primarily of birds and small mammals, or mammal tracks and signs, with one amphibian species [leopard frog (*Lithobates pipiens*)] observed in the pond at the eastern edge of the Site. Examples of birds and mammals observed on-Site during the field survey included: American crow (*Corvus brachyrynchos*), American goldfinch (*Spinus* tristis), black-capped chickadee (*Poecile atricapillus*), downy woodpecker (*Dryobates pubescens*), gray squirrel (*Sciurus carolinensis*), meadow vole (*Microtus pennsylvanicus*), and red fox (*Vulpes vulpes*). It is likely that many other species occur in the habitats on the Site, especially the vegetated portions. The FOD5-8 at the western edge of the Site has mature trees with habitat features such as cavities and cracks to support bats and other wildlife. These habitat features also occur within the FOM5, but to a lesser degree. The pond at the eastern edge of the Site may provide suitable habitat for various reptiles, amphibians, and other wildlife. This pond exhibits typical extraction pond characteristics consisting of gravel edges and areas of near shore aquatic vegetation. Fish observations are described in Section 5.3.

No SAR or provincially rare wildlife were observed on Site or in the extraction pond proposed for stormwater discharge. A list of all species observed is included in Appendix E.

5.3 Aquatic Features and Fish Habitat

The pond at the eastern edge of the Site was observed to contain large numbers of small-bodied fish, including minnows (Cyprinids) and brook stickleback (*Culaea inconstans*). As noted, this pond is a flooded aggregate pit that was created by below-water extraction. It is not hydrologically connected via surface water to any other surface water features on or off the Site. Within the Study Area, east of the Site, is another similar pond that was also created as part of aggregate extractions. This off-Site pond is of similar character as the on-Site pond and may contain a similar small-bodied fish community.

6 ASSESSMENT OF SIGNIFICANCE AND IMPACT ASSESSMENT

This section assesses the significance of natural features and functions observed on the Site, as well as the potential impacts to those features and functions that may result from the proposed Project, in consideration of recommended mitigation measures.

6.1 Provincially Significant Wetlands and Coastal Wetlands

Provincially significant wetlands (PSW) are areas identified as provincially significant by the MNR, or evaluators certified by the MNR using evaluation procedures established by the province of Ontario. The province has established the Ontario Wetland Evaluation System (OWES; MNRF 2022) which assesses wetlands based on a range of criteria, including biology, hydrology, societal value and special features. Coastal wetlands are those located on the shores of the five great lakes, their connecting channels, or on a direct tributary of the lakes or their connecting channels within 2 km of the lake or connecting channel shoreline.

No significant wetlands are mapped within the Site. The Jackson Creek Wetland Complex PSW is located south of Hillis Road, a small portion of which overlaps the Study Area. As presented in the SWM report (WSP 2026),there are no predicted off-Site effects from SWM. The on-Site pond that will receive surface water run-off from the Project is an area of aggregate excavation below the water table that has been created by former aggregate operations. It is not hydrologically connected via surface water to any other surface water features on or off the Site, including the Jackson Creek Wetland Complex PSW located to the south of the Site, south of Hillis Road. No other off-Site effects are predicted, and there are no anticipated impacts to the PSW off-Site resulting from the proposed Project.

There is a small unevaluated wetland on the Site, as discussed in Section 5.1. Based on the size and observed characteristics this feature would not meet the threshold for provincial significance under OWES, if evaluated. This conclusion is based on the authors' extensive experience with OWES (certified evaluators) and with wetlands in general. The wetland is small, contains a single plant community, has low diversity and minimal habitat features, very little, if any, areas of open water, no fish habitat, and is unlikely to support habitat for significant plant and animal species. Furthermore, due to its size, location, and isolated nature, it provides limited hydrological function. Given its location and lack of public access, it has minimal to no social value. In addition, this wetland is located at least 30 m outside of the proposed Project footprint. There are no predicted hydrological effects to this wetland from the proposed Project and therefore there are no predicted impacts.

Standard mitigation measures to protect adjacent natural areas during construction and operation are outlined in Section 7.

6.2 Significant Woodlands

Significant woodlands are identified by planning authorities, or the planning authorities approve the work of others using criteria recommended in the Natural Heritage Resource Manual (NHRM) or municipal Official Plans that employ the same criteria (MNR 2010).

The forest communities on-Site are described in Section 5.1. They are not mapped as significant woodlands in the CPOP. To be considered significant, a woodland must meet at least one of the criteria listed in the NHRM, including size, ecological functions, uncommon characteristics or economic / social functions. The entire woodland was not assessed during the field survey as large portions lay off-Site, within the Study Area. Based on the observations made during the field survey, the on-Site portions of the woodlands did not appear to exhibit any unusual ecological functions or uncommon characteristics, economic or social functions, and is small in consideration of the extensive forest cover in the County of Peterborough. However, regardless of the significance, the Project footprint for the RMC does not overlap these forests, and there is no predicted impact to the forest cover on the Site, or within the Study Area because of the proposed Project. Further, a notable portion of these woodlands on the Site lie within the existing, approved extraction area and may, with time, be removed to accommodate the approved aggregate extraction.

Standard mitigation measures to protect adjacent natural areas during construction are outlined in Section 7.

6.3 Significant Valleylands

Significant valleylands should be defined and designated by the planning authority. General guidelines for determining significance of these features are presented in the NHRM (MNR 2010). Recommended criteria for designating significant valleylands include prominence as a distinctive landform, degree of naturalness, importance of its ecological functions, restoration potential, and historical and cultural values.

There are no significant valleylands identified on the Site or within the Study Area within the CPOP. None of the features on the Site or within the Study Area would be considered a valleyland, significant or not.

6.4 Significant Wildlife Habitat

Significant wildlife habitat (SWH) is one of the more complicated natural heritage features to identify and evaluate. The NHRM includes criteria and guidelines for designating SWH. There are two other documents, the Significant Wildlife Habitat Technical Guide (SWHTG) and the Significant Wildlife Habitat Criteria Schedules (SWHCS) (MNR 2000 and MNR 2015), that can be used to help decide what areas and features should be considered significant wildlife habitat. These documents were used as reference material for this study.

Although no SWH was identified at the Site, or within the Study Area, there is potential for a few types of candidate SWH. Candidate SWH on the Site is discussed below.

6.4.1 Seasonal Concentration Areas

Seasonal concentration areas are areas where wildlife occur in aggregations at certain times of year. Examples include concentrations of wildlife during migration, hibernation, wintering areas or specialized breeding areas for colonial species. The following candidate SWH seasonal concentration areas may be present.

Turtle Overwintering Areas

The pond at the eastern edge of the Site may provide suitable habitat to support overwintering of turtle species such as Midland painted turtle (*Chrysemys picta marginata*) and snapping turtle (*Chelydra serpentina*). As noted,

this pond is a flooded aggregate pit and will be used as a stormwater pond for the Project. As described in the SWM report (WSP 2026), there will be no in-water works within this pond, and with proposed surface water mitigation, it is not anticipated that any deleterious substances will enter the waterbody. The only predicted change is a potential increase in water levels at times. This pond will continue to function as suitable habitat for overwintering turtles during construction and operations of the Project. Therefore, there are no predicted impacts to this candidate SWH.

Bat Maternity Roost Colonies

The deciduous forest (ELC code: FOD 5-8) at the western edge of the Site is semi-mature with several large cavity trees present. It may contain 10 larger-diameter snags/cavity trees per hectare and is a candidate for this SWH type. This forest is outside of the Project footprint, and there are no predicted impacts to this candidate SWH.

6.4.2 Specialized Habitat for Wildlife

Specialized habitats are those habitats that support wildlife during a critical part of the life processes, primarily during breeding, but also includes specific features or micro-habitats, such as seeps. The following candidate SWH specialized habitat for wildlife may be present.

Amphibian Breeding Habitat (Woodland)

The pond at the eastern edge of the Site has potential to support breeding amphibians. This pond in combination with the forests immediately adjacent, are candidates for this SWH type. This pond is a flooded aggregate pit and will be used as a stormwater pond for the Project. As described in the SWM report (WSP 2026), there will be no in-water works within this pond, and with proposed surface water mitigation, it is not anticipated that any deleterious substances will enter the waterbody. The only predicted change is a potential increase in water levels at times. This pond will continue to function as suitable habitat for amphibians during construction and operations of the Project. These areas are outside of the Project footprint, and there are no predicted impacts to this candidate SWH.

6.4.3 Habitat for Species of Conservation Concern

Habitat for species of conservation concern (SOCC) includes certain habitats for groups of species that are declining provincially, as well as individual species that are considered rare. The following candidate SWH for SOCC may be present.

The SAR screening provided in Appendix E identified a moderate potential for the presence of several species designated special concern under the ESA. These species are considered SOCC, and suitable breeding habitat would be considered candidate SWH as discussed below.

The forests on the Site, may be suitable as breeding habitat for two forest bird SOCC: eastern wood pewee (*Contopus virens)* and wood thrush (*Hylocichla mustelina*), and are candidates for this type of SWH. These forests are outside of the Project footprint, and there are no anticipated impacts to this candidate SWH.

The pond and immediately adjacent upland areas at the eastern edge of the Site may provide suitable habitat to support various life history needs of snapping turtle, which is a SOCC. Therefore, this area is candidate SWH. As described in the SWM report (WSP 2026), there will be no in-water works within this pond, and with proposed surface water mitigation, it is not anticipated that any deleterious substances will enter the waterbody. The only predicted change is a potential increase in water levels at times. This pond will continue to function as suitable

habitat for overwintering snapping turtles, if they occur, during construction and operations of the Project There are no anticipated impacts to this candidate SWH.

The mosaic of open vegetation and edge habitats on the Site, in combination with adjacent lands, may be suitable habitat for three insect SOCC: the American bumblebee (*Bombus pensylvanicus*), monarch (*Danaus plexippus*), and the yellow-banded bumblebee (*Bombus terricola*), and may be candidate for this type of SWH. The majority of suitable habitat is outside of the Project footprint. There are no anticipated impacts to this candidate SWH.

As noted, a notable portion of the Site, including some candidate habitat for these SOCC species is within the approved extraction area and so may, with time, be removed to accommodate the approved aggregate extraction.

There is potential for SWH within the Study Area, outside of the Site; however, there are no anticipated impacts from the Project to off-Site natural features. Therefore, there are no anticipated impacts to SWH that may occur outside of the Site, within the Study Area. Standard mitigation measures to protect adjacent natural areas during construction are outlined in Section 7.

6.5 Habitat of Endangered and Threatened Species

Refer to Appendix E for the SAR screening. The forests on Site, especially the deciduous forest (ELC code: FOD5-8) are potentially suitable maternity roost habitat for several SAR bats. These are: eastern red bat (*Lasiurus borealis),* northern hoary bat (*Lasiurus* cinereus), and silver-haired bat (*Lasionycteris noctivagans*); designated as endangered under the ESA, as well as: little brown myotis (Myotis lucifugus), northern myotis (*Myotis septentrionalis*), and tricolored bat (*Perimyotis subflavus),* designated as endangered under the ESA and the SARA. The small patch of immature trees that overlaps the Project footprint is not suitable bat maternity roost habitat.

In addition, these forests are suitable habitat for woodpeckers, including the red-headed woodpecker (*Melanerpes erythrocephalus*), that is designated as endangered under the ESA and the SARA. Several woodpecker cavities of the right size for red-headed woodpecker were identified within the FOD5-8 at the western edge of the Site. No potential woodpecker nesting cavities were observed in the small patch of trees that overlaps the Project footprint.

The FOD5-8 also is potentially suitable habitat for American ginseng (*Panax quinquefolius*), which is designated as endangered under the ESA and the SARA.

The forested and treed areas within the Site that have potential to be suitable habitat for the forest species noted above, are outside of the Project footprint. No impacts to these forest species or their habitat are anticipated.

In addition to the forest species, the pond at the eastern edge of the Site is potentially suitable for overwintering habitat for Blanding's turtle (*Emydoidea blandingii*), which is designated as threatened under the ESA and the SARA. There are no records of this species within the NHIC square that encompasses the Site, or any of the immediately adjacent squares. As described in the SWM report (WSP 2026), there will be no in-water works within this pond, and with proposed surface water mitigation, it is not anticipated that any deleterious substances will enter the waterbody. The only predicted change is a potential increase in water levels at times. This pond will continue to function as suitable habitat for overwintering turtles, if they occur, during construction and operations of the Project. Therefore, no impacts to this species or its habitat are anticipated.

As noted, a portion of the woodlands on the Site lie within the existing, approved extraction area and so may, with time, be removed to accommodate the approved aggregate extraction.

The Study Area, outside of the Site, also contains potential habitat for several endangered and threatened species (Appendix E). However, no off-Site impacts are predicted because of the Project, and therefore no impacts to these potential habitats are anticipated.

Standard mitigation measures to protect adjacent natural areas during construction are outlined in Section 7.

6.6 Aquatic and Fish Habitat

The pond at the eastern edge of the Site contains fish and would likely be considered fish habitat per the definition in the *Fisheries Act*. As described in the SWM report (WSP 2026), there will be no in-water works within this pond, and with proposed surface water mitigation, it is not anticipated that any deleterious substances will enter the waterbody. The only predicted change is a potential increase in water levels at times. Therefore, there are no anticipated impacts to fish habitat on the Site from the Project. Since the pond is a flooded man-made aggregate pit (i.e., an artificial waterbody) and is not connected to any other waterbodies that contain fish, a review by DFO is not required (Canada 2025).

Additional, but minimal fish habitat may also occur outside of the Site within the Study Area. However, no off-Site impacts are predicted because of the Project, and therefore no impacts potential off-Site fish habitat are anticipated.

7 MITIGATION AND MONITORING

Based on our documentation and assessment of the existing natural features at the Site and in the Study Area, the proposed Project is not expected to result in negative effects on the natural environment, provided the following mitigation measures and best practices are implemented:

- To minimize impacts to wildlife during construction, the follow standard practices should be followed.
  - Confining disturbance to the demarcated work area of the Site already permitted for aggregate extraction activities.
  - Adhering to all timing windows described below.
  - Manage the construction site by ensuring food waste is properly disposed of, no storage of materials outside the work area, covering any stockpiled materials, and avoiding the accumulation of standing water.
  - Conduct daily sweeps of the work area for wildlife, and if present, allow them to leave the work area of their own accord. Conduct sweeps of machinery if it has been idle overnight or during work breaks.
  - If wildlife will not or are unable to leave the work area on their own (e.g., are injured or trapped), contact the project biologist, a wildlife rehabilitator, or other wildlife expert for advice. Staff should not attempt to capture or handle most kinds of wildlife, unless an animal is in imminent peril or is injured and cannot wait for rescue by qualified personnel.
- Although most of the vegetation on-Site will not be affected by the Project, some patches of vegetation and individual trees will be removed. Where clearing is proposed, any works that may impact nesting birds must comply with the MBCA and any disturbance of vegetation at the edges of the work area should only take place outside of the core nesting period for breeding birds (i.e., April 1 to August 31) unless nesting surveys

are undertaken in advance by qualified biologists. If any nests are observed, they must be buffered from disturbance and remain buffered until the nest is no longer active.

- The remnant building on the Site showed evidence of nesting by birds protected under the MBCA [e.g., American Robin (*Turdus migratorius*)]. To avoid contravention of the MBCA, this building should be demolished outside of the core nesting period for breeding birds (i.e., April 1 to August 31).
- Although little to no bat habitat is expected to be removed as part of the Project, for due diligence, since targeted bat surveys were not completed, tree removal, or removal of the building on the Site should not occur during the active bat season. MECP recommends avoidance of clearing activities during April 1 – November 30; however, bats are more likely to be encountered during the core of this period. If clearing needs to occur within this period, it should be done under direction of a qualified biologist.
- No in-water works within the existing pond at the east end of the Site are anticipated. However, if this changes, a qualified ecologist should be consulted for advice as it relates to permitting and authorizations, timing windows, significant features, and potential for fish and wildlife rescues.
- To ensure no impacts to surface water features outside of the Project footprint, including off-Site in the Study Area, follow all recommendations and mitigation presented in the Stormwater Management Plan (WSP 2026).
- Implement a sediment and erosion control plan to mitigate the potential for release of sediments the pond at the eastern edge of the Site. The sediment and erosion control measures are to be installed prior to site works, be maintained, regularly inspected, and repaired as required during the construction phase, and removed post-construction.
- Implement construction best management practices, including:
  - Refueling and equipment washing to occur at least 30 m from wetlands and watercourses.
  - Preparation of a Spills Management Plan – to be kept on-Site.
  - No stockpiling or storage of construction materials or soils outside the delineated work area.
  - Ensure all equipment is cleaned prior to transportation and use on the Site to avoid the spread or introduction of invasive species on the Site.

By implementing the mitigation measures outlined above, it is expected that there will be no negative impacts to the natural environment as a result of the proposed Project.

No monitoring, except for regular monitoring of sediment and erosion control measures during construction, are proposed or warranted.

8 CONCLUSIONS AND RECOMMENDATIONS

The proposed Project consists of construction and operation of an RMC plant within an existing aggregate extraction operation (disturbed area). Based on this assessment, it is expected that there will be no negative impacts to the natural features and functions on the Site, or in the Study Area due to the proposed Project, provided the mitigation measures listed in this EIS are implemented.

9 LIMITATIONS

This report was prepared for the exclusive use of Sunrock Industries Canada ULC. The report, which specifically includes all tables, figures and attachments, is based on data and information collected by WSP and is based solely on the conditions of the properties at the time of the work, supplemented by historical information and data obtained by WSP as described in this report.

Electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore authenticity of any electronic media versions of WSP's report should be verified.

WSP has relied in good faith on all information provided and does not accept responsibility for any deficiency, misstatements, or inaccuracies contained in the report as a result of omissions, misinterpretation, or fraudulent acts of the persons contacted or errors or omissions in the reviewed documentation.

The services performed, as described in this report, were conducted in a manner consistent with that level of care and skill normally exercised by other members of the engineering and science professions currently practicing under similar conditions, subject to the time limits and financial and physical constraints applicable to the services.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based on it, are the responsibilities of such third parties. WSP accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The findings and conclusions of this report are valid only as of the date of this report. If new information is discovered in future work, including excavations, borings, or other studies, WSP should be requested to re-evaluate the conclusions of this report, and to provide amendments as required.

Signature Page

We trust that the information presented in this report meets your current requirements. Should you have any questions or concerns, please do not hesitate to contact the undersigned

WSP Canada Inc.

Fergus Nicoll Dip.T.
Senior Ecologist

Gwendolyn Weeks, H.B.Sc.Env.
Lead Ecologist

FN/GW/al/ld

https://wsponlinecan.sharepoint.com/sites/ca-ca0054344.1346/shared documents/06. deliverables/ecology scoped eis/ca0054344.1346 - r - sunrock ready-mix plant - hillis road_scoped eis march_18_2026_finalfn.docx

REFERENCES

Bat Conservation International (BCI). 2026. Range Maps. Available: http://batcon.org/index.php/all-about-bats/species-profiles.html.

Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier, editors. 2007. Atlas of the Breeding Birds of Ontario. Co-published by Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp. ISBN 978-1-896059-15-0.

Canada, Government of (Canada). 1985. *Fisheries Act*. R.S.C. 1985, c. F-14.

Canada, Government of (Canada). 1994. *Migratory Birds Convention Act*. S.C. 1994, c. 22.

Canada, Government of (Canada). 2002. *Species at Risk Act.* S.C. 2002, c. 29.

Canada, Government of (Canada). 2025. Projects Near Water. Available: https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html

DFO (Fisheries and Oceans Canada). 2019. Fish and Fish Habitat Protection Policy Statement, August 2019. Ecosystem Programs Policy. Her Majesty the Queen in Right of Canada. Available: https://www.dfo-mpo.gc.ca/pnw-ppe/policy-politique-eng.pdf

DFO (Fisheries and Oceans Canada). 2020. Projects Near Water. Available: http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html.

DFO (Fisheries and Oceans Canada). 2026. Aquatic Species at Risk Mapping (Online). Available: http://www.dfo-mpo.gc.ca/species-especes/fpp-ppp/index-eng.htm

Dobbyn, J.S. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists, Toronto. 120 pp.

eBird. 2026. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org.

Environment and Climate Change Canada (ECCC). 2026. Species at Risk Public Registry. Available: http://www.registrelep-sararegistry.gc.ca/sar/index/default_e.cfm.

iNaturalist. 2026. Observations of species at risk from the Study Area. Retrieved from iNaturalist: https://www.inaturalist.org

Jones, C., R. Layberry, and A. Macnaughton. 2026. Ontario Butterfly Atlas Online. Toronto Entomologists' Association. Available: http://www.ontarioinsects.org/atlas_online.htm.

Land Information Ontario. 2026. Available: https://geohub.lio.gov.on.ca/.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, South Central Region, Science Development and Transfer Branch. SCSS Field Guide FG 02.

Leslie J. 2018. Vascular Plants at Risk in Ontario. Savanta Inc. May 2018. Available: http://cms.savanta.ca/sites/default/files/2018-08/SAR_Document_2018_05_25_1.pdf. 96 p.

Long Associates Consulting Ltd. June 1995. Site Plans for Dunford Pit (License No. P732136). Part of Lot 6, Concession 3, Township of Smith, County of Peterborough.

Ontario, Government of (Ontario) 1990a. *Aggregate Resources Act*, R.S.O. 1990, Chapter A.8. Government of Ontario.

Ontario, Government of (Ontario). 1990b. *Planning Act*, R.S.O. 1990, Chapter P.13.

Ontario, Government of (Ontario). 1990c. *Conservation Authorities Act*, R.S.O 1990, c. C. 27.

Ontario, Government of (Ontario). 2007. *Endangered Species Act*. S.O. 2007.

Ontario, Government of (Ontario). 2025. *Protect Ontario by Unleashing our Economy Act.* Available: https://www.ola.org/sites/default/files/node-files/bill/document/pdf/2025/2025-06/b005ra_e.pdf

Ontario Ministry of the Environment, Conservation and Parks (MECP). 2026. Species At Risk in Ontario List. Queens Printer for Ontario. Available: http://www.ontario.ca/environment-and-energy/species-risk-ontario-list.

Ontario Ministry of Municipal Affairs and Housing (MMAH). 2024. http://www.mah.gov.on.ca/Page1485.aspx. Ontario Ministry of Municipal Affairs and Housing.

Ontario Ministry of Natural Resources (MNR). 2000. Significant Wildlife Habitat Technical Guide (SWHTG). 151 pp.

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

Ontario Ministry of Natural Resources (MNR). 2015. Significant Wildlife Habitat 6E Criterion Schedule. 39 pp.

Ontario Ministry of Natural Resources (MNR). 2022. Ontario Wetland Evaluation System – Southern Manual (OWES). Third Edition, Version 3.3. Queen's Printer for Ontario.

Ontario Ministry of Natural Resources (MNR). 2026a. Make-a-Map Natural Heritage Explorer. Available: http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US

Ontario Ministry of Natural Resources (MNR). 2026b. Land Information Ontario, Aquatic Resources Area Layer. Fisheries Section, Species Conservation Policy Branch.

Ontario Ministry of Natural Resources (MNR). 2026c. Ontario Land Cover Compilation. Science and Research Branch, Ministry of Natural Resources and Forestry.

Ontario Nature. 2019. Ontario Reptile and Amphibian Atlas. Available: http://www.ontarionature.org/protect/species/herpetofaunal_atlas.php.

Peterborough, County of (Peterborough). 1994. Official Plan

Selwyn, Township of (Selwyn). 2025. The Corporation of the Township of Selwyn Comprehensive Zoning By-Law (By-Law No. 2009-021). Office Consolidation up to and including By-law No. 2024-077 (January 31, 2025). Available: https://www.selwyntownship.ca/media/dthjiuxd/zoning-by-law-2009-021-office-consolidation-january-2025.pdf

WSP Canada Inc. (WSP). 2026. Sunrock Ready-Mix Plant - Hillis Road Stormwater Management Report.

FIGURE

KEY MAP

SCALE: 1:100,000

LEGEND

- SUBJECT LANDS
- EXCAVATION AREA
- ECOLOGICAL LAND CLASSIFICATION (ELC)
- WATERBODY
- PROVINCIALLY SIGNIFICANT WETLAND

ELC	DECRIPTION
AGRC	Agricultural Fields
DIS/REG	Disturbed/Regenerating Old Pit Area
FOC	Coniferous Forest
FOD5-8	Dry to Fresh Sugar Maple – White Ash – Red Oak Deciduous Forest
FOM	Mixed Forest
FOM5	Dry to Fresh White Birch-Poplar-Mixed Forest
RES	Residential
SWC	Coniferous Swamp
SWC3-1	White Cedar Organic Coniferous Swamp

0 40 80 160

1:3,500 METRES

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. BASE MAP: SOURCES: ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY, NEW YORK STATE, VANTOR
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
SUNROCK INDUSTRIES CANADA ULC

PROJECT
HILLIS PIT READY MIX PLANT ENVIRONMENTAL IMPACT STUDY
HILLIS PIT, ONTARIO

TITLE
SITE AND ECOLOGICAL LAND CLASSIFICATION

CONSULTANT

wsp

YYYY-MM-DD	2026-03-16
DESIGNED	FN
PREPARED	SSD
REVIEWED	FN
APPROVED	GW

PROJECT NO.	CONTROL	REV	FIGURE
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APPENDIX A

Terms of Reference

December 3, 2024 Project No. 2024CA331346

Ms. Marnie Guindon, Planning & Regulations Officer
Otonabee Conservation Authority
250 Milroy Dr
Peterborough, ON K9H 7M9

SUNROCK INDUSTRIES CANADA CONCRETE READY-MIX PLANT ON 424 HILLIS ROAD, PETERBOUROUGH, ON; SCOPED ENVIRONMENTAL IMPACTS STUDY (EIS) TERMS OF REFERENCE (TOR)

Dear Mr Lundberg and Ms. Guidon,

WSP Canada Inc (WSP) has been requested by Sunrock Industries Canada (Sunrock), to prepare a proposal for a Environmental Impact Study in support of a Zoning By-law Amendment Application for the development of a ready-mix concrete plant operation on 424 Hillis Road in the Township of Selwyn. We are contacting you to confirm the scope of work (ToR) required for the EIS. The application is to permit the proposed concrete ready-mix plant use at 424 Hillis Road.

Thank you in advance for your guidance and input to the preparation of the scope of work/terms of reference (ToR) for the EIS. We are circulating our proposed ToR for peer review clearance by the County of Peterborough and the Otonabee Conservation Authority as requested on the Application Checklist appended to the Record of Pre-consultation dated January 17, 2024. The proposed ToR are also shared with the Town for potential comments and feedback.

1.0 INTRODUCTION AND BACKGROUND

The Hillis Road site is currently licensed by the Ministry of Natural Resources under the Aggregate Resources Act (ARA) (Class A License 3293) for aggregate pit extraction with a maximum of 127,000 tonnes of aggregate leaving the site annually. The licenced pit is located to the west of the intersection of Highway 12 and Hillis Rd. The construction of a new Sunrock concrete ready-mix plant (see Figure 1a) is proposed within the pit license. Sunrock does not plan to apply for any increase to this maximum annual tonnage, but does intend to extract, sell and distribute aggregate under the existing ARA licence. The site is an active gravel extraction site and is zoned accordingly. We note that the current municipal zoning designation is Extractive Industrial (M3) and Environmental Projection (EP).

Sunrock is planning to develop the proposed concrete ready-mix plant within the ARA licence on 424 Hillis Road west of County Road 12. Access to the plant is proposed to be at the existing site driveway, situated approximately 395 m west of the centreline of Country Road 12. Operations of the plant are expected to commence in 2025.

The site is part of a sub-catchment of an unnamed creek, which is a tributary of Jackson River that eventually discharges into Little Lake (see Figure 1b). WSP understands that the site currently discharges surface runoff through a culvert crossing along the roadside ditch of Hwy 12 across Hillis Rd.

Given that the proposal does not involve the expansion of the site, or changes to depth of extraction and the potential for impacts to the natural environment are focused on the potential effects of storm water management and associated discharges to the natural environment. After reviewing the current County's Official Plan and the Otonabee Conservation Authority Watershed Planning & Regulations Policy Manual, and the new conservation Authority Regulation 41, the following ToR and its associated tasks are provided.

The following tasks describe the proposed ToR for the current project, to help protect the surrounding environment.

2.0 SCOPED EIS

Applicable Policy

Provincial Planning Statement (2024)

Given that the site is currently licensed under the ARA for extraction and proposed on-site addition of the Ready Mix plant is within the area subject extractive activities, potential impacts are generally associated with on potential 'Adjacent land' impacts.

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

County of Peterborough Official Plan (1995)

Policy 2.6 of The County of Peterborough Official Plan (1994) indicated that the County and/or Townships may requires the completion and submission of an Environmental Impact Analysis in the consideration of a development proposal and applications made under the Planning Act.

Policy 4.1.3.1 outline the requirements for the completion of an Environmental Impact Assessment to ensure that there will be no negative impact on the natural features or ecological functions for which the area is identified.

Policy 4.1.3.4 states that development and site alteration shall not be permitted on adjacent lands to natural heritage features unless the ecological function of the adjacent lands has been evaluated in accordance with an environmental impact assessment as described in Section 4.1.3.1 and it has been determined that there will be no new negative impacts on the natural features or on their ecological functions.

Scoped EIS Work Plan

As noted, the site is currently licensed under the ARA for extraction and proposed on-site addition of the Ready Mix plant is within the area subject extractive activities (see MHBC concept Plan attached), potential impacts are generally associated with potential 'Adjacent land' impacts. The work plan for the Scopes EIS is as follows:

Task 1 - Desktop Data Review

WSP will complete a desktop review of data and information available in the study area plus a 1 km buffer using information available from sources including but not limited to:

- Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC) Make-a-Map geographic explorer for species at risk (SAR) and natural areas information queries
- Readily available MNRF mapping and existing studies, as well as any additional information from the MNRF and Ministry of the Environment, Conservation and Parks (MECP) obtained through a data request
- Information (including any watershed studies and wetland mapping) and mapping available through the Town of Tecumseh, Essex County, or Essex Region Conservation Authority (ERCA)
- SAR range mapping to determine if the site falls within the range for species regulated under the Ontario *Endangered Species Act, 2007* (ESA) and the federal *Species at Risk Act* (SARA)
- Ontario species atlases (breeding birds, mammals, reptiles and amphibians, butterflies)
- Bat Conservation International (BCI) range maps
- Citizen science databases (eBird, iNaturalist)
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Map
- MNRF Land Information Ontario (LIO) Aquatic Resources Area Layer
- MNRF Fish On-Line
- City of Windsor Official Plan
- Information contained in natural heritage related map layers from Ontario Base Map series, Natural Resource Values Information System (NRVIS) mapping and/or LIO
- Existing aerial photography

The results of the desktop review will be used to identify significant natural heritage features, or functions, that occur or have the potential to occur in the study area. The background data will also be used to screened for potential occurrences of SAR listed under the ESA and/or SARA as described below.

Task 2 - Site Reconnaissance and Assessment of Existing Conditions

Existing conditions for the Study Area will be documented through a combination of background review and a site-specific surveys. The natural heritage study area will include a 120-m zone of investigation around the property consistent with provincial standards of assessment but limited to those lands accessible at the time of study. The site is licensed under the Aggregate Resources Act and existing on-site condition are well documented. The site will be used to confirm existing condition and document Natural heritage condition on adjacent lands. Based on the proposed addition of a of Ready Mix plant within the area of an active aggerate site, the field program is recommended to be scoped to one site visit:

- One floristic survey including ELC delineation;
- General wildlife survey and habitat assessment.

The EIS will include an assessment of potential candidate significant wildlife habitat (SWH) based on on-site features, observed species occurrences and comparison of ELC communities to the SWH criteria types, using the Significant Wildlife Habitat Technical Guide and Ecoregion 7E Criteria Schedule. Species at Risk (SAR) Screening Assessment will be completed for potential species and habitat of species at risk and rare species to occur on site assessed using habitat suitability assessments based on site ELC and other features observed during field surveys.

SAR specific surveys (e.g., bat acoustic surveys) that may potential be required by MECP are not included in these terms of reference given that there is no proposed clearing of vegetation.

Task 3 - Impact Evaluation

WSP will assess potential impacts that development of the Ready-Mix facility at the site may have on the natural heritage features and/or functions that are not permitted for disturbance under the current ARA licence and in the study area (Adjacent Lands). WSP will identify any natural environment regulatory constraints that may affect development limits on the site. Impacts will be identified as direct (those that will occur on the site) and indirect (those affecting features and functions off-site) in the context of both municipal and provincial policy considerations. The EIS will identify constraints specific storm water management and provide recommendations for the storm water plan.

WSP will include recommended design and mitigation measures (e.g. sediment and erosion fencing) to minimize potential impacts to the natural features in the study area and will identify the need for any permits or additional requirements, if necessary.

A scoped EIS report, including appropriate figures, will be completed and submitted as part of the scope of work and will include the results of the natural heritage inventory and analysis, and an assessment of impacts from potential addition of the Ready-Mix facility at the site. Potential permits, mitigation measures and monitoring requirements will also be identified in the report.

3.0 CLOSURE

We trust that these scoped EIS Terms of Reference meets with approval of the County of Peterborough, the Township of Selwyn and the Otonabee Conservation Authority. We respectfully request your acknowledgement in this regard.

If you have any questions or require clarification with respect to these terms, please do not hesitate to contact us at your convenience and we would be happy to discuss the requirements further.

WSP Canada Inc.

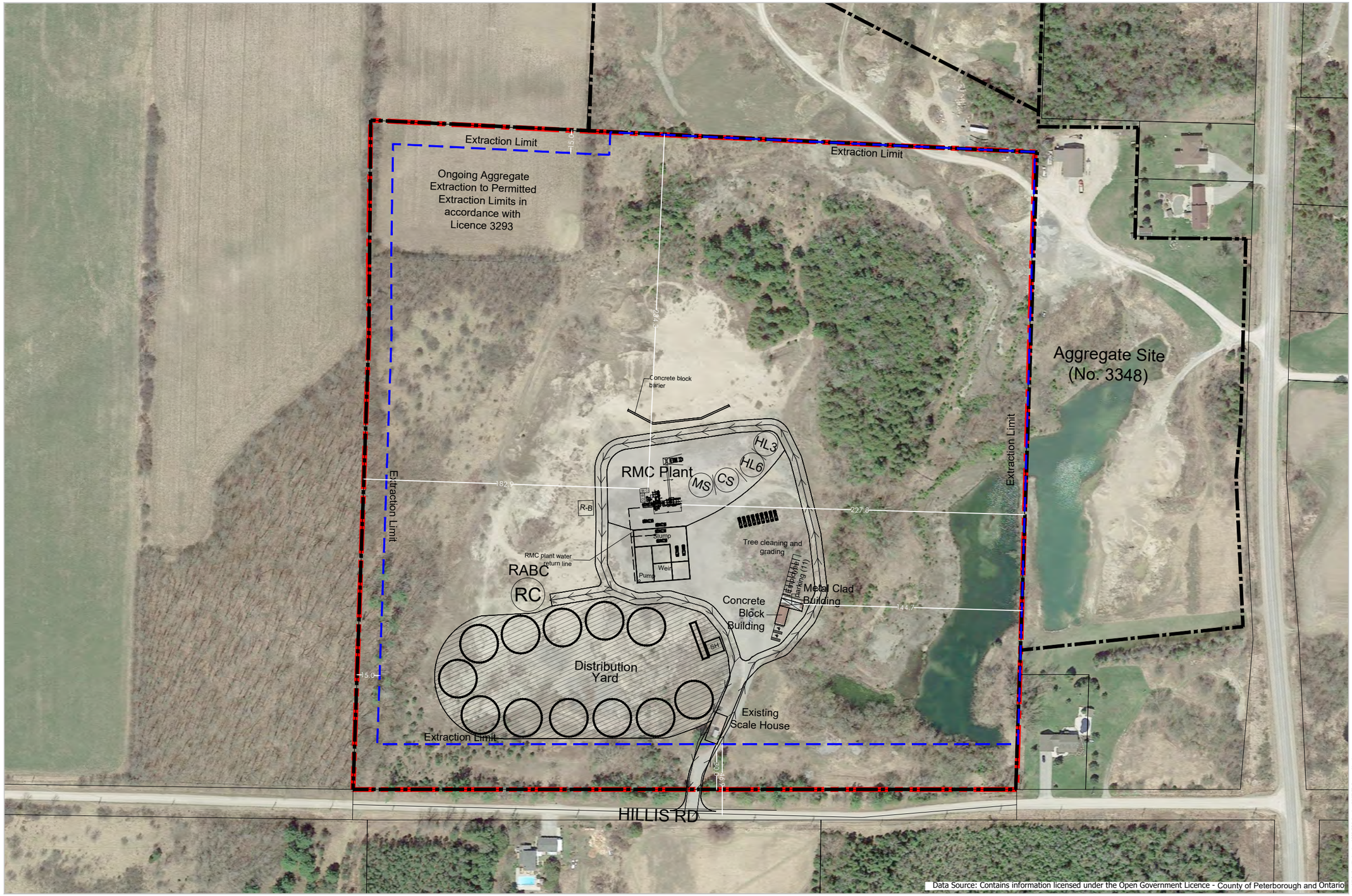
Daniel Eusebi, BES RPP MCIP
Senior Principal Ecologist

APPENDIX B

Concept Plan

Figure 5 - Concept Plan

Subject Lands
Licence Boundary
Excavation Setback Limit



APPENDIX C

Site Photos

Photo 1: Overview of Core of Site, Disturbed Aggregate Resource Extraction, November 2025

Photo 2: FOD5-8 Dry to Fresh Sugar Maple – White Ash – Red Oak Deciduous Forest, November 2025

Photo 3: Small Patch of Meadow with FOM5 Dry to Fresh White Birch – Poplar Mixed Forest in Background, November 2025

Photo 4: SWC3-1 White Cedar Organic Coniferous Swamp, November 2025

Photo 5: Pond at Eastern Edge of Site, November 2025

Photo 6: Small Patch of Immature Trees that Overlaps the Project Footprint, November 2025

Photo 7: On-Site Building with old American Robin Nest, November 2025

Photo 8: Jackson Creek Wetland Complex PSW in Study Area, November 2025

APPENDIX D

Species List

APPENDIX D
Plant List

Scientific name	Common Name	Native Status[a]	G_rank[b]	S_rank[b]	SARA Status[c]	ESA Status[d]
Abies balsamea	Balsam Fir	N	G5	S5	-	-
Acer negundo	Manitoba Maple	N	G5	S5	-	-
Acer rubrum	Red Maple	N	G5	S5	-	-
Acer saccharum	Sugar Maple	N	G5	S5	-	-
Achillea millefolium	Common Yarrow	I	G5	SNA	-	-
Alliaria petiolata	Garlic Mustard	I	GNR	SNA	-	-
Betula papyrifera	Paper Birch	N	G5	S5	-	-
Bromus inermis	Smooth Brome	I	G5T5	SNA	-	-
Carex spp.	Sedges	N/A			-	-
Dactylis glomerata	Orchard Grass	I	GNR	SNA	-	-
Danthonia spicata	Poverty Oatgrass	N	G5	S5	-	-
Daucus carota	Wild Carrot	I	GNR	SNA	-	-
Desmodium sp.	Tick-trefoil sp.	N			-	-
Echium vulgare	Common Viper's Bugloss	I	GNR	SNA	-	-
Epilobium ciliatum	Northern Willowherb	N	G5	S5	-	-
Equisetum arvense	Field Horsetail	N	G5	S5	-	-
Fraxinus americana	White Ash	N	G4	S4	-	-
Juniperus virginiana	Eastern Red Cedar	N	G5	S5	-	-
Malus pumila	Common Apple	I	G5	SNA	-	-
Melilotus sp.	Sweet-clover sp.	N/A	GNR	SNA	-	-
Ostrya virginiana	Eastern Hop-hornbeam	N	G5	S5	-	-
Phleum pratense	Common Timothy	I	GNR	SNA	-	-
Phragmites australis ssp. australis	European Reed	I	G5T5	SNA	-	-
Pilosella sp.	Hawkweed sp.	I	GNR	SNA	-	-
Pinus banksiana	Jack Pine	N	G5	S5	-	-
Pinus strobus	Eastern White Pine	N	G5	S5	-	-
Plantago lanceolata	English Plantain	I	G5	SNA	-	-
Poa compressa	Canada Bluegrass	I	GNR	SNA	-	-
Poa palustris	Fowl Bluegrass	N	G5	S5	-	-
Populus balsamifera	Balsam Poplar	N	G5	S5	-	-
Populus tremuloides	Trembling Aspen	N	G5	S5	-	-
Potentilla norvegica	Rough Cinquefoil	N	G5	S5	-	-
Prunus serotina	Black Cherry	N	G5	S5	-	-
Pteridium aquilinum	Bracken Fern	N	G5	S5	-	-
Quercus rubra	Red Oak	N	G5	S5	-	-
Rhamnus cathartica	European Buckthorn	I	GNR	SNA	-	-
Rhus typhina	Staghorn Sumac	N	G5	S5	-	-
Robinia pseudoacacia	Black Locust	I	G5	SNA	-	-
Rubus idaeus	Red Raspberry	N	G5	S5	-	-
Salix sp.	Willow sp.	N/A			-	-
Solidago caesia	Blue-stemmed Goldenrod	N	G5	S5	-	-
Solidago canadensis var. canadensis	Canada Goldenrod	N	G5T5	S5	-	-
Symphyotrichum novae-angliae	New England Aster	N	G5	S5	-	-
Symphyotrichum spp.	Asters	N			-	-
Thuja occidentalis	Eastern White Cedar	N	G5	S5	-	-
Trifolium pratense	Red Clover	I	GNR	SNA	-	-
Trifolium repens	White Clover	I	GNR	SNA	-	-
Tussilago farfara	Coltsfoot	I	GNR	SNA	-	-
Verbascum thapsus	Common Mullein	I	GNR	SNA	-	-
Vicia cracca	Tufted Vetch	I	GNR	SNA	-	-
Vitis riparia	Riverbank Grape	N	G5	S5	-	-
Xanthium strumarium	Rough cocklebur	N	G5	S5	-	-

[a] Origin: N = Native; (N) = Native but not in study area region; I = Introduced.

[b] Ranks based upon determinations made by the Ontario Natural Heritage Information Centre.
G = Global; S = Provincial; Ranks 1-3 are considered imperiled or rare; Ranks 4 and 5 are considered secure.
SNA = Not applicable for Ontario Ranking (e.g. Exotic species)

[c] Canada Species at Risk Act (Schedule 1)

[d] Ontario Endangered Species Act (O.Reg.230/08)

Common Name	Scientific Name	Native Status[a]	G-rank[b]	S-rank[b]	ESA Status[c]	SARA Status[d]
Northern Leopard Frog	*Lithobates pipiens*		G5	S5	NAR	
American Crow	*Corvus brachyrhynchos*		G5	S5		
American Goldfinch	*Spinus tristis*		G5	S5		
American Tree Sparrow	*Spizelloides arborea*		G5	S5		
Black-capped Chickadee	*Poecile atricapillus*		G5	S5		
Blue Jay	*Cyanocitta cristata*		G5	S5		
Brown Creeper	*Certhia americana*		G5	S5		
Dark-eyed Junco	*Junco hyemalis*		G5	S5		
Downy Woodpecker	*Dryobates pubescens*		G5	S5		
European Starling	*Sturnus vulgaris*		G5	SNA		
Mourning Dove	*Zenaida macroura*		G5	S5		
Red-tailed Hawk	*Buteo jamaicensis*		G5	S5	NAR	
White-breasted Nuthatch	*Sitta carolinensis*		G5	S5		
Wild Turkey	*Meleagris gallopavo*		G5	S5		
Eastern Gray Squirrel	*Sciurus carolinensis*		G5	S5		
Meadow Vole	*Microtus pennsylvanicus*		G5	S5		
Red Fox	*Vulpes vulpes*		G5	S5		
Red Squirrel	*Tamiasciurus hudsonicus*		G5	S5		
White-tailed Deer	*Odocoileus virginianus*		G5	S5		
Woodchuck	*Marmota monax*		G5	S5		

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[c] Canada Species at Risk Act (Schedule 1)

[d] Ontario Endangered Species Act (O.Reg.230/08)

APPENDIX E

Species at Risk Screening

Taxon	Common Name	Scientific Name	[a]S-rank	[b]ESA Status	[c]SARA Status	[d]COSEWIC Status	COSSARO Status	Habitat Requirements	Probability to Occur on the Site	Probability to Occur in the Study Area
Amphibians	Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population	*Pseudacris triseriata pop. 1*	S4		THR	THR		In Ontario, Western Chorus Frogs breed in temporary or shallow permanent wetlands including ponds, basins, marshes, swamps, and drainage ditches. They are known to forage in terrestrial habitats including pastures, clearings, meadows, and shrublands. Hibernation occurs in terrestrial lowlands with vegetation, soft substrate, dead leaves, woody debris, or burrows (Environment Canada 2014).	Low - The surface water features on the Site are not suitable habitat for this species, as they contain permanent water and fish.	Moderate - The Jackson Creek PSW south of Hillis road may contain likely contains suitable habitat.
Birds	Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	THR	In Ontario, bank swallow breeds in a variety of natural and anthropogenic habitats, including lake bluffs, stream and riverbanks, sand and gravel pits, and roadcuts. Nests are generally built in a vertical or near-vertical bank. Breeding sites are typically located near open foraging sites such as rivers, lakes, grasslands, agricultural fields, wetlands and riparian woods. Forested areas are generally avoided (Garrison 1999).	Low - Banks or other suitable features for breeding are not present on Site.	Moderate - potential habitat for nesting may be present off-Site within the Study Area.
Birds	Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	SC	In Ontario, barn swallow breeds in areas that contain a suitable nesting structure, open areas for foraging, and a body of water. This species nests in human made structures including barns, buildings, sheds, bridges, and culverts. Preferred foraging habitat includes grassy fields, pastures, agricultural cropland, lake and river shorelines, cleared rights-of-way, and wetlands (COSEWIC 2011). Mud nests are fastened to vertical walls or built on a ledge underneath an overhang. Suitable nests from previous years are reused (Brown and Brown 2019).	Low - Anthropogenic structures on-Site did not contain barn swallow nests.	High - Anthropogenic structures associated with agricultural operations within the Study Area likely provide suitable nesting habitat. Recent observations occur at the neighbouring property (444 Hillis Road).
Birds	Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	SC	THR	In Ontario, bobolink breeds in grasslands or graminoid dominated hayfields with tall vegetation (Gabhauer 2007). Bobolink prefers grassland habitat with a forb component and a moderate litter layer. They have low tolerance for presence of woody vegetation and are sensitive to frequent mowing within the breeding season. They are most abundant in established, but regularly maintained, hayfields, but also breed in lightly grazed pastures, old or fallow fields, cultural meadows and newly planted hayfields. Their nest is woven from grasses and forbs. It is built on the ground, in dense vegetation, usually under the cover of one or more forbs (Renfrew et al. 2015).	Low - Site is heavily disturbed with no grasslands present.	Moderate - Agricultural fields in the Study Area may provide suitable nesting habitat
Birds	Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	SC	In Ontario, breeding habitat for Canada warbler consists of moist mixed forests with a well-developed shrubby understory. This includes low-lying areas such as cedar and alder swamps, and riparian thickets (McLaren 2007). It is also found in densely vegetated regenerating forest openings. Suitable habitat often contains a developed moss layer and an uneven forest floor. Nests are well concealed on or near the ground in dense shrub or fern cover, often in stumps, fallen logs, overhanging stream banks or mossy hummocks (Reitsma et al. 2010).	Low - The forests on the Site are not of the suitable size and structure for this species.	Moderate - Forests within the Study Area may provide suitable nesting habitat
Birds	Cerulean Warbler	*Setophaga cerulea*	S2B	THR	END	END	END	In Ontario, breeding habitat of cerulean warbler consists of second-growth or mature deciduous forest with a tall canopy of uneven vertical structure and a sparse understory. This habitat occurs in both wet bottomland forests and upland areas, and often contains large hickory and oak trees. This species may be attracted to gaps or openings in the upper canopy. The cerulean warbler is associated with large forest tracks but may occur in woodlots as small as 10 ha (COSEWIC 2010). Nests are usually built on a horizontal limb in the mid-story or canopy of a large deciduous tree (Buehler et al. 2013).	Low - The forests on the Site are not of the suitable size and structure for this species.	Moderate - Forests within the Study Area may provide suitable nesting habitat
Birds	Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	THR	In Ontario, chimney swift breeding habitat is varied and includes urban, suburban, rural and wooded sites. They are most commonly associated with towns and cities with large concentrations of chimneys. Preferred nesting sites are dark, sheltered spots with a vertical surface to which the bird can grip. Unused chimneys are the primary nesting and roosting structure, but other anthropogenic structures and large diameter cavity trees are also used (COSEWIC 2007).	Low - structures on-Site do not provide suitable nesting habitat	Moderate - structures within the Study Area may provide suitable nesting habitat
Birds	Common Nighthawk	Chordeiles minor	S4B	SC	SC	SC	SC	In Ontario, these aerial foragers require areas with large open habitat. This includes farmland, open woodlands, clearcuts, burns, rock outcrops, alvars, bogs, fens, prairies, gravel pits and gravel rooftops in cities (Sandilands 2007)	Low - no suitable undisturbed habitat occurs.	Moderate - the Study Area may provide suitable nesting or foraging habitat. No recent observations occur within the Study Area.

Taxon	Common Name	Scientific Name	[a]S-rank	[b]ESA Status	[c]SARA Status	[d]COSEWIC Status	COSSARO Status	Habitat Requirements	Probability to Occur on the Site	Probability to Occur in the Study Area
Birds	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	THR	THR	In Ontario, eastern meadowlark breeds in pastures, hayfields, meadows and old fields. Eastern meadowlark prefers moderately tall grasslands with abundant litter cover, high grass proportion, and a forb component (Hull 2019). They prefer well drained sites or slopes, and sites with different cover layers (Roseberry and Klimstra 1970).	Low - Site is heavily disturbed with no grasslands present.	Moderate - Agricultural fields in the Study Area may provide suitable nesting habitat
Birds	Eastern Whip-poor-will	Antrostomus vociferus	S4B	SC	THR	THR	SC	In Ontario, whip-poor-will breeds in semi-open forests with little ground cover. Breeding habitat is dependent on forest structure rather than species composition, and is found on rock and sand barrens, open conifer plantations and post-disturbance regenerating forest. Territory size ranges from 3 to 11 ha (COSEWIC 2009). No nest is constructed, and eggs are laid directly on the leaf litter (Mills 2007).	Low - The forests on the Site are not of the suitable structure for this species.	Moderate - Forests within the Study Area may provide suitable nesting habitat
Birds	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	SC	SC	In Ontario, eastern wood-pewee inhabits a wide variety of wooded upland and lowland habitats, including deciduous, coniferous, or mixed forests. It occurs most frequently in forests with some degree of openness. Intermediate-aged forests with a relatively sparse midstory are preferred. In younger forests with a relatively dense midstory, it tends to inhabit the edges. Also occurs in anthropogenic habitats providing an open forested aspect such as parks and suburban neighborhoods. Nest is constructed atop a horizontal branch, 1-2 m above the ground, in a wide variety of deciduous and coniferous trees (COSEWIC 2012).	Moderate - The forest at the western edge and northern half of the Site may provide suitable nesting habitat.	Moderate - Forests within the Study Area may provide suitable nesting habitat
Birds	Golden-winged Warbler	Vermivora chrysoptera	S3B	SC	THR	THR		In Ontario, golden-winged warbler breeds in regenerating scrub habitat with dense ground cover and a patchwork of shrubs, usually surrounded by forest. Their preferred habitat is characteristic of a successional landscape associated with natural or anthropogenic disturbance such as rights-of-way, and field edges or openings resulting from logging or burning. The nest of the golden-winged warbler is built on the ground at the base of a shrub or leafy plant, often at the shaded edge of the forest or at the edge of a forest opening (Confer et al. 2011).	Low - no suitable regenerating nesting habitat occurs.	Moderate - regenerating habitat within the Study Area may provide suitable habitat for nesting. N.
Birds	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	SC	SC	In Ontario, grasshopper sparrow is found in medium to large grasslands with low herbaceous cover and few shrubs. It also uses a wide variety of agricultural fields, including cereal crops and pastures. Close-grazed pastures and limestone plains (e.g. Carden and Napanee Plains) support highest density of this bird in the province (COSEWIC 2013).	Low - Site is heavily disturbed with no grasslands present.	Moderate - Agricultural fields in the Study Area may provide suitable nesting habitat
Birds	Least Bittern	Ixobrychus exilis	S4B	THR	THR	SC		In Ontario, least bittern breeds in marshes, usually greater than 5 ha, with emergent vegetation, relatively stable water levels and areas of open water. Preferred habitat has water less than 1 m deep (usually 10 – 50 cm). Nests are built in tall stands of dense emergent or woody vegetation (Woodliffe 2007). Clarity of water is important as siltation, turbidity, or excessive eutrophication hinders foraging efficiency (COSEWIC 2009).	None - Ponds on-site do not provide suitable large marsh habitat to support nesting.	Low - No suitable large marsh habitat is present.
Birds	Olive-sided Flycatcher	Contopus cooperi	S4B	SC	SC	SC	SC	In Ontario, olive-sided flycatcher breeding habitat consists of natural openings in coniferous or mixed forests, including bogs, burns, riparian zones, and cutover areas. They are also found in semi-open forest stands and early successional forest when tall snags and residual live trees are present. In the boreal forest it is often associated with muskeg, bogs, fens and swamps dominated by spruce and tamarack. Open areas with tall trees or snags for perching are used for foraging (COSEWIC 2007). Nests are usually built on horizontal branches of conifers (Peck and James 1987).	None - forested habitat on-Site is not suitable composition to provide breeding habitat.	Moderate - Forests within the Study Area may contarin suitable breeding habitat.
Birds	Red-headed Woodpecker	Melanerpes erythrocephalus	S3	END	END	END	END	In Ontario, red-headed woodpecker breeds in open, deciduous woodlands or woodland edges and are often found in parks, cemeteries, golf courses, orchards and savannahs (Woodliffe 2007). They may also breed in forest clearings or open agricultural areas provided that large trees are available for nesting. They prefer forests with little or no understory vegetation. They are often associated with beech or oak forests, beaver ponds and swamp forests where snags are numerous. Nests are excavated in the trunks of large dead trees (Frei et al. 2017).	Moderate - The forest at the western edge of the Site may provide suitable nesting habitat.	Moderate - Forests within the Study Area may provide suitable nesting habitat

Taxon	Common Name	Scientific Name	[a]S-rank	[b]ESA Status	[c]SARA Status	[d]COSEWIC Status	COSSARO Status	Habitat Requirements	Probability to Occur on the Site	Probability to Occur in the Study Area
Birds	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	THR	SC	In Ontario, wood thrush breeds in moist, deciduous hardwood or mixed stands that are often previously disturbed, with a dense deciduous undergrowth and with tall trees for singing perches. This species selects nesting sites with the following characteristics: lower elevations with trees less than 16 m in height, a closed canopy cover (>70 %), a high variety of deciduous tree species, moderate subcanopy and shrub density, shade, fairly open forest floor, moist soil, and decaying leaf litter (COSEWIC 2012).	Moderate - forested habitat on-Site at the northern and western rportions of the Site may provide suitable habitat for breeding.	Moderate - Forests within the Study Area may provide suitable nesting habitat
Insects	American Bumble Bee	Bombus pensylvanicus	S3S4	SC	SC	SC	SC	This bumble bee species is found in open grassland habitats, including agricultural fields and meadows. It builds nests in tufts of grass, old bird nests, rock piles, mammal burrows or cavities of trees (Hatfield et al. 2015).	Moderate - the mosaic of habitats on Site may be suitable habitat for this species.	Moderate - the Study Area provides potential for suitable habitat. Recent observations have occurred within the City of Peterborough, south east of the Site ~ 6.5 km.
Insects	Monarch	Danaus plexippus	S2N,S4B	SC	END	END	SC	In Ontario, monarch is found throughout the northern and southern regions of the province. This butterfly is found wherever there is milkweed (Asclepias spp.) plants for its caterpillars and wildflowers that supply a nectar source for adults. It is often found on abandoned farmland, meadows, open wetlands, prairies and roadsides, but also in city gardens and parks. Important staging areas during migration occur along the north shores of the Great Lakes (COSEWIC 2010).	Moderate - Although not observed, milkweed and nectar source plants may be present on the Site.	Moderate - Potential for milkweed to occur within the Study Area. Recent observations occur within 1 km, north of the Site
Insects	Yellow-banded Bumble Bee	Bombus terricola	S3S5	SC	SC	SC	SC	Yellow-banded bumblebee is a forage and habitat generalist, occupying open woodlands, meadows, grasslands, farmlands and urban parks, and taking nectar from various flowering plants (COSEWIC 2015). It is an early emerging species, making it likely an important pollinator of early blooming wild flowering plants (e.g. wild blueberry) and agricultural crops (e.g., apple). Nest sites are often in abandoned rodent burrows in old fields and queens overwinter by burrowing into loose soil or rotting trees (COSEWIC 2015).	Moderate - the mosaic of habitats on Site may be suitable habitat for this species.	Moderate - the mosaic of habitats in the Study Area may be suitable habitat for this species.
Mammals	Eastern Red Bat	Lasiurus borealis	S2S3	END		END	END	Eastern Red Bats occupy a wide diversity of habitats across their geographic range. They use both deciduous and coniferous forests, of any age class. Trees used as maternity roosts tend to be large diameter and tall, reaching or exceeding the height of the surrounding canopy. They typically roost among the foliage of trees and occasionally shrubs. Male Eastern Red Bats in particular have been observed to use saplings as roosts, which is rarely reported for reproductive females. They forage in both forested and non-forested habitats. Heavily disturbed habitats are generally avoided. Eastern Red Bats migrate to overwintering areas in the southern United States but their migration routes are not known.	Moderate - Forests on the Site may provide suitable roosting habitat	Moderate - Forests in the Study Area may provide suitable roosting habitat
Mammals	Eastern Small-footed Myotis	Myotis leibii	S2S3	END			END	In Ontario, eastern small-footed myotis is not known to roost in trees, but there is very little known about its roosting habits. The species generally roosts on the ground under rocks, in rock crevices, talus slopes and rock piles, but it occasionally inhabits buildings. Entrances of caves or abandoned mines where humidity is low, and temperatures are cool and sometimes subfreezing may be used as hibernacula (Humphrey 2017).	Low - No suitable roosting habitat was observed on-Site	Moderate - Suitable roosting habitat may be present in theStudy Area.
Mammals	Little Brown Myotis	Myotis lucifugus	S3	END	END	END	END	In Ontario, this species' range is extensive and covers much of the province. It will roost in both natural and man-made structures. Roosting colonies require a number of large dead trees, in specific stages of decay and that project above the canopy in relatively open areas. May form nursery colonies in the attics of buildings within 1 km of water. Caves or abandoned mines may be used as hibernacula, but high humidity and stable above freezing temperatures are required (ECCC 2018).	Moderate - Forests on the Site may provide suitable roosting habitat.	Moderate - Forests and buildings in the Study Area may provide suitable roosting habitat.

Taxon	Common Name	Scientific Name	[a]S-rank	[b]ESA Status	[c]SARA Status	[d]COSEWIC Status	COSSARO Status	Habitat Requirements	Probability to Occur on the Site	Probability to Occur in the Study Area
Mammals	Northern Hoary Bat	Lasiurus cinereus	S2S3	END		END	END	Hoary Bats occupy a wide diversity of habitats across their geographic range. They use both deciduous and coniferous forests, of any age class. Trees used as maternity roosts tend to be large diameter and tall, reaching or exceeding the height of the surrounding canopy. They typically roost among the foliage of trees and occasionally shrubs. They forage in the open, and suitable habitats may include wetlands, grasslands and open fields with patchily distributed trees. Heavily disturbed habitats are generally avoided. Hoary Bats migrate to overwintering areas in the southern United States but their migration routes are not known.	Moderate - Forests on the Site may provide suitable roosting habitat	Moderate - Forests in the Study Area may provide suitable roosting habitat
Mammals	Northern Myotis	Myotis septentrionalis	S3	END	END	END	END	In Ontario, this species' range is extensive and covers much of the province. It will usually roost in hollows, crevices, and under loose bark of mature trees. Roosts may be established in the main trunk or a large branch of either living or dead trees. Caves or abandoned mines may be used as hibernacula, but high humidity and stable above freezing temperatures are required (ECCC 2018).	Moderate - Forests on the Site may provide suitable roosting habitat	Moderate - Forests in the Study Area may provide suitable roosting habitat
Mammals	Silver-haired Bat	Lasionycteris noctivagans	S2S3	END		END	END	Silver-haired Bats occupy a wide diversity of habitats across their geographic range. They roost in a variety of large diameter coniferous and deciduous trees. Roosting occurs primarily under bark and in the cavities of trees, and occasionally buildings. They forage in young and old forest, as well as forest openings (canopy gaps), but are concentrated along forest edges and intact forest. Silver-haired Bats overwinter in the United States, southeastern British Columbia and sometimes the Great Lakes region. In British Columbia, they have been documented hibernating in mines, rock crevices, trees, and snags. Little else is known about their winter ecology.	Moderate - Forests on the Site may provide suitable roosting habitat	Moderate - Forests in the Study Area may provide suitable roosting habitat
Mammals	Tricolored Bat	Perimyotis subflavus	S3?	END	END	END	END	In Ontario, tri-colored bat may roost in foliage, in clumps of old leaves, hanging moss or squirrel nests. They are occasionally found in buildings although there are no records of this in Canada. They typically feed over aquatic areas with an affinity to large-bodied water and will likely roost in close proximity to these. Hibernation sites are found deep within caves or mines in areas of relatively warm temperatures. These bats have strong roost fidelity to their winter hibernation sites and may choose the exact same spot in a cave or mine from year to year (ECCC 2018).	Moderate - Forests on the Site may provide suitable roosting habitat	Moderate - Forests in the Study Area may provide suitable roosting habitat
Reptiles	Blanding's Turtle	Emydoidea blandingii	S3	THR	END	END	THR	In Ontario, Blanding's Turtle will use a variety of aquatic habitats, including swamps, bogs, fens, marshes, lakes, ponds, beaver regulated wetlands, slow-flowing creeks, channels and sloughs. However, it prefers shallow, eutrophic wetlands with organic substrates, slow to no flow and abundant aquatic vegetation. Swamp, pond , marsh, lake, fen and bog habitats are significantly preferred over lotic or ephemeral habitats. This species is known to make extensive inter- and intra-wetland movements and uses multiple bodies of water throughout the active season. Females may make large overland movements of >10km during the nesting season and nest sites may be >1km from the nearest wetlands (average 100-242m). Suitable nesting sites occur in sun-exposed areas with low vegetation cover and loose substrates including organic soils, sand, gravel and cobble. They hibernate singly or communally in shallow waters of suitable waterbodies (COSEWIC 2016).	Low-Moderate - The ponds at the eastern edge of the Site may provide suitable overwintering habitat.	Moderate- suitable habitat for various life history traits is present within the wetlands and surface water features in the Study Area.
Reptiles	Snapping Turtle	Chelydra serpentina	S4	SC	SC	SC		In Ontario, snapping turtle uses a wide range of waterbodies, but shows preference for areas with shallow, slow-moving water, soft substrates and dense aquatic vegetation. Hibernation takes place in soft substrates under water. Nesting sites consist of sand or gravel banks along waterways or roadways (COSEWIC 2008).	Moderate - The ponds at the eastern edge of the Site may provide suitable overwintering habitat.	Moderate- suitable habitat for various life history traits is present within the wetlands and surface water features in the Study Area.
Reptiles	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	SC		In Ontario, painted turtles use waterbodies, such as ponds, marshes, lakes and slow-moving creeks, with a soft bottom and abundant basking sites and aquatic vegetation. This species hibernates on the bottom of waterbodies (Ontario Nature 2018).	Moderate - The ponds at the eastern edge of the Site may provide suitable overwintering habitat.	Moderate- suitable habitat for various life history traits is present within the wetlands and surface water features in the Study Area.

Taxon	Common Name	Scientific Name	[a]S-rank	[b]ESA Status	[c]SARA Status	[d]COSEWIC Status	COSSARO Status	Habitat Requirements	Probability to Occur on the Site	Probability to Occur in the Study Area
Reptiles	Northern Map Turtle	Graptemys geographica	S3	SC	SC	SC	SC	In Ontario, northern map turtle prefers large waterbodies with slow-moving currents, soft substrates, and abundant aquatic vegetation. Ideal stretches of shoreline contain suitable basking sites, such as rocks and logs. Along Lakes Erie and Ontario, this species occurs in marsh habitat and undeveloped shorelines. It is also found in small to large rivers with slow to moderate flow. Hibernation takes place in soft substrates under deep water (COSEWIC 2012).	Low - Suitable large bodies of water do not occur.	Low - Suitable large bodies of water do not occur.
Reptiles	Eastern Milksnake	Lampropeltis triangulum	S4	NAR	SC	SC		In Ontario, milksnake uses a wide range of habitats including prairies, pastures, hayfields, wetlands and various forest types, and is well-known in rural areas where it frequents older buildings. Proximity to water and cover enhances habitat suitability. Hibernation takes place in mammal burrows, hollow logs, gravel or soil banks, and old foundations (COSEWIC 2014).	Moderate - The various habitats within the Study Area may provide suitable habitat. Recent sitings occur within the region greater than 1 km from the Site.	Moderate - The various habitats within the Study Area may provide suitable habitat. Recent sitings occur within the region greater than 1 km from the Site.
Reptiles	Eastern Musk Turtle	Sternotherus odoratus	S3	SC	THR	SC	SC	In Ontario, eastern musk turtle is very rarely out of water and prefers permanent bodies of water that are shallow and clear, with little or no current and soft substrates with abundant organic materials. Abundant floating and submerged vegetation is preferred. Hibernation occurs in soft substrates under water. Eggs are sometimes laid on open ground, or in shallow nests in decaying vegetation, shallow gravel or rock crevices (COSEWIC 2012).	Low - The ponds at the eastern edge of the Site have very little vegetation.	Moderate- suitable habitat for various life history traits is present within the wetlands and surface water features in the Study Area.
Vascular Plants	American Ginseng	Panax quinquefolius	S2	THR	END	END	THR	In Ontario, American ginseng is found in moist, undisturbed and relatively mature deciduous woods often dominated by sugar maple. It is commonly found on well-drained, south-facing slopes. American ginseng grows under closed canopies in well-drained soils of glacier origin that have a neutral pH (ECCC 2018).	Moderate - The forest at the western edge of the Stie may be suitable	Moderate - Forests within the Study Area may be suitable
Vascular Plants	Black Ash	Fraxinus nigra	S4	END		THR	END	Found throughout Ontario in moist ecosystems; commonly found in northern swampy woodlands (MNRF 2018). This species typically grows on mucky or peaty soils and is considered a facultative wetland species (Reznicek et al. 2011).	Low - None were observed on the Site or within 30m of the Site.	Moderate - Treed swamps in the Study Area may be suitable for this species
Vascular Plants	Butternut	Juglans cinerea	S2?	END	END	END	END	In Ontario, butternut is found along stream banks, on wooded valley slopes, and in deciduous and mixed forests. It is commonly associated with beech, maple, oak and hickory (Voss and Reznicek 2012). Butternut prefers moist, fertile, well-drained soils, but can also be found in rocky limestone soils. This species is shade intolerant (Farrar 1995).	Low - None were observed during the Site visit on the Site or within 25m.	Moderate - Treed habitat in the Study Area may be suitable.

(Grank)

[a] Provincial Ranks (SRANK) are Rarity Ranks assigned by the Natural Heritage Information Centre (NHIC). These ranks are not legal designations. S1 (Critically Imperiled), S2 (Imperiled), S3 (Vulnerable), S4 (Apparently Secure), S5 (Secure), SNA (Not Applicable), S#S# (Range Rank), S? (Not ranked yet)

[b] Endangered Species Act (ESA), 2007. General (O.Reg 242/08). Species at Risk in Ontario List (O.Reg 230/08); Schedule 1 (Extirpated - EXP), Schedule 2 (Endangered - END), Schedule 3 (Threatened - THR), Schedule 4 (Special Concern - SC)

[c] Species at Risk Act (SARA), 2002. Schedule 1 ; Part 1 (Extirpated), Part 2 (Endangered), Part 3 (Threatened), Part 4 (Special Concern)

[d] Committee on the Status of Endangered Wildlife in Canada (COSEWIC)

(COSSARO)

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