Environmental Impact Statement for 4200 Innes Road

FINAL REPORT

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Sign-off Sheet

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1.0 INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by Reseau-Selection Développement Hors Québec Inc. (Reseau-Selection), to prepare an Environmental Impact Statement (EIS) in support of a Site Plan Control application for the proposed development area at 4200 Innes Road, in Ottawa, Ontario.

In 2016, Stantec prepared an EIS for SmartReid Canada, which included 4100 Innes Road/2025 Mer Bleue Road, in the City of Ottawa (Stantec, 2016a). This EIS was updated in 2018, and is currently pending (City of Ottawa, 2018c). SmartReid has since severed off a portion of the property to Reseau-Selection. The current EIS was prepared at the request of the City of Ottawa, and is focused on the property (i.e. 4200 Innes Road, Ottawa, ON) purchased by Reseau-Selection.

The EIS is intended to identify the natural heritage features and functions, on and within 120 metres (m) of the Subject Property boundary, that may pose constraints to development, and to recommend appropriate measures to avoid and mitigate potential impacts and enhance the natural heritage features and associated functions, where possible.

1.1 STUDY AREA

The Project Site, from now on referred to as the “Site”, is located immediately southeast of the intersection of Innes Road and Mer Bleue Road in Orleans, in the City of Ottawa, Ontario (**Figure 1**). For the purposes of this report, the “Study Area” includes the Site and the 120 m area beyond the Site boundary (Figure 1, Appendix A).

The Site is privately owned and is located at Concession 11, Lot 1 within the City of Ottawa. The Property Identification Number (PIN) is 145632820. The Site is approximately 14,437 square metres (m^2) (1.44 hectares (ha)). The land use designation is Urban Employment Area as outlined in the Official Plan, Schedule B (City of Ottawa, 2018a). Current zoning is Arterial Mainstreet (City of Ottawa, 2018b).

The majority of the Site was formerly used for agricultural row crops, specifically corn/soy beans, and appears to be currently fallow with remnant soybean plants visible. A small meadow area occurs in the northeast portion of the Site. Bilberry Creek, a Natural Heritage System Feature (City of Ottawa, 2018b), is located north of the Site and a remnant portion of Bilberry Creek is located approximately 50 m north of the Site. Stantec (2016a), noted a new culvert and interim ditch is located adjacent to Bilberry Creek, running east to north, located approximately 15 m north of the Site. Stantec (2016a) assumed that this interim ditch would be piped underground. It appears that the interim ditch may be piped underground at this time, as a site visit completed in October 2018 indicated that this ditch did not appear to be present.

Aerial photos dating back to 1928 (City of Ottawa, 2018d) show that the Site and surrounding area was predominantly used for agricultural cropland; over the years, agricultural land north, east and west of the Site has been replaced by residential and commercial development.

1.2 PURPOSE

The City of Ottawa has identified the need for Reseau-Selection to complete a detailed EIS, including an impact assessment of endangered species, as part of a Site Plan application for the 1.44 hectare (ha) Site for the development of a seniors residence and parking lots.

This EIS report has been prepared to meet the requirements of the City of Ottawa EIS Guidelines (City of Ottawa, 2015a).

1.3 APPROACH

Background information was reviewed, consisting of existing published data and data made available through various public agencies, web-based mapping programs and other environmental reports pertaining to the Study Area including the EIS previously completed for this property (Stantec, 2016a).

The background information has been summarized to identify the natural heritage features that may be affected by the proposed site plan control application. Targeted field work was used to confirm and further consider issues raised by review of the background information.

2.0 NATURAL HERITAGE AND HAZARD POLICY CONSIDERATIONS

An assessment of the natural heritage features and functions within the Study Area was undertaken to comply with the requirements of the following policy and guideline documents.

2.1 PROVINCIAL POLICY STATEMENT

The Provincial Policy Statement (PPS) was issued under Section 3 of the *Planning Act* and came into effect on May 22, 1996 and revised in 2005 and 2014 (Ministry of Municipal Affairs and Housing , 2014). Decisions made by Planning Authorities shall be consistent with the policy statements issued under the *Planning Act*, such as the PPS, which includes policies on development and land use patterns, resources and public health and safety. Section 2.1 of the PPS deals with Natural Heritage Features in various ecoregions including Ecoregion 6E, which includes the Subject Property.

According to Section 2.1.4 of the PPS, development and site alteration shall not be permitted in the following features in Ecoregion 6E:

- Significant wetlands
- Significant coastal wetlands

According to Section 2.1.5 of the PPS, development and site alteration shall not be permitted in the following features in Ecoregion 6E, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions:

- Significant woodlands
- Significant valleylands
- Significant wildlife habitat
- Significant areas of natural and scientific interest (ANSIs)

Sections 2.1.6 and 2.1.7 of the PPS state that development and site alteration shall not be permitted in the following features, except in accordance with provincial and federal requirements:

- Habitat of endangered or threatened species
- Fish habitat

According to Section 2.1.8, development and site alteration are prohibited on lands adjacent to the natural heritage features identified in 2.1.4, 2.1.5, and 2.1.6, 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.

2.2 CITY OF OTTAWA OFFICIAL PLAN

The City of Ottawa Official Plan (Plan) was adopted by Council on in May 2003. Schedules A, B, K, and L of the Plan designate the Natural Heritage System Features and Areas, which generally include features that are protected by the PPS such as significant wetlands and woodlands, and other habitat features (City of Ottawa, 2018a).

Section 3.2.1 of the Plan states that development and site alteration shall not be permitted within Significant Wetlands, including Provincially Significant Wetlands (PSW). According to Section 3.2.1, development and site alterations are not be permitted within 120 m of the boundary of a Significant Wetland unless an EIS demonstrates that there will be no negative impacts on the wetland or its ecological function.

Section 3.2.2 of the Plan states that development and site alteration shall not be permitted within Natural Environment Areas (i.e., wetlands, Significant Woodlands, Significant Wildlife Habitat (SWH), ANSIs). According to Section 3.2.2, development and site alterations are not permitted within 120 m of a Natural Environment Area, unless an EIS demonstrates that there will be no negative impacts on the natural features within the area or their ecological functions.

According to Section 4.7.3, development and site alteration is not permitted in fish habitat except in accordance with federal and provincial requirements. Proposed development near or adjacent to water bodies that provide fish habitat must demonstrate that the proposed development will not have a negative impact on fish habitat.

Section 4.7.4 of the Plan states that development and site alteration shall not be permitted in significant habitat of endangered and threatened species. According to Section 4.7.4, development and site alterations are not permitted within 120 m of the boundary of identified significant habitat of endangered and threatened species unless the ecological function of the adjacent lands has been evaluated and an EIS demonstrates that there will be no negative impacts on the significant habitat of endangered and threatened species or on its ecological functions.

2.3 RIDEAU VALLEY CONSERVATION AUTHORITY POLICIES

The site is within the jurisdiction of the Rideau Valley Conservation Authority (RVCA) (Land Information Ontario Database (LIO), MNRF, 2018)). Pursuant to Ontario Regulations 174/06, *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*, prior permission is required from the RVCA to development (as defined), interference with wetlands, and alterations to shorelines and watercourses in areas where the control of flooding, erosion, dynamic beaches, pollution, or the conservation of land may be affected by development (RVCA, 2006).

Alteration to a watercourse within the jurisdiction of the RVCA must be in accordance with the policies and guidelines in the RVCA *Policies Regarding 'Development Including the Construction / Reconstruction of Building and Structures, Placing of Fill and Alterations to Waterways Under Section 28 of the Conservation Authorities Act of Ontario (), Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation' – Ontario Regulation 174/06* and must be to the satisfaction of the Authority.

2.4 ENDANGERED SPECIES ACT

The Ontario *Endangered Species Act, 2007* (ESA, 2007) protects habitat and individuals of wildlife species designated as threatened, endangered, or extirpated in Ontario. Provincial species at risk are identified and assessed by the Committee on the Status of Species at Risk in Ontario (COSSARO).

The ESA, 2007 protects species listed by COSSARO as threatened, endangered, or extirpated in Ontario and their habitats by prohibiting anyone from killing, harming, harassing or possessing protected species, as well as prohibiting any damage or destruction to the habitat of the listed species. All listed species are provided with general habitat protection under the ESA, 2007 aimed at protecting areas that species depend on to carry out their life processes, such as reproduction, rearing, hibernation, migration or feeding. Some species have had detailed habitat regulations passed that define specifically the extent and character of protected habitats.

Activities that may impact a protected species or its habitat require the prior issuance of a Permit from the Ministry of Natural Resources and Forestry (MNRF), unless the activities are exempted under Regulation. Ontario Regulation 242/08 identifies activities that are exempt from the permitting requirements of the Act subject to rigorous controls outside the permit process, including registration of the activity and preparation of mitigation. Activities not exempt under O. Reg. 242.08 require a complete permit application process.

2.5 FEDERAL PROTECTION OF SPECIES AT RISK, FISH, AND MIGRATORY BIRDS

Federally protected special concern, threatened, or endangered species are listed in Schedule 1 of the *Species at Risk Act* (SARA). SARA applies to federally owned lands and regulated projects, with the exception of fish (those species covered by the *Fisheries Act*) and migratory birds (those species covered by the *Migratory Birds Convention Act, 1994* (MBCA)), which are afforded protection on all lands.

2.6 SUMMARY OF POLICY IMPLICATIONS

The policies and guidelines summarized above were used to scope the study methodologies and inform an analysis of the opportunities and constraints for the Study Area.

3.0 Methods for Data Collection and Analysis

The collection and analysis of natural heritage feature data focuses on those natural heritage systems protected under the 2014 Provincial Policy Statement (Ministry of Municipal Affairs and Housing , 2014).

- Significant wetlands
- Significant woodlands
- Significant valleylands
- Significant wildlife habitat
- Significant areas of natural and scientific interest (ANSI)
- Fish habitat
- Habitat of endangered and threatened species (e.g., species at risk)

3.1 BACKGROUND INFORMATION

The information in this report is based on field investigations completed by Stantec biologists, existing published data, data made available through various public agencies, web-based mapping programs, and online databases, including the following primary data sources:

- City of Ottawa's Official Plan (City of Ottawa, 2018a)
- City Stream Watch Bilberry Creek 2015 Summary Report (RVCA, 2015)
- Agricultural Information Atlas (Ontario Ministry of Agriculture, Food and Rural Affairs, 2014)
- geoOttawa (City of Ottawa, 2018d)
- Satellite imagery (Google Earth Pro, 2013)
- Smart Centres Limited Application for Severances D08-01-11/B-0542-543 4100 Innes Road & 2035 Mer Bleue Road Fish Habitat and Community Summary (Muncaster Environmental Planning Inc., 2012)
- Innes Road Shopping Centres Servicing Corridors, Bobolink Surveys (Muncaster Environmental Planning Inc., 2011)
- Tree Conservation Report for the proposed retail development at Innes Road and Mer Bleue Road (Levstek Consultants Inc., 2016)
- Servicing Report – Orleans Development – 2025 Mer Bleue Road – Phase 1 (Stantec, 2016b)
- Environmental Impact Statement with Headwaters Assessment for 4100 Innes Road/2025 Mer Bleue Road (Stantec, 2016a)

A list of species at risk species designated under the Ontario *Endangered Species Act*, *2007* (ESA, 2007) and/or the federal *Species at Risk Act* (SARA) as endangered, threatened or special concern with potential to occur in or adjacent to the Site was developed by reviewing the following sources:

- Natural Heritage Information Centre (NHIC) database (NHIC, 2018)
- Aquatic Species at Risk Mapping (DFO, 2018)
- Ontario Breeding Bird Atlas (OBBA) (Cadman, 2007)
- Ottawa Bird Count (Ottawa Bird Count, 2015)
- eBird Canada (ebird, 2015)
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2015)
- Ontario Butterfly Atlas Online (Toronto Entomologists' Association, 2015)
- Atlas of the Mammals of Ontario (Dobbyn, 1994)

Some of the sources above provide data at a scale as large as 10 kilometres (km) by 10 km. Results were therefore screened to assess their relevance to the Site and species were removed from consideration if no suitable habitat was observed within the Study Area (e.g., fish species where no watercourses exist, or grassland species in an urban/forest habitat matrix).

Biological field data were evaluated to determine the significance of natural heritage features. Status rankings (S ranks) for plants, vegetation communities and wildlife are based on the number of occurrences in Ontario and have the following meanings:

- **S1**: critically imperiled; often fewer than 5 occurrences
- **S2**: imperiled; often fewer than 20 occurrences
- **S3**: vulnerable; often fewer than 80 occurrences
- **S4**: apparently secure
- **S5**: secure
- **S?**: unranked, or, if following a ranking, rank uncertain (e.g. S3?).

The global, federal and provincial status of wildlife was determined by reviewing species accounts published by the NHIC (2018). The provincial status of all plant species is based on Newmaster et al. (1998), with updates from the database of the NHIC (2018).

3.2 AGENCY CONSULTATION

Information regarding the Study Area was requested from the Kemptville District Ministry of Natural Resources and Forestry (MNRF), the RVCA and South Nation Conservation (SNC) on October 12, 2018. Responses from RVCA and SNC were received on October 30, 2018 and October 15, 2018, respectively.

Neither RVCA or SNC identified additional natural heritage features or concerns. A response from MNRF has not been received at this time, however, responses from RVCA, SNC, and MNRF, received under the previously submitted EIS were reviewed for this EIS. A copy of the requests/responses for this Project are provided in **Appendix B**. If a response from MNRF is received, Stantec will update the EIS and/or advise Reseau-Selection regarding appropriate next steps/mitigation measures, if required.

3.3 SITE VISIT

Stantec biologists completed site visits in 2016, in support of the previously submitted EIS for this area (Stantec, 2016a), to characterize the existing natural heritage features within and adjacent to the Site and to conduct a standard headwater assessment (**Table 1**). An additional site visit was completed in 2018 to identify changes to the conditions identified by Stantec (2016a).

Table 1: Ecological Field Work

Date	Start/End Time	Field Surveys	Weather Conditions	Biologist
May 31, 2016	1100 - 1530	• Vegetation • Species at Risk Habitat • General Wildlife Habitat	Temperature: 21˚C Wind (Beaufort scale): 4 Cloud cover: 30%	Angela Lougheed
June 6, 2016	0900 - 1200	• Headwater Drainage Feature Assessment	Temperature: 19˚C Wind (Beaufort scale): 3 Cloud cover: 80%	Josh Mansell
October 9, 2018	1435 - 1530	• Vegetation • Species at Risk Habitat • General Wildlife Habitat	Temperature: 26^{O}C Wind (Beaufort scale): 2-3 Cloud cover: 15%	Brennan Obermayer

3.3.1 Vegetation Survey

Initial characterization of existing vegetation communities was completed by interpreting available aerial imagery. Vegetation was identified and communities were assessed in the field following a meandering transect on May 31, 2016, and assessed and revised as required on October 9, 2018. Community characterizations (eco sites and vegetation types) were based on the Ontario Ecological Land Classification (ELC) system (Lee et. al., 2001).

3.3.2 Species at Risk Survey

The potential for use of the Site by species at risk (SAR) was determined through assessing habitat potential while conducting the meandering transect vegetation surveys. Adjacent lands were visually assessed using binoculars.

3.3.3 Wildlife Observations and General Wildlife Habitat Surveys

Wildlife habitat suitability assessments were conducted for ESA protected species that may occur in the area, including species identified in the NHIC database and other planning reports. Wildlife habitat

suitability was assessed in the field by following meandering transects within the Site. Adjacent lands were visually assessed using binoculars. A GPS, a GPS camera and a field notebook were used to document observations.

3.3.4 Significant Wildlife Habitat

Field investigations documented candidate SWH features outlined in the *Significant Wildlife Technical Guide* (MNRF, 2000) and the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015). There are four general types of SWH: (a) seasonal concentrations, (b) rare or specialized habitat, (c) habitat for species of conservation concern and (d) animal migration corridors. Observations of candidate SWH were recorded during environmental field investigations.

3.3.5 Headwater Drainage Feature Assessment

Drainage features are not present on the Site, however, several headwater drainage features (HDF) are present within the Study Area buffer. A HDF assessment was previously completed for these features (Stantec, 2016a), which followed the Toronto Region Conservation Authority and the Credit Valley Conservation (TRCA and CVC, 2014) protocol Evaluation, Classification and Management of Headwaters Drainage Features Guidelines. These guidelines use standardized survey methods and a tiered study design to determine the risk of functional impairment to an HDF through land development.

4.0 EXISTING CONDITIONS

This section describes the natural heritage features and functions within Study Area based on a review of existing information and refinement of current conditions based on the field investigations, as described in **Section 3**.

The Study Area consists of open agriculture, meadow, thicket, and constructed lands. There are no structures or buildings on the Site.

4.1 BACKGROUND DATA

4.1.1 Geology and Topography

The Site is generally flat, as is the Study Area, with the exception of a mounded area to the northeast of the Site; it lies within the Ottawa Valley Clay Plains physiographic region (Ontario Geological Survey, 2018). The surficial geology of the Site consists of fine-textured glaciomarine deposits. Inclusions of carbonate-derived silty and/or sandy till, and of Paleozoic bedrock are found in the northwest and northeast corners, respectively, of the Study Area, as illustrated in **Figure 3 (Appendix A)**. Underlying bedrock is part of the Ottawa Formation, consisting of limestone with some shaly partings and sandstone (Natural Resources Canada, 2014).

4.1.2 Hydrology

The Study Area is within the jurisdiction of the RVCA's Bilberry Creek subwatershed which outlets to the Ottawa River (City of Ottawa, 2011). There are no surface water features within the Site. Surface water features within the Study Area include a remnant portion of Bilberry Creek and an interim ditch to the north, which, as discussed in Stantec (2016a), is now connected to Bilberry Creek downstream (north of Innes). Bilberry Creek flows north through a forested, highly incised valley between urban areas and residential subdivisions before discharging into the Ottawa River (RVCA, 2015). Other surface water features within the Study Area include agricultural drains to the southeast. A tributary of McKinnons Creek is located south of the Site. The majority of the Bilberry Creek subwatershed area has been developed, resulting in numerous alterations to the watercourse such as channelization, piping and storm water drains. Bank erosion and contaminant levels have increased as a result of water course alterations associated with the development (RVCA, 2015). Bilberry Creek, immediately downstream (north) of the Site is buried and piped underneath a residential community and piped upstream (west) of the Site under current commercial development for an unknown distance (Muncaster Environmental Planning Inc., 2012).

The Bilberry Creek thermal classification ranged between cool water to cool-warm water and 33 fish species have been observed historically which includes 12 game fish species (RVCA, 2015).

In 2012, dip netting was completed at three locations in the remnant portion of Bilberry Creek within the Study Area as part of a Fish Habitat and Community Summary; no fish were caught (Muncaster Environmental Planning Inc., 2012).

There are no Municipal Drains within or adjacent to the Site (City of Ottawa, 2018d). An unevaluated wetland was identified west of the site near the southeast corner of Innes and Mer Bleue Road (**Figure 2**) in the NHIC database (NHIC, 2018); however, aerial imagery indicates that commercial space now occupies this area and the wetland does not exist.

4.1.3 Species at Risk and Provincially Rare Species

As per Stantec (2016a), a desktop background review resulted in a list of 17 species at risk that have been previously documented or have potential to occur within or adjacent to the Site (**Table 2**).

Table 2: Species at Risk with the Potential to Occur Within or Adjacent to the Site

Species	Status	
	Ontario ESA, 2007	Federal *Species at Risk Act*, Schedule 1
Small-footed myotis (*Myotis leibii*)[1]	Endangered	NA
Little brown myotis (*Myotis lucifungus*)[1]	Endangered	Endangered
Northern myotis (*Myotis septentrionalis*)[1]	Endangered	Endangered
Tri-colored bat (*Perimyotis subflavus*)[1]	Endangered	Endangered
Least bittern (*Ixobrychus exilis*)[3]	Threatened	Threatened
Common nighthawk (*Chordeiles minor*)[3]	Special concern	Threatened
Eastern whip-poor-will (*Antrostomus vociferus*)[3]	Threatened	Threatened
Chimney swift (*Chaetura pelagica*)[3,8]	Threatened	Threatened
Bank swallow (*Riparia riparia*)[2,3]	Threatened	Threatened
Barn swallow (*Hirundo rustica*)[2,3,4]	Threatened	Threatened
Wood thrush (*Hylocichla mustelina*)[3]	Special concern	Threatened
Canada warbler (*Cardellina canadensis*)[3]	Special concern	Threatened
Bobolink (*Dolichonyx oryzivorus*)[2,3,4,7]	Threatened	Threatened
Eastern meadowlark (*Sturnella magna*)[3,4,7]	Threatened	Threatened
Henslow's sparrow (*Centronyx henslowii*)[7]	Endangered	Endangered
Blanding's turtle (*Emydoidea blandingii*)[5]	Threatened	Threatened
Western chorus frog (Pseudacris triseriata)5	Not at Risk	Threatened

Table 2 Notes:
1 Atlas of Mammals of Ontario (Dobbyn, 1994)
2 Ottawa Bird Count (point counts within 1 km of the Site) (Ottawa Bird Count, 2015)
3 Atlas of Breeding Birds of Ontario (Cadman, 2007) (10 x 10 km squares 18VR53 and 18VR63)
4 eBird Point (point counts within 1 km of the Site) (ebird, 2015)
5 Ontario Reptile and Amphibian Atlas (Ontario Nature, 2015) (10 x 10 km squares 18VR53 and 18VR63)
6 Ontario Butterfly Atlas Online (10 x 10 km squares 18VR53 and 18VR63) (Toronto Entomologists' Association, 2015)
7 NHIC database (1x1km squares 18VR6033 and 18VR6133) (NHIC, 2018)

The 23 species of conservation concern (S1-S3 ranked species, including provincially designated Special Concern species) in **Table 3** were identified during the background review as being present in the vicinity of the Study Area.

Table 3: Species of Conservation Concern with Records in the Vicinity of the Study Area

Species	S-Rank (S1-S3)	Ontario ESA, 2007
Plants		
Cattail sedge (*Carex typhina*)	S2	Not listed
Greene's rush (*Juncus greenei*)	S3	Not listed
Large purple fringed orchid (*Platanthera grandiflora*)	S1	Not listed
Northern long sedge (*Carex folliculata*)	S3	Not listed
Hidden-fruit bladderwort (*Utricularia geminiscapa*)	S3?	Not listed
Woodland Pinedrops (*Pterospora andromedea*)	S2	Not listed
Southern Twayblade (*Neottia bifolia*)	S1	Not listed
Mammals		
Small-footed myotis (*Myotis leibii*)	S2S3	Endangered
Northern myotis (*Myotis septentrionalis*)	S3?	Endangered
Tri-colored bat (*Perimyotis subflavus*)	S3?	Endangered
Insects		
Monarch (*Danaus plexippus*)	S4B, S2N	Special concern
Amphibians		
Western chorus frog (Great Lakes - Shield) (*Pseudacris triseriata*)	S3	Not at Risk
Reptiles		
Snapping turtle (*Chelydra serpentine*)	S3	Special concern
Blanding's turtle (*Emydoidea blandingii*)	S3	Threatened
Northern map turtle (*Graptemys geographica*)	S3	Special concern
Eastern milksnake (*Lampropeltis triangulum*)	S3	Not Listed
Birds		
Short-eared owl (*Asio flammeus*)	S2N, S4B	Special concern
Eastern wood-pewee (*Contopus virens*)	S4B	Special concern
Common nighthawk (*Chordeiles minor*)	S4B	Special concern
Short-eared owl (*Asio flammeus*)	S4	Special concern
Eastern wood-pewee (*Contopus virens*)	S4	Special concern
Wood thrush (*Hylocichla mustelina*)	S4	Special concern
Canada warbler (*Cardellina canadensis*)	S4	Special concern

Based on habitat descriptions (e.g., wet habitats, mixedwood forests) for the plants listed above (iNaturalist, 2016), the Site does not provide habitat required for the plants. Similarly, the row crop field and small strip of cultural thicket do not represent preferred habitat for rare wildlife species.

Stantec was previously provided a Tree Conservation Report for the development application for 4100 Innes Road/2025 Mer Bleue Road, and this report was reviewed in Stantec, 2016a. As per Stantec, 2016a, the Tree Conservation Report report identified each tree 10 centimetres (cm) or more in diameter at breast height (dbh) and commented on the health of the trees (Levstek Consultants Inc., 2016). The report identified three distinctive trees according to the City of Ottawa, Urban Tree Conservation By-law (i.e. dbh 50 cm or more) and no tree species at risk were found or identified (Levstek Consultants Inc., 2016).

4.1.4 Significant Natural Areas

A review of the Official Plan (City of Ottawa, 2018a) and NHIC and LIO data indicates that there are no significant woodlands, significant valleylands, SWH, Provincially Significant Wetlands (PSWs), Significant Areas of Natural and Scientific Interest (ANSIs), or areas of major open space, within the Study Area.

The nearest natural features to the Study Area include: a significant woodland approximately 1 kilometres (km) to the south, an Urban Natural Feature (UNF) associated with Bilberry Creek approximately 355 m to the north, significant valleylands located approximately 100 m to the north, which are also identified as areas with unstable slopes, a PSW and ANSI (Mer Bleue wetland), approximately 3.5 km southwest, and an area of major open space approximately 355 m to the north of the Site. Aerial imagery identifies this major open space area as a city park with sports fields and play structures.

4.2 FIELD INVESTIGATIONS

4.2.1 Vegetation

Vascular plant species observed within the Study Area consisted of commonly occurring species, invasive weeds and deciduous early successional tree species (**Appendix C**).

The majority of the Site is agricultural row crops. A meadow area is present on the east side of the site, and a cultural thicket at the south side of the site (Figure 4). The meadow area consists of a variety of grasses and forbs. Additional ecosites occurring within the Study Area Include a residential neighbourhood to the north, commercial development to the east and west, and a driving range and thicket swamp to the south.

The vegetation communities, based on the ELC system for Southern Ontario, are shown on **Figure 4, Appendix A**. The vegetation community types are briefly described in **Table 4** below. A vegetation list for the Study Area is provided in **Appendix C**.

Table 4: Ecological Land Classification Vegetation Types

ELC TYPE	Community Description
Meadow (ME)	
Mixed Meadow (MEM)	
Dry – Fresh Mixed Meadow Ecosite (MEMM3)	This ecosite is found in the east portion of the Site, and to the northeast in the Study Area. It occupies approximately 0.3 hectares within the site. The meadow ecosite to the northeast contains a vegetated mounded area, presumed to be discarded fill from the adjacent development. Vegetation is dominated by mixed grasses (i.e., brome (*Bromus* sp.) and ryegrass (*Lolium* sp.)), common burdock (*Arctium minus*), Canada goldenrod (*Solidago canadensis*), milkweed (*Asclepias syriaca*), asters (Asteraceae), and wild carrot (*Daucus carota*). The following invasive species were also noted: garlic mustard (*Alliaria petiolate*), wild parsnip (*Pastinaca sativa*) and common buckthorn (*Rhamnus cathartica*).
Agricultural (AG)	
Open Agriculture (OAG)	
Annual Row Crops (OAGM1)	Unharvested soy was cultivated over the majority of the Site covering an area of approximately 0.9 hectares.
Commercial and Institutional (CVC)	
Business sector (CVC_1)	Adjacent properties east and west of the Site consist of retail box stores and paved areas.
Cultural Thicket (CUT)	
Cultural Thicket (CUT1)	A cultural thicket occurs along the southern boundary of the Site, and continues south into the Study Area. The dominant species include sumac, buckthorn, hawthorn, small elms and vetch. Approximately 0.2 ha are within the site.

4.2.2 Species at Risk

The list of potential species at risk identified during a background review (**Table 2**) was assessed based on observations collected during the site visits to determine which species have the potential to occur within the Study Area. Sixteen of these species are considered absent within the Site, on the basis of suitable habitat not being observed.

No species at risk identified during a background review (**Table 2**) were observed within the Study Area.

4.2.3 Fish and Fish Habitat

As described in Section 3, there were no watercourses or drainages identified within the site, therefore, there is no Fish Habitat within the Site.

The HDFs located within the Study Area were assessed under Stantec (2016a). Of the HDFs assessed, mitigation was recommended only for the interim ditch located north of the Site. As described in Section 3, field observations from October 2018 indicate that this interim ditch has been piped underground.

For summary description of reach characteristics and the evaluation of each HDF within the Study Area, please refer to Stantec, 2016a.

4.2.4 Wildlife Habitat

Wildlife habitat within the Site is typical of an agricultural setting. Common species are anticipated to occur within these habitat features. No amphibian or reptile species were observed during the wildlife survey. No candidate overwintering habitat for reptiles was observed within the site, however, Stantec (2016a) identified concrete slabs, foundation remnants and brush piles northwest of the site, within the Study Area that could provide basking, foraging and overwintering habitat for reptiles. Stantec (2016a) identified an area of exposed bedrock with fissures throughout within the CUT adjacent to the south side of the Site, which may also provide potential habitat for reptiles.

Racoon tracks were observed on the site. The following common bird species were observed on or adjacent to the Site: American Goldfinch and Song Sparrow. Stantec (2016a) identified the following common bird species on or adjacent to the site: black-capped chickadee, American crow, mourning dove, European starling, sparrow, American robin, common grackle, killdeer, house finch, and red-winged blackbird. Large trees are absent from the Site, however, deciduous trees associated with the Cultural Thicket, Bilberry Creek and various hedgerows within the Study Area could provide nesting habitat for migratory songbirds and small mammals. No other active bird nests were observed.

Potential bat roosting sites were not observed within the Site. Large diameter trees within the adjacent CUT1 community could potentially provide habitat for bats.

4.3 SIGNIFICANT WILDLIFE HABITAT

4.3.1 Seasonal Concentration Areas

Seasonal concentration areas are those sites where large numbers of a species gather together at one time of the year, or where several species congregate. Such areas include, but are not limited to, deer yards, snake and bat hibernacula, waterfowl staging and molting areas, raptor roosts, bird nesting colonies, shorebird staging areas, and passerine migration concentrations. Only the best examples of these concentration areas are usually designated as SWH. Areas that support a species at risk, or areas where a large proportion of the population may be lost if the habitat is destroyed, are examples of seasonal concentration areas which should be designated as significant (MNRF, 2015).

Bat Maternity Colonies: According to the SWH Criteria Schedules for Ecoregion 6E (MNRF, 2015), bat maternity colonies are characterized by mature deciduous or mixed forest stands with greater than 10 large diameter (>25 cm) trees per hectare located within deciduous forest (FOD), mixed forest (FOM), SWD, and mixed swamp (SWM) communities. Candidate habitat is not present within the Site or Study Area.

No other candidate habitat for seasonal concentration areas was observed within the Study Area.

4.3.2 Rare or Specialized Habitat

Rare habitats are those with vegetation communities that are considered rare in the province. It is assumed that these habitats are at risk and that they are also likely to support additional wildlife species that are considered significant. Field investigations indicated that the ELC communities within the Study Area are all considered common in Ontario. Therefore, no rare habitats exist within the Study Area.

Specialized habitats are microhabitats that are critical to some wildlife species. The SWH Criteria Schedules for Ecoregion 6E (MNRF, 2015) identifies a number of habitats that could be considered specialized habitats. No candidate rare or specialized habitat was observed within the Study Area.

4.3.3 Habitat for Species of Conservation Concern

Field investigations screened the Study Area for the presence or absence of area sensitive breeding birds and species of conservation concern within the Study Area. Results are summarized below.

Special Concern and Rare Wildlife Species: No special concern or rare plant or wildlife species were observed during the field investigations. Potentially suitable habitat for the following special concern and rare species was observed within the Study Area:

- Monarch (S4B, S2N, special concern)
- Eastern milksnake (S3, not listed)

Of these, only potentially suitable habitat for monarch was observed within the site, however milkweed was noted to be rare and the site does not represent significant habitat.

4.3.4 Animal Movement Corridors

Migration corridors are areas that are regularly used by wildlife to move to one habitat from another. This is usually in response to different seasonal habitat requirements. The SWH Criteria Schedules for Ecoregion 6E (MNRF, 2015) speak specifically to amphibian movement corridors. These corridors are only considered when significant amphibian breeding habitat is identified for eastern newt, blue-spotted salamander, spotted salamander, gray treefrog, spring peeper, western chorus frog or wood frog. Amphibian movement corridors should be at least 200 m wide and consist of native vegetation, roadless area, no gaps such as fields, waterways or bodies.

No significant amphibian breeding habitat was observed within the Study Area, therefore there are no animal movement corridors within the Study Area.

5.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT

Reseau-Selection has proposed the construction of a seniors residence southeast of the corner of Innes Road and Mer Bleue Road in Orleans, in the City of Ottawa, Ontario.

The Site Plan provided by Reseau-Selection details a multi-phase plan (Phases 1 and 2) which incorporates two residential buildings along with associated roadways and parking areas throughout the Site (**Appendix A**). The current Site Plan Application to the City of Ottawa consists of development of Phase 1 in 2019, with submission of Phase 2 at a later date.

It is assumed that connections to existing municipal water supply, sanitary sewer, electrical and communications services will be undertaken using existing services and that the interim ditch will be directed though piping underground. Additionally, it is expected that standard construction materials (e.g., steel, wood, metal, concrete, asphalt) will be used and that during construction all applicable safety codes, with reference to public health, fire protection, and structural sufficiency will be followed.

6.0 IMPACT ASSESSMENT

The environmental effects identified as being of potential concern as a result of the proposed development are identified and discussed in this section. Potential direct and indirect impacts, as well long-term impacts have been considered separately.

The impact assessment and recommendations for mitigation were developed in consideration of the policies that pertain to the significant natural heritage features identified for the Site.

6.1 DIRECT IMPACTS

6.1.1 Vegetation cover

Tree and vegetation removal will occur within the Site to facilitate construction of the proposed development (**Appendix G**), within three ELC communities: dry-fresh mixed meadow ecosite (MEMM3), cultural thicket (CUT), and annual row crops (OAG1). Trees adjacent to the Site are assumed to be retained during construction and there is potential that they may be impacted during construction activities, (e.g., heavy machinery may compact soil within the critical root zone, excavation within the critical root zone).

After construction activities are complete, restoration landscaping plans should incorporate native, non-invasive species.

6.1.2 Wildlife

Displacement of wildlife (e.g., birds, racoons, and groundhogs) will likely occur as a result of this development; however, no significant impacts are anticipated for the populations of common wildlife species that have potential to occur within the Site.

A temporary increase in noise, exhaust fumes and dust due to construction activities may result in the disruption of wildlife breeding and foraging behaviors. Generally, noise from construction activities represents a short-term disturbance to wildlife using the Site and adjacent lands. It is expected that with the completion of construction, wildlife will quickly return to their normal use patterns within the natural areas adjacent to the development.

6.1.3 Species at Risk

Species at risk, who’s habitat was identified on or adjacent to the site are discussed below (Table 5).

Table 5: Species at Risk and Species at Risk Potential Habitat Impact Assessment within or Adjacent to the Site

Species	Potential Impact
Small-footed myotis	Potential roosting habitat is absent from the Site. Potential roosting habitat was identified in the CUT1, and in existing structures adjacent to the Site, but within the Study Area. No work will be occurring in the potential habitat and no negative effects are anticipated.
Little brown myotis	Potential roosting habitat is absent from the Site. Potential roosting habitat was identified in the CUT1, and in existing structures adjacent to the Site, but within the Study Area. No work will be occurring in the potential habitat and no negative effects are anticipated.
Northern myotis	Potential roosting habitat is absent from the Site. Potential roosting habitat was identified in the CUT1, and in existing structures adjacent to the Site, but within the Study Area. No work will be occurring in the potential habitat and no negative effects are anticipated.
Tri-colored bat	Potential roosting habitat is absent from the Site. Potential roosting habitat was identified in the CUT1, and in existing structures adjacent to the Site, but within the Study Area. No work will be occurring in the potential habitat and no negative effects are anticipated.
Bobolink	Current site conditions contain potential breeding habitat for Bobolink in MEMM3 on and adjacent to the Site. However the section of MEMM3 habitat on Site is small in size (approximately 0.3 ha) and fragmented. The section of MEMM3 habitat adjacent to the Site is also fragmented from nearby similar habitat and all sections are surrounded by ongoing residential and commercial development, mostly to the south and east of the Site (City of Ottawa, 2018d). Under current conditions there is low potential for breeding activities of Bobolink on and adjacent to the Site and low potential for the development to affect Bobolink. If conditions change prior to development Bobolink could return to breed.
Eastern milksnake	Potential habitat for Eastern milksnake was not observed on site, Within the Study Area, concrete slabs, areas of exposed bedrock, foundation remnants and brush piles on the northwest portion of the Site, and exposed bedrock with fissures in the CUT south of the site could provide basking, foraging and overwintering habitat for eastern milksnake. There is potential for disturbance to eastern milksnake that may be encountered in the Site during site-clearing and construction activities.
Monarch	Potential habitat for monarch was observed on Site in the meadow area. Monarch butterflies arrive in Ontario from their overwintering habitat in the south between March to May and begin breeding, staging and nectaring activities between May to October (COSEWIC, 2010). The species lays its eggs on the underside of milkweed leaves up to four times during this time period. Milkweed is the sole food source of the larval (caterpillar) stage. Once the adult emerges, it nectars on wildflowers in open meadows, grasslands, and pastures. Milkweed was noted to be a rare occurrence in the meadow and thicket and these communities are a very small portion of the site. The very limited occurrence of milkweed indicates that the site is not significant Monarch habitat.

6.1.4 Significant Wildlife Habitat

As described in Section 4.3, potential habitat for monarch was the only SWH identified within the Site. However, as noted, the lack of milkweed suggest that the site is not significant habitat.

6.1.5 Migratory Birds

The MBCA protects migratory birds and their nests from damage and disruption while they are active, including nests in vegetation and on structures. Site alteration activities within the Subject Property have the potential to disturb breeding birds and damage nests of protected species. Measures to avoid contravention of the MBCA during vegetation clearing and construction are provided in **Section 6.6**.

6.1.6 Surface water and Fish Habitat

Surface water features and fish habitat are not present on the Site. The Site will be located within a larger development project, reviewed by Stantec, 2016a. Stantec, 2016a detailed how underground piping to the existing Wallflower Drive storm sewer system, as well as the installation of an oil and grit separator (OGS) designed and sized for an 80 % Total Suspended Solids (TSS) reduction from the Site will be implemented to reduce potential downstream impacts to Bilberry Creek. It is anticipated that the development at 4200 Innes Road will be incorporated into this stormwater design, or a separate but similar design will be incorporated. If not, additional investigations into potential impacts to surface water and fish habitat may be required.

6.2 INDIRECT IMPACTS

Potential indirect effects may occur as a result of activities including sensory disturbance to species at risk (i.e., SAR bats). However, there is existing sensory disturbance in the area and the incremental increase in disturbance as a result of site activities would be infrequent and low in magnitude and are not expected to be significant.

Potential impacts that are relevant to the proposed project are the following:

- Disturbance and damage of vegetation along the edge of the natural areas. During construction, heavy machinery may damage trees and shrubs within affected areas. This impact can be prevented by clearly delineating work areas in the field.
- Dust deposition on vegetation. This can be mitigated by the use of dust suppressants to reduce or eliminate dust generation, if necessary.
- Fill and sediment deposition. Fill and sediment runoff from the active construction area may enter natural areas. This impact can be prevented with the installation of sediment control fencing around the perimeter of areas where ground disturbance is planned.

6.3 LONG-TERM DEVELOPMENT IMPACTS

Potential long-term impacts to natural areas could result from permanent loss of potential suitable habitat for common wildlife species and permanent loss of vegetation within the MEMM3 and CUT1 communities. Vegetation to be removed consists of species not listed under ESA, 2007 or SARA and will be restricted to approximately 0.5 ha. Limiting vegetation removal to within the boundary of the proposed development is required to minimize impacts on these features.

6.4 MITIGATION

Due diligence for the natural heritage features within the Study Area should include general mitigation measures to reduce or eliminate potential negative effects. These general mitigation measures should be applied to the design and construction activities of the proposed development.

6.4.1 Protection of Natural areas

The following strategies are recommended to protect areas of natural vegetation that will be retained through development of the proposed plan:

- Educate workers on the requirements for and importance of avoiding entrance to the demarcated area.
- Inspectors should ensure construction vehicles and personnel stay within the construction envelope, thereby limiting the disturbance of natural vegetation.
- Where trees are adjacent to the Site, tree protection fencing should be installed along the construction boundaries to protect off Site trees from direct impacts. In the event of accidental damage to trees, or unexpected vegetation removal, vegetation should be replaced / replanted with native species.
- Maintenance activities, vehicle refueling or washing, as well as the storage of chemical and construction equipment should be located >30 m from natural areas and watercourses.
- In the event of an accidental spill, the Ministry of Environment, Conservation and Parks Spills Action Centre should be contacted, and emergency spill procedures implemented immediately.
- Implementation of a clean equipment protocol is recommended for all equipment used on site to avoid the introduction and spread of invasive species.
- Install, monitor and maintain proper muffling and maintenance of machinery and equipment.

6.4.2 Species at Risk

Prior to any site alterations the following mitigation measures are recommended:

- Implement a worker awareness program for construction staff that that includes species at risk identification and habitat characteristics
- Conduct a daily pre-construction search of the work area to identify presence of species at risk
- If threatened or endangered species are seen in or near the work area, stop work immediately
- Take photographs if possible, but do not interact with the animal
- Contact MNRF

The most current species at risk information available for the 4200 Innes Road proposed development has been reviewed and reported in this EIS (**Tables 2, 3, 5**); however, because federal and provincial lists

of species at risk are periodically updated to reflect changes in species status and occurrence data for these species is also subject to change, this information should be reviewed immediately prior to the commencement of on-site activities to confirm that any newly listed species at risk are adequately addressed.

6.4.3 Significant Wildlife Habitat

No significant wildlife habitat was identified on site. General mitigation measures can be applied in order to mitigate effects to this species' habitat from the site development. The following mitigation measures are recommended:

- Vegetation removal should be minimized to only what is required for the proposed works.
- Exposed soils should be revegetated as soon as possible using a seed mix composed of native species, native trees and shrubs which are appropriate for the site conditions.
- Re-vegetation should consist of vegetation native to the area including various species of milkweed.

6.4.4 Wildlife Management

There is potential for wildlife to be present within the Site. To avoid adverse effects to wildlife, the following mitigation measures are recommended:

- Prior to beginning work each day, visually inspect the work area for wildlife presence
- Site clearing activities (e.g., vegetation removal) should commence in the northwest corner of the Site and move southeast; this will ensure that displaced wildlife is guided toward undisturbed habitat
- Do not feed wildlife or leave food out that may attract wildlife
- If wildlife are encountered within the work area, keep distance and allow the animal to exit the work area
- Additional mitigation measures should also be reviewed in the City of Ottawa's Protocol for Wildlife Protection during Construction (City of Ottawa, 2015b) before site clearing and construction activities commence.

6.4.5 Protection of Migratory Birds

The MBCA provides legal protection of migratory birds and their nests in Canada. The loss of migratory bird nests, eggs and or nestlings due to tree cutting or other vegetation clearing can be avoided by limiting clearing of vegetation to outside of the general nesting period for migratory birds in this region as identified by Environment Canada (Government of Canada, 2017) (e.g., between early April and late August). If work must be performed within this window, a survey for active nests or breeding behavior should be conducted by a qualified biologist within 7 days prior to commencing work and additional mitigation measures (e.g., implementation of avoidance distances during construction) implemented, if required.

6.4.6 Drainage, Erosion, Sediment Control and Protection of Fish Habitat

Although there are no surface water features present on the Site, appropriate erosion and sediment controls should be employed during each phase of construction to minimize potential erosion into Bilberry Creek to the north (downstream) of the Site.

Mitigation measures to avoid negative impacts to fish habitat and water quality in Bilberry Creek should include the following:

- Implement project specific temporary erosion and sediment control measures according to the Ontario Provincial Standard Specification (OPSS) 805 for Construction Specification for Temporary Erosion and Sediment Control Measures (OPSS, 2015) prior to starting work.
- Do not stockpile soil in areas that allow sediment to enter watercourses.
- Develop and implement a containment and spill management plan in order to prevent deleterious substances from entering the watercourse.
- Ensure machinery is clean and free of leaks.
- Keep emergency spill kit(s) on site.
- Stabilize disturbed soil upon completion of work.

7.0 SUMMARY AND RECOMMENDATIONS

This EIS provides an assessment of the potential impacts on the natural environment that may result from the proposed development. The impacts from this development to key natural features and functions identified within and adjacent to the Site include the following:

- The loss of migratory bird nests, eggs and or nestlings due to tree cutting or other vegetation clearing
- Temporary disruption to wildlife within and adjacent to Site during construction activities

By following the mitigation measures recommended in this EIS, the proposed development project will not result in adverse environmental effects to the natural heritage features identified.

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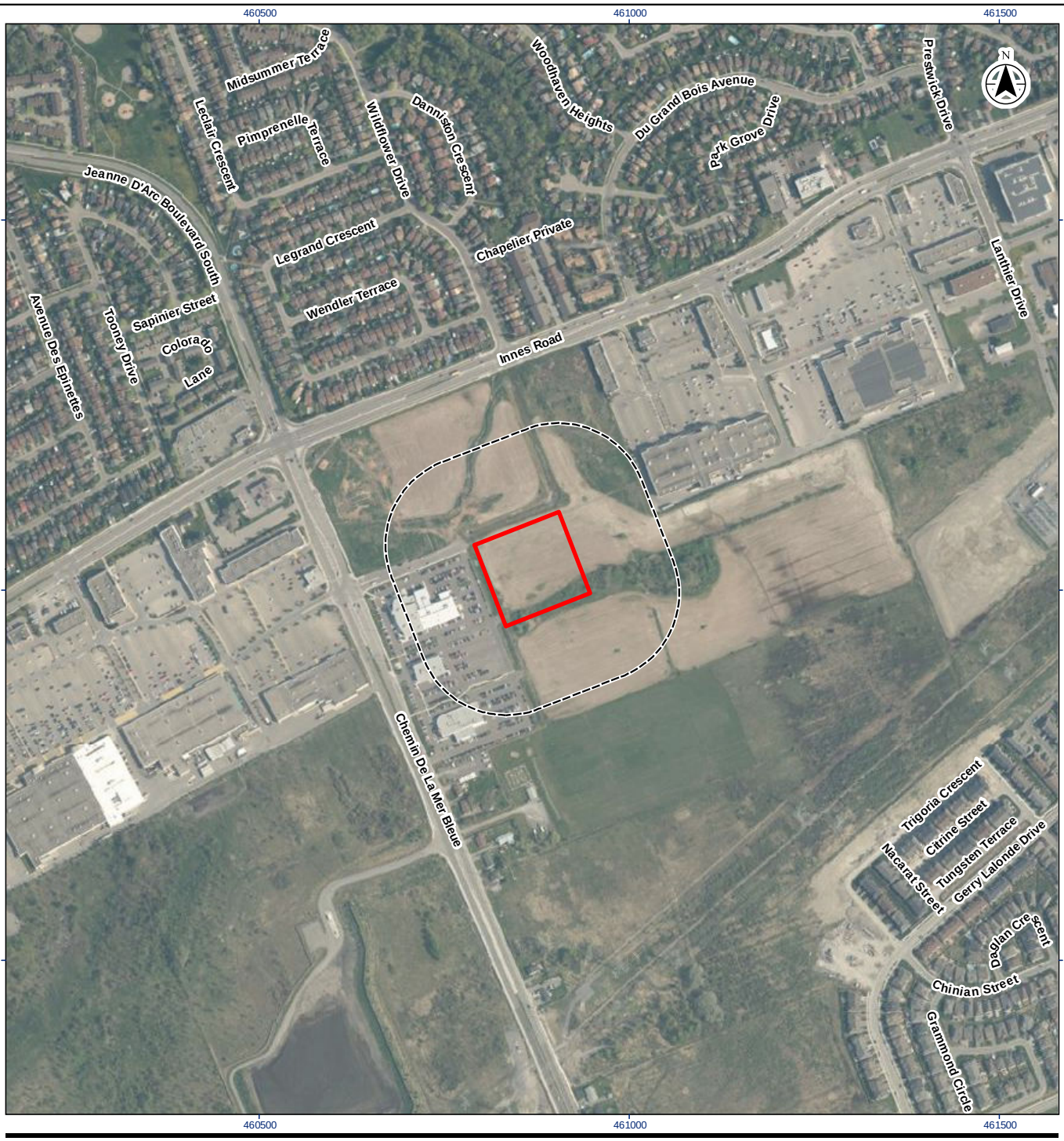
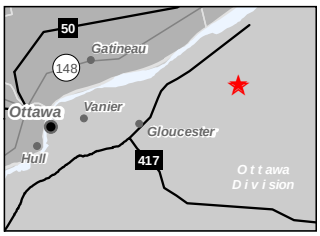
APPENDIX A:
Figures





Legend

- Site Location
- 120 metre Zone of Investigation

0 100 200 metres

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Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
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Stantec

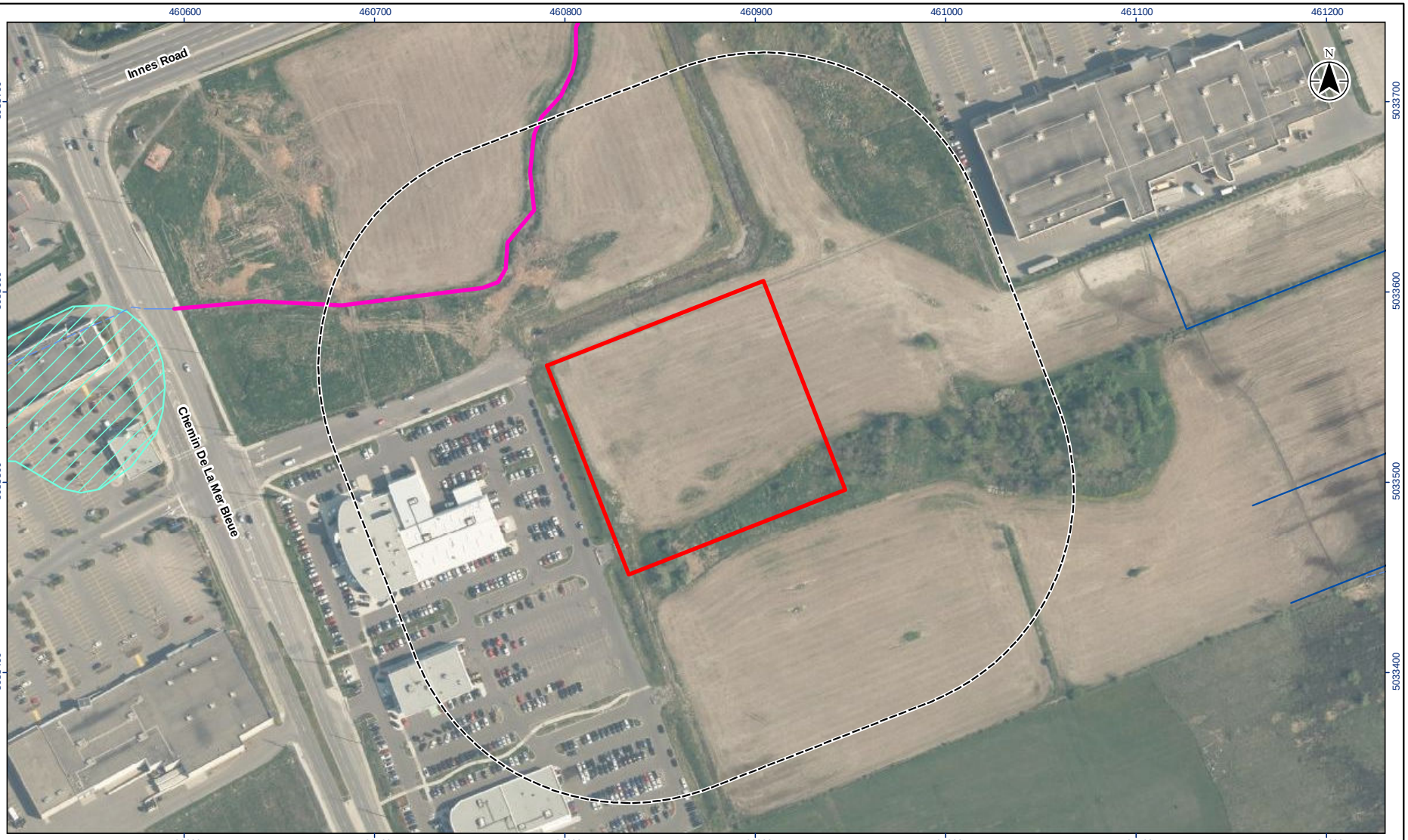
Project Location
City of Ottawa

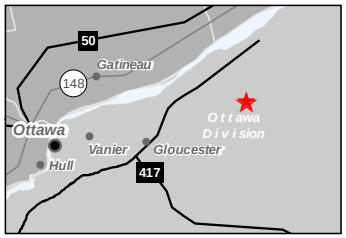
160425014 REVA
Prepared by PW on 2018-11-19
Technical Review by BC on 2018-11-19

Client/Project
RÉSEAU SÉLECTION
RÉSEAU SÉLECTION ORLÉANS
ENVIRONMENTAL IMPACT STATEMENT

Figure No.
1

Title
Site Location





Legend

- Site Location
- 120 metre Zone of Investigation
- Agricultural Drain
- Remnant Portion of Bilberry Creek
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Wetland, Not evaluated per OWES

0 40 80 metres

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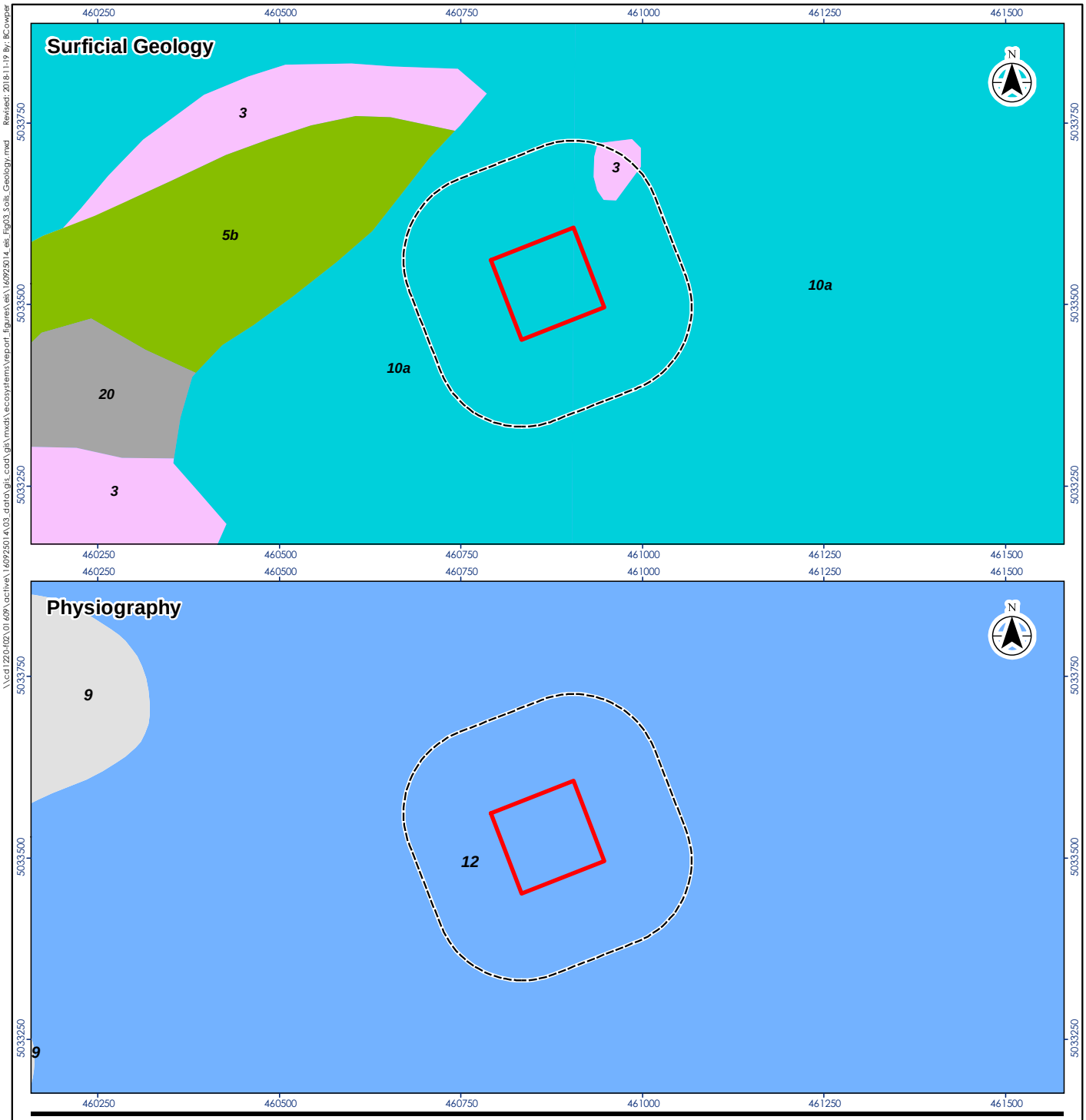
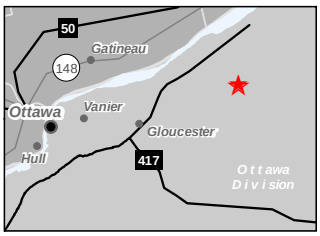
Client/Project
RÉSEAU SÉLECTION
RÉSEAU SÉLECTION ORLÉANS
ENVIRONMENTAL IMPACT STATEMENT

Figure No.
1

Title
Natural Features & Surface Drainage





Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Surficial Geology data source: Ontario Geological Survey 2010. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release–Data 128-REV ISBN 978-1-4435-2483-4.
4. Physiography data source: Chapman, L.J. and Putnam, D.F. 2007. Physiography of southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 228.

Legend

Site Location

120 metre Zone of Investigation

Surficial Geology

- 3: Paleozoic bedrock
- 5b: Stone-poor, carbonate-derived silty to sandy till
- 10a: Fine-textured glaciomarine deposits (Massive-well laminated)
- 20: Organic deposits

Physiography

- 9: Limestone Plains
- 12: Clay Plains

0 100 200 metres

1:8,000 (at original document size of 8.5x11)

Stantec

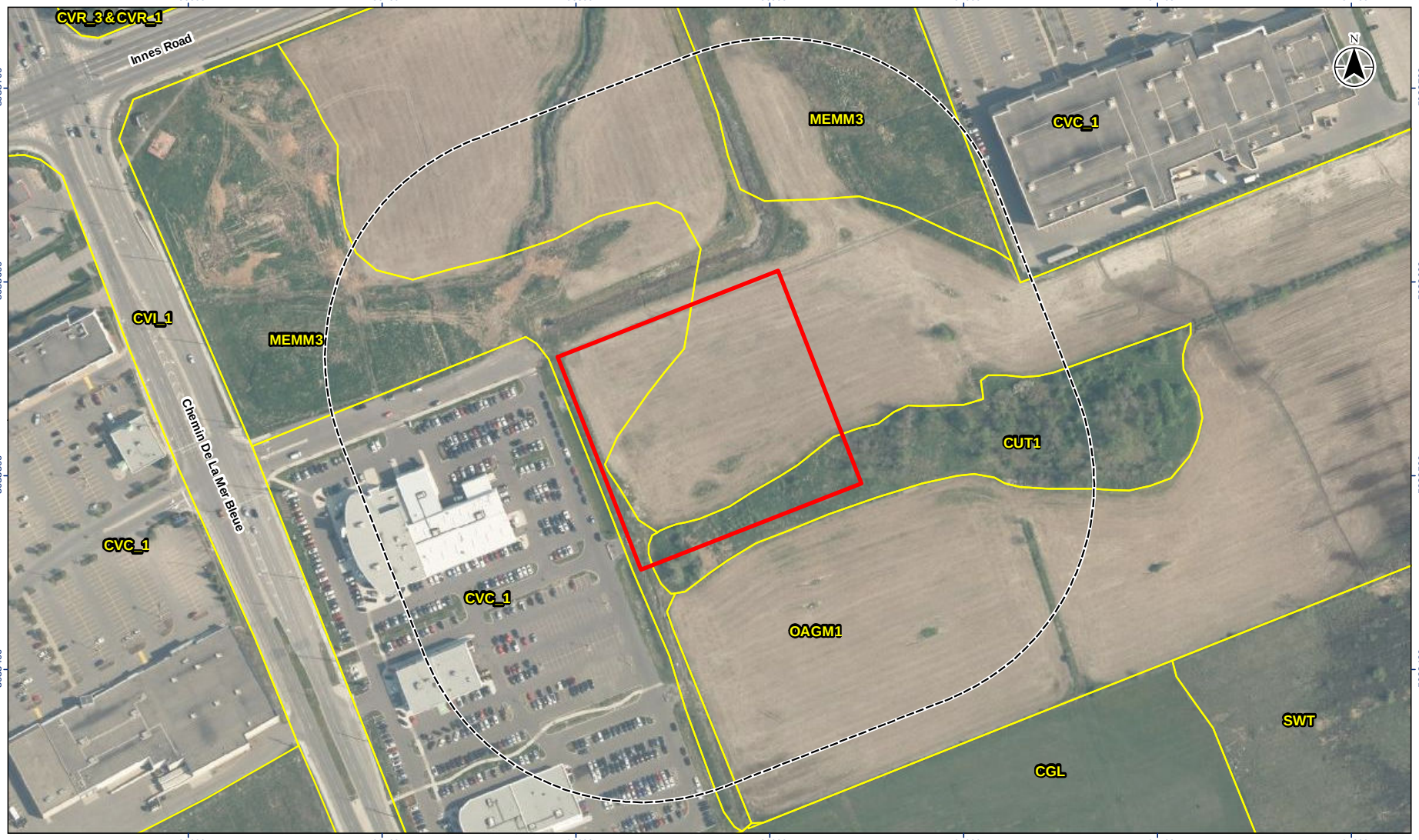
Project Location
City of Ottawa

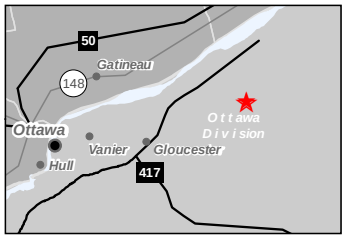
160425014 REVA
Prepared by PW on 2018-11-19
Technical Review by BC on 2018-11-19

Client/Project
RÉSEAU SÉLECTION
RÉSEAU SÉLECTION ORLÉANS
ENVIRONMENTAL IMPACT STATEMENT

Figure No.
3

Title
Soils and Geology





Legend

- Site Location
- 120 metre Zone of Investigation
- ELC Community

ELC Legend

- CGL - Green Lands
- CUT1 - Cultural Thicket
- CVC_1 - Business Sector
- CVI_1 - Transportation
- CVR_1 - Single Family Residential
- CVR_3 - Low Density Residential
- MEMM3 - Dry - Fresh Mixed Meadow
- OAGM1 - Annual Row Crops
- SWT - Thicket Swamp

0 25 50 metres

1:3,000 (At original document size of 8.5x11)

Notes

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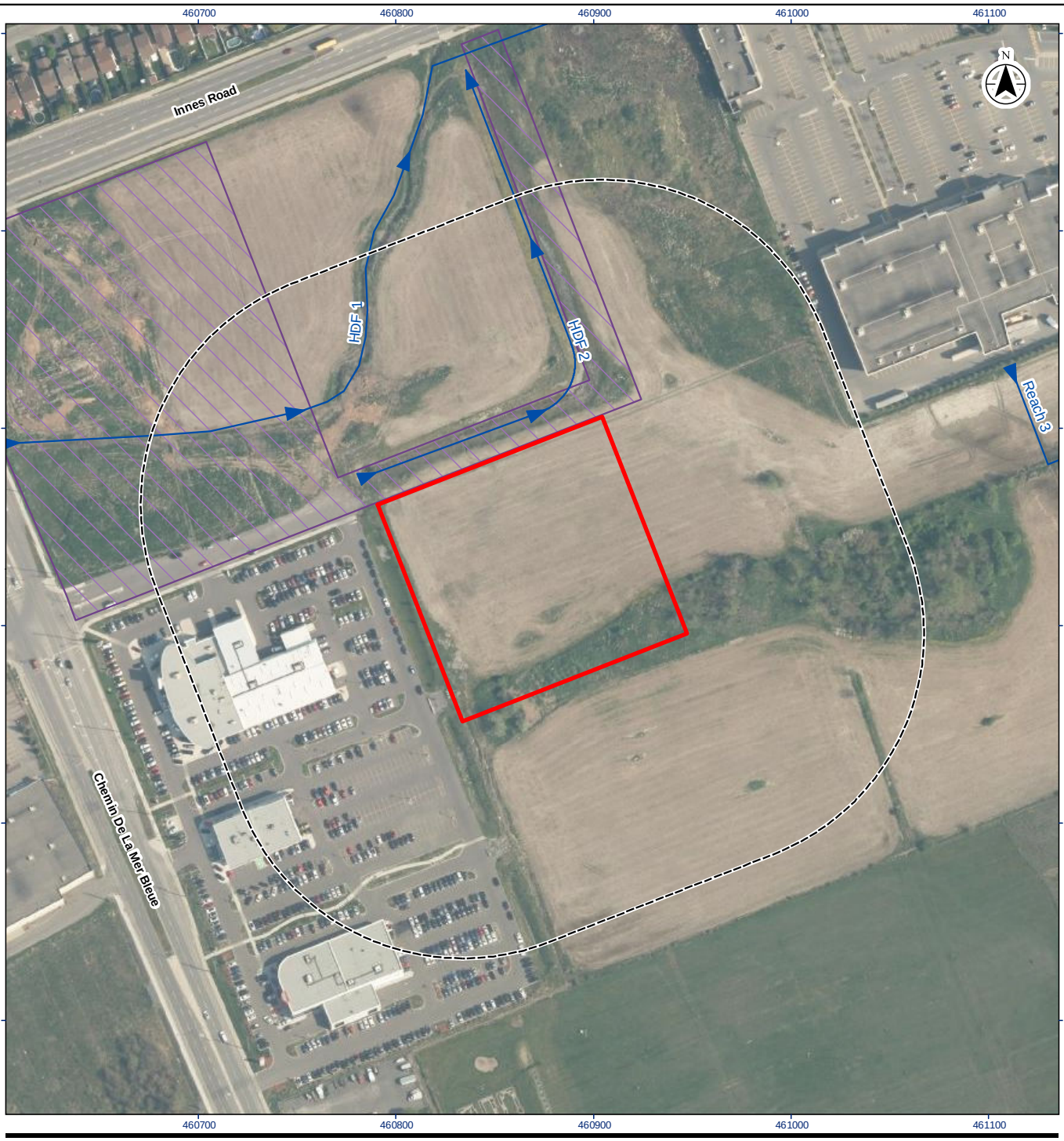
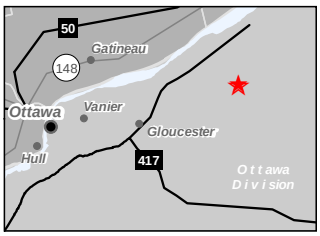
Client/Project
RÉSEAU SÉLECTION
RÉSEAU SÉLECTION ORLÉANS
ENVIRONMENTAL IMPACT STATEMENT

Figure No.
4

Title
Ecological Land Classification





Legend

- Site Location
- 120 metre Zone of Investigation
- Headwater Drainage Feature (HDF)
- Phase I Development

0 25 50 metres

1:3,000 (at original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2017.

Stantec

Project Location
City of Ottawa

160425014 REVA
Prepared by PW on 2018-11-19
Technical Review by BC on 2018-11-19

Client/Project
RÉSEAU SÉLECTION
RÉSEAU SÉLECTION ORLÉANS
ENVIRONMENTAL IMPACT STATEMENT

Figure No.
5

Title
Headwater Features and Phase I of Development

APPENDIX B:
AGENCY CORRESPONDENCE

From:	Lyon, Christian
To:	Jocelyn.chandler@rvca.ca; Jennifer.Lamoureux@rvca.ca; Glen McDonald
Cc:	Dave Crossman; Pengelly, Chris
Subject:	RE: RVCA Information Request - Project # 160925014 - UPDATED EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON
Date:	Friday, October 12, 2018 11:52:55 AM
Attachments:	AttachA_RSD-1714_Orleans_2018-07-27 (LowRes) 2.pdf SmartREIT Site Plan_20180402.pdf Information Request - Project # 164001242 - EIS for 2025 Mer Bleue Rd4100 Innes Rd Ottawa ON - RVCA.msg

Good morning everyone,

Apologies for adding everyone on the email list but I wasn't sure who was managing this file anymore.

Per the email below, I am asking RVCA if any previously provided information for the abovementioned site has changed since our last correspondence. The original project request was for an EIS/HDFA for the entire lot (owned by SmartReit) located at 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON. Recently, SmartReit has severed a parcel of land within their lot to Reseau-Selection Développement Hors Québec Inc. The new client now requires their own EIS at the request of the City of Ottawa. I wanted to send a quick note to ask if anything has changed so we can incorporate the information into our new report for our client. Please advise. I look forward to hearing back from you.

Entire Lot Previously Requested

- Attached Figure: "SmartREIT Site Plan_20180402"
- RVCA email response from request (2016)

Severed Parcel – new request

- Attached Figure: (Reseau-Selection Développement Hors Québec Inc) "AttachA_RSD-1714_Orleans_2018-07-27 (LowRes) 2"

Regards,
Christian

Christian Lyon
Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
Phone: 613.738.6044
Cell: 343.999.7573
Christian.Lyon@stantec.com

Vacation Notice: October 15th to 24th.

From: Lyon, Christian
Sent: Tuesday, April 03, 2018 2:55 PM
To: 'Jocelyn.chandler@rvca.ca' <Jocelyn.chandler@rvca.ca>; 'Jennifer.Lamoureux@rvca.ca' <Jennifer.Lamoureux@rvca.ca>
Subject: RVCA Information Request - Project # 160401419 - EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Good afternoon Jennifer and Jocelyn,

I’m writing to you to see if RVCA has any updated information regarding the abovementioned site location. On behalf of our client, SmartREIT, Stantec prepared an EIS and HDFA in the fall of 2016 which RVCA reviewed and provided feedback on (see attached correspondence). The project details have since changed (Site plan attached), however, the footprint has not. Please let me know if you require additional details or if nothing has changed. Thanks in advance.

Regards,
Christian

Christian Lyon
Planner/Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
Phone: 613.738.6044
Cell: 343.999.7573
Christian.Lyon@stantec.com

Lyon, Christian

From: Jamie Batchelor <jamie.batchelor@rvca.ca>
Sent: Tuesday, October 30, 2018 9:38 AM
To: Lyon, Christian
Subject: RE: RVCA Information Request - Project # 160925014 - UPDATED EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Categories: Reseau-Selection

Good Morning Christian,

Based on our knowledge of what has transpired in the area, the only new information which has been provided is some additional work which was completed by Niblett Environmental for the EUC MUC CDP. However with respects to the watercourses on the above mentioned site, all previous conclusions by Stantec were carried over.

Jamie Batchelor, MCIP, RPP
Planner
Rideau Valley Conservation Authority
3889 Rideau Valley Drive
613-692-3571 ext 1191
jamie.batchelor@rvca.ca

From:	Lyon, Christian
To:	James Holland
Cc:	Pengelly, Chris
Subject:	RE: SNC Information Request - Project # 160925014 - UPDATED EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON
Date:	Friday, October 12, 2018 11:52:16 AM
Attachments:	image001.png SNC Information Request - Project # 160401419 - EIS for 2025 Mer Bleue Rd4100 Innes Rd Ottawa ON.msg AttachA_RSD-1714_Orleans_2018-07-27 (LowRes) 2.pdf

Good morning James,

As you can see, this is regarding the email chain below (and attached). The previous client for the entire lot (SmartReit) has severed off a parcel to a new client (Reseau-Selection Développement Hors Québec Inc.) and they now require their own EIS. As you have already responded to our request for information on the entire lot, I just wanted to send a quick note and ask if anything has changed since April. I've attached a site layout for the parcel. Please let me know if you have any further information to add. Thanks in advance.

Regards,
Christian

Christian Lyon
Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
Phone: 613.738.6044
Cell: 343.999.7573
Christian.Lyon@stantec.com

Vacation Notice: October 15th to 24th.

From: James Holland <jholland@nation.on.ca>
Sent: Wednesday, April 04, 2018 1:20 PM
To: Lyon, Christian <Christian.Lyon@stantec.com>
Subject: RE: SNC Information Request - Project # 160401419 - EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Hi Christian,

I don't see anything issued for those addresses to Stantec in 2016. It currently shows as roll number 061450030136500 – is there possibly another roll number to use in the search.

There are two studies completed for that area by Niblett and Stantec as part of the East Urban Community - Mixed Use Community CDP. Following the 2016 Stantec report, Niblett completed a summary of the headwater drainage features assessment work and made recommendations, which has been reviewed and cleared by the South Nation Conservation. There are also aquatic and terrestrial studies completed for the Vanguard Drive extension, by Morrison Hershfield.

The best approach may be to acquire these studies from the authors, but if you require a written

review from SNC, you would need to request a Property Inquiry. Feel free to contact me if you would like to discuss.

Kind regards,
James

From: Lyon, Christian [mailto:Christian.Lyon@stantec.com]
Sent: April 3, 2018 1:39 PM
To: James Holland <jholland@nation.on.ca>
Subject: SNC Information Request - Project # 160401419 - EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Good afternoon James,

On behalf of our client (SmartREIT) I am writing to request any information South Nation Conservation (SNC) might have within, nearby, or from adjacent properties within the approximate boundaries of the study area/site location (please see attached PDF document) related to:

- Fish and Fish Habitat
- Water Quality & Quantity
- Natural Environment Features/Heritage Features (Species at Risk, etc.)
- Regulatory flows
- Floodplain mapping; and
- Water management studies

The purpose of this request is to complete an updated Environmental Impact Statement (EIS) to meet the requirements of the City of Ottawa's Official Plan and EIS guidelines for the proposed redevelopment of the site located at 2025 Mer Bleue Road, in Orleans, Ottawa, Ontario. A previous request was made to SNC on May 30, 2016 regarding this same location and project, however the staff that made the request is no longer with Stantec and any correspondence that may have been sent to them is no longer available. The project details have since changed, however, the footprint has not.

If any further information is required by Stantec to complete the information request do not hesitate to contact me directly.

Thank you in advance for the requested information.

Regards,
Christian

Christian Lyon
Planner/Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
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Cell: 343.999.7573
Christian.Lyon@stantec.com

James Holland, MSc, RPP
South Nation Conservation
P. O. Box 29
38 Victoria Street
Finch, ON - K0C 1K0
Tel: 613-984-2948 ext. 227
Fax: 613-984-2872
Toll Free: 1-877-984-2948
jholland@nation.on.ca
www.nation.on.ca

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Lyon, Christian

From: James Holland <jholland@nation.on.ca>
Sent: Monday, October 15, 2018 2:34 PM
To: Lyon, Christian
Subject: RE: SNC Information Request - Project # 160925014 - UPDATED EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Categories: Reseau-Selection

Hi Christian,
I'm not aware of any new information for the area.
Cheers,
James

From: Lyon, Christian <Christian.Lyon@stantec.com>
Sent: October 12, 2018 11:52 AM
To: James Holland <jholland@nation.on.ca>
Cc: Pengelly, Chris <Chris.Pengelly@stantec.com>
Subject: RE: SNC Information Request - Project # 160925014 - UPDATED EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Good morning James,

As you can see, this is regarding the email chain below (and attached). The previous client for the entire lot (SmartReit) has severed off a parcel to a new client (Reseau-Selection Développement Hors Québec Inc.) and they now require their own EIS. As you have already responded to our request for information on the entire lot, I just wanted to send a quick note and ask if anything has changed since April. I've attached a site layout for the parcel. Please let me know if you have any further information to add. Thanks in advance.

Regards,
Christian

Christian Lyon
Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
Phone: 613.738.6044
Cell: 343.999.7573
Christian.Lyon@stantec.com

Vacation Notice: October 15th to 24th.

From: James Holland <jholland@nation.on.ca>
Sent: Wednesday, April 04, 2018 1:20 PM
To: Lyon, Christian <Christian.Lyon@stantec.com>
Subject: RE: SNC Information Request - Project # 160401419 - EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Hi Christian,

I don't see anything issued for those addresses to Stantec in 2016. It currently shows as roll number 061450030136500 – is there possibly another roll number to use in the search.

There are two studies completed for that area by Niblett and Stantec as part of the East Urban Community - Mixed Use Community CDP. Following the 2016 Stantec report, Niblett completed a summary of the headwater drainage features assessment work and made recommendations, which has been reviewed and cleared by the South Nation Conservation. There are also aquatic and terrestrial studies completed for the Vanguard Drive extension, by Morrison Hershfield.

The best approach may be to acquire these studies from the authors, but if you require a written review from SNC, you would need to request a Property Inquiry. Feel free to contact me if you would like to discuss.

Kind regards,
James

From: Lyon, Christian [mailto:Christian.Lyon@stantec.com]
Sent: April 3, 2018 1:39 PM
To: James Holland <jholland@nation.on.ca>
Subject: SNC Information Request - Project # 160401419 - EIS for 2025 Mer Bleue Rd/4100 Innes Rd, Ottawa, ON

Good afternoon James,

On behalf of our client (SmartREIT) I am writing to request any information South Nation Conservation (SNC) might have within, nearby, or from adjacent properties within the approximate boundaries of the study area/site location (please see attached PDF document) related to:

- Fish and Fish Habitat
- Water Quality & Quantity
- Natural Environment Features/Heritage Features (Species at Risk, etc.)
- Regulatory flows
- Floodplain mapping; and
- Water management studies

The purpose of this request is to complete an updated Environmental Impact Statement (EIS) to meet the requirements of the City of Ottawa's Official Plan and EIS guidelines for the proposed redevelopment of the site located at 2025 Mer Bleue Road, in Orleans, Ottawa, Ontario. A previous request was made to SNC on May 30, 2016 regarding this same location and project, however the staff that made the request is no longer with Stantec and any correspondence that may have been sent to them is no longer available. The project details have since changed, however, the footprint has not.

If any further information is required by Stantec to complete the information request do not hesitate to contact me directly.

Thank you in advance for the requested information.

Regards,
Christian

Christian Lyon
Planner/Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
Phone: 613.738.6044
Cell: 343.999.7573
Christian.Lyon@stantec.com

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Fax: 613-984-2872
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Toll Free: 1-877-984-2948
jholland@nation.on.ca
www.nation.on.ca

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From:	Lyon, Christian
To:	Inforequest, Kemptville (MNRF)
Cc:	Pengelly, Chris
Subject:	RE: MNR Kemptville District Information Request (2018_CUM-4512) Response_EIS - 2025 Mer Bleue Rd - Project#160925014
Date:	Friday, October 12, 2018 11:52:08 AM
Attachments:	MNR Kemptville District Information Request (2018_CUM-4512) Response_EIS - 2025 Mer Bleue Rd - Project#160401419.msg AttachA_RSD-1714_Orleans_2018-07-27 (LowRes) 2.pdf KV_InfoRequest_EN_ReseauSelection_20181012.pdf

---

Good morning,

On behalf of our client (Reseau-Selection Développement Hors Québec Inc.), I am writing to request any information the Ministry of Natural Resources (MNRF) might have within, nearby, or from adjacent properties within the approximate boundaries of the Site (please see attached for site plan) related to:

- Natural Heritage Features
- Provincially Significant Wetlands
- Significant Wildlife Habitat
- Habitat for Endangered or Threatened Species
- Significant Valleylands
- Significant Woodlands, and
- Fish and Fish Habitat

The purpose of this request is to complete an updated Environmental Impact Statement (EIS) to meet the requirements of the City of Ottawa's Official Plan and EIS guidelines for the proposed redevelopment of the site located at 2025 Mer Bleue Road, in Orleans, Ottawa, Ontario.

As you can see below (and attached), the MNRF had already responded to a previous request for this location, however this specific parcel has been severed from the original lot and now requires its own EIS. We are asking MNRF if anything has changed since our last request.

If any further information is required by Stantec to complete the information request do not hesitate to contact me directly.

Regards,
Christian Lyon

Christian Lyon
Project Manager
Stantec, Environmental Services
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
Phone: 613.738.6044
Cell: 343.999.7573
Christian.Lyon@stantec.com

Vacation Notice: October 15th to 24th.

From: Inforequest, Kemptville (MNRF) <Kemptville.Inforequest@ontario.ca>
Sent: Monday, April 16, 2018 10:59 AM
To: Lyon, Christian <Christian.Lyon@stantec.com>

Cc: Inforequest, Kemptville (MNRF) <Kemptville.Inforequest@ontario.ca>
Subject: MNR Kemptville District Information Request (2018_CUM-4512) Response_EIS - 2025 Mer Bleue Rd - Project#160401419
Importance: High

Hello,

Christian Lyon
Stantec

Please find attached a response to your information request for project 'EIS - 2025 Mer Bleue Rd - Project#160401419'.

Sincerely,

Information Request Services
Kemptville District
Ministry of Natural Resources

APPENDIX C:
VASCULAR PLANT LIST

Vegetation Observed on Site

Aster (Asteraceae)

Birdsfoot trefoil (*Lotus corniculatus*)

Black medic (*Medicago lupulina*)

Brome grass (*Bromus* spp.)

Canada goldenrod (*Solidago canadensis*)

Cattail (*Typha* spp.)

Cherry (*Prunus* spp.)

Clover (*Trifolium* spp.)

Common bedstraw (*Galium aparine*)

Common buckthorn (*Rhamnus cathartica*)

Common burdock (*Arctium minus*)

Common winter cress (*Barbarea vulgaris*)

Dandelion (*Taraxacum officinale*)

Elderberry (*Sambucus nigra*)

Evening primrose (*Oenothera* spp.)

Garlic mustard (*Alliaria petiolate*)

Glossy buckthorn (*Rhamnus frangula*)

Green Ash (Fraxinus *pennsylvanica*)

Hackberry (*Celtis occidentalis*)

Hawthorn (*Crataegus* sp.)

Honeysuckle (*Lonicera* spp.)

Horsetail (*Equisetum* spp.)

Lambsquarters (*Chenopodium album*)

Manitoba Maple (*Acer negundo*)

Meadow sweet (*Spirea alba*)

Milkweed (*Asclepias syriaca*)

Mint (*Mentha* sp.)

Mullein (*Verbascum* sp.)

Poplar (*Poplar* sp.)

Purple loosestrife (*Lythrum salicaria*)

Reed canary grass (*Phalaris arundinacea*)

Red Osier dogwood (*Cornus sericea*)

Rye grass (*Lolium* spp.)

Sedge (*Carex* spp.)

Silver maple (*Acer saccharinum*)

Trembling aspen (*Populus tremuloides*)

Common vetch (*Vicia sativa*)

White elm (*Ulmus americana*)

Wild carrot (*Daucus carota*)

Wild grape (*Vitis* sp.)

Wild parsnip (*Pastinaca sativa*)

Willow (*Salix* spp.)