



September 2017

## REPORT ON

# Phase One Environmental Site Assessment 4305 McKenna Casey Drive 3285, 3288 and 3300 Borrisokane Road Ottawa, Ontario

**Submitted to:**  
Barrhaven Conservancy Inc.  
Suite 300 - 1565 Carling Avenue  
Ottawa, ON  
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REPORT



**Report Number: 1771847-1000**

**Distribution:**

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## Executive Summary

*The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.*

Golder Associates Ltd. (“Golder”) was retained by Barrhaven Conservancy Inc. (“BCI”) to conduct a Phase One Environmental Site Assessment (“Phase One ESA”) of the properties located at 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road in Ottawa, Ontario (herein after referred to as the “Site” or “Phase One Property”) as shown on Figures 1 and 2. For reporting purposes, Site north has been defined such that McKenna Case Drive has an east-west axis. At the time of the Site visit, which was conducted on February 16, 2017, the Site consisted of approximately 251.50 acre (101.78 hectare) of land that was primarily occupied by agricultural fields. More specifically, three of the four properties located on the Site (4305 McKenna Casey Drive and 3285 and 3300 Borrisokane Road) were undeveloped and primarily consisted of agricultural fields. The other property located on the Site (3288 Borrisokane Road) was developed as a farm property that consisted of a farm house, a barn, a wooden storage shed, a silo, a few other small wooden storage sheds and agricultural fields. No access was not provided to the interior portions of the structures located on the on-Site farm property.

It is understood that the Phase One Property is to be redeveloped with residential dwellings, a stormwater management pond, schools and community parks. The four properties on the Site are each owned by private individuals.

The Phase One ESA was completed in accordance with Ontario Regulation (O. Reg. 153/04), as amended, and included a review of available current and historical information regarding the Site and surrounding properties, a Site reconnaissance, interviews, evaluation of readily available information, and reporting, subject to the limitations outlined in Section 9.0 of this report. Given that the Site has only been used for agricultural and residential purposes and that the Site has not been used as an automotive garage, a bulk liquid dispensing facility or a dry cleaning facility, the Site is not considered an enhanced investigation property as defined by O. Reg. 153/04. There will be no change in the land use from less sensitive to more sensitive; therefore the Phase One ESA has not been completed to support a Record of Site Condition.

Based on the information obtained as part of this Phase One ESA, none of the identified potentially contaminating activities (PCAs) were considered to represent an area of potential environmental concern (APEC) for the Site and a Phase Two ESA is not recommended to be carried out at the Site at this time. However, the following building-related issues of potential environmental concern were identified:

- Based on the age of the farm house and farm buildings located at 3288 Borrisokane Road (prior to 1946), potential ACMs such as floor tiles, dry wall compounds, stucco ceilings, mortar and window caulking may be present in the Site buildings; and,
- Based on the age of the farm house and farm buildings located at 3288 Borrisokane Road (prior to 1946), there is a potential for lead-based paints to be present on the walls within these buildings.

Prior to renovations or demolition of the building, ACMs must be removed in accordance with Ontario Regulation 278/05: Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations. Other designated substances must be removed or managed in accordance within the OH&S Act.



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**PHASE ONE ESA – 4305 MCKENNA CASEY DRIVE  
3285, 3288 AND 3300 BORRISOKANE ROAD, OTTAWA ON**

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At the time of the Site visit, debris was observed around the barn located on the farm property at 3288 Borrisokane Road. The debris included abandoned vehicles, boats and trailers, a plastic drum, wood and metal debris. The presence of this waste is not considered to be an on-Site PCA; however, it is considered to be a property management issue and should be removed from the Site prior to development.

At the time of preparation of this report, a response to Golder's request for information had not been received from the City of Ottawa or the Ministry of Natural Resources and Forestry. In addition, Golder was unable to access the interior portion of the on-Site residential building during the Site visit. However, based on the body of information acquired, it is considered that the absence of this information should not likely affect the final conclusion of the Phase One ESA. Golder will review responses to these regulatory requests upon their receipt and should the responses affect the findings of this Phase One ESA, they will be forwarded to BCI. There were no material deviations to the Phase One ESA requirements set out in O.Reg. 153/04 that would cause uncertainty or absence of information that would affect the validity of the Phase One Conceptual Site Model or the findings of this Phase One ESA.



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## 1.0 INTRODUCTION

### 1.1 Phase One Property Information

Golder Associates Ltd. (Golder) was retained by Barrhaven Conservancy Inc. (“BCI”) to conduct a Phase One Environmental Site Assessment (Phase One ESA) of the following property:

<b>Municipal Addresses</b>	4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road
<b>Property Identification Numbers</b>	045950057, 045950025, 045950023 and 045951742
<b>Legal Description</b>	Part 1 of Lot 14, Concession 3 and Parts 3, 4 and 5 of Lot 13, Part 1 of Lot 14 and Part of Lot 15, Concession 4, Ottawa, Ontario

The Site location is provided on Figure 1. A Site plan is provided on Figure 2. For reporting purposes, Site north has been defined such that McKenna Casey Drive has an east-west axis.

As shown on Figure 2, part of the Site is located on the west side of Borrisokane Road and the other part is located on the east side of Borrisokane Road. The portion of the Site west of Borrisokane Road consists of the properties located at 4305 McKenna Casey Drive, 3288 Borrisokane Road and 3300 Borrisokane Road and the portion of the Site east of Borrisokane Road consists of the property located at 3285 Borrisokane Road.

The contact information for the Site is:

Site Owner / Client	Address	Contact Information
Barrhaven Conservancy Inc.	223 Colonnade Road South Suite 204 Nepean, Ontario K2E 7K3	Mr. Frank Cairo Office: 613-227-1177 Email: frank.cario@caivan.com

## 2.0 SCOPE OF INVESTIGATION

A Phase One ESA is a preliminary qualitative assessment of the environmental condition of a property, based on a review of current activities and historical information for the Site and a review of relevant and readily available environmental information for the surrounding properties located within a 250 metre (m) radius of the boundary of the Site (collectively referred to as the “Phase One Study Area”). The boundary of the Phase One Study Area is presented in Figure 2.

According to Ontario Regulation (O.Reg.) 153/04 *Records of Site Condition*, the objectives of a Phase One ESA are to:

- 1) Develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in, or under the Site.
- 2) Determine the need for a Phase Two Environment Site Assessment (ESA).
- 3) Provide a basis for carrying out a Phase Two ESA.



- 4) Provide adequate preliminary information about environmental conditions in the land or water on, in, or under the Site for the conduct of a risk assessment following completion of a Phase Two ESA.
- 5) Identify and report on evidence of actual and/or potential contamination on the Site from current and historical activities at the Site or from adjacent properties.

## **3.0 RECORDS REVIEW**

### **3.1 General**

#### **3.1.1 Phase One Study Area Determination**

For the purpose of this Phase One ESA, the Phase One Study Area is the area within a 250 m radius of the boundary of the Site. Based on Golder's review of the historical and current information compiled as part of this Phase One ESA for the area surrounding the Site and observations of neighbouring properties made during the Site visit, it was concluded that an assessment of information pertaining to properties within 250 m of the boundary of the Site was sufficient to achieve the objectives of the Phase One ESA.

#### **3.1.2 First Developed Use Determination**

The date of first developed use of the Phase One Property was determined based on review of the aerial photographs, the EcoLog Environment Risk Information Service Ltd. (ERIS) report and information provided by the Site Representative. The 1946 aerial photograph shows that the Phase One Property is developed with a farm (farm house and barn) located at 3288 Borrisokane Road. The remainder of the Site has been undeveloped, agricultural and/or vacant land since at least 1946. Therefore, the first development on the Phase One Property was determined to be prior to 1946, and included the current farm house and barn.

#### **3.1.3 Fire Insurance Plans**

Golder conducted a search of available Fire Insurance Plans (FIPs) for the Phase One Property and the surrounding properties within the Phase One Study Area. FIPs were not available for the Phase One Property or the Phase One Study Area.

#### **3.1.4 Chain of Title**

From Golder's review of aerial photography and information provided by the Site Representative, the majority of the Phase One Property (with the exception of the farm property at 3288 Borrisokane Road) has been undeveloped, agricultural and/or vacant land since at least 1946. Chain of Title information was not ordered as it was deemed that the other information from the records review would satisfy the objectives of the records search and that the information to be provided in a Chain of Title would not contribute additional environmental information relevant to the Phase One ESA.

#### **3.1.5 City Directories**

Based on the review of the aerial photographs, the only development on the Site has been the current farm located 3288 Borrisokane Road and the surrounding lands have primarily been occupied by vacant or agricultural lands with a few farm properties. As such, street directories for the Site and surrounding properties were not reviewed as they would not likely provide any further information.



### 3.1.6 Environmental Reports

No previous environmental reports related to the Phase One Study Area were available for review.

## 3.2 Environmental Source Information

### 3.2.1 EcoLog ERIS Report

Golder contracted EcoLog ERIS to conduct a search of environmental sources, including federal, provincial, and private sector databases, for information on the Phase One Property and Study Area. The EcoLog ERIS report is provided in Appendix B.

The databases searched included the following:

Federal	Provincial	Private
<ul style="list-style-type: none"> <li>▪ Contaminated Sites on Federal Land</li> <li>▪ Environmental Effects Monitoring</li> <li>▪ Environmental Issues Information System</li> <li>▪ Federal Convictions</li> <li>▪ Fisheries &amp; Oceans Fuel Storage Tanks</li> <li>▪ Indian &amp; Northern Affairs Fuel Tanks</li> <li>▪ National Analysis of Trends in Emergencies System (NATES)</li> <li>▪ National Defence &amp; Canadian Forces Fuel Storage Tanks</li> <li>▪ National Defence &amp; Canadian Forces Spills</li> <li>▪ National Defence &amp; Canadian Forces Waste Disposal Sites</li> <li>▪ National Environmental Emergencies System (NEES)</li> <li>▪ National PCB Inventory</li> <li>▪ National Pollutant Release Inventory</li> <li>▪ Parks Canada Fuel Storage Tanks</li> <li>▪ Transport Canada Fuel Storage Tanks</li> </ul>	<ul style="list-style-type: none"> <li>▪ Abandoned Aggregate Inventory</li> <li>▪ Abandoned Inventory</li> <li>▪ Aggregate Mine Information System</li> <li>▪ Borehole</li> <li>▪ Certificates of Approval</li> <li>▪ Certificates of Property Use</li> <li>▪ Commercial Fuel Oil Tanks</li> <li>▪ Compliance and Convictions</li> <li>▪ Drill Hole Database</li> <li>▪ Environmental Activity and Sector Registry</li> <li>▪ Environmental Compliance Approval</li> <li>▪ Environmental Registry</li> <li>▪ Fuel Storage Tank</li> <li>▪ Fuel Storage Tank – Historic</li> <li>▪ Inventory of Coal Gasification Plants and Tar Sites</li> <li>▪ Inventory of PCB Storage Sites</li> <li>▪ Landfill Inventory Management Ontario</li> <li>▪ List of TSSA Expired Facilities</li> <li>▪ Mineral Occurrences</li> <li>▪ Non-Compliance Reports</li> <li>▪ Ontario Oil and Gas Wells</li> <li>▪ Ontario Regulation 347 Waste Generators Summary</li> <li>▪ Ontario Regulation 347 Waste Receivers Summary</li> <li>▪ Ontario Spills</li> <li>▪ Orders</li> <li>▪ Permit to Take Water</li> <li>▪ Pesticide Register</li> <li>▪ Private and Retail Fuel Storage Tanks</li> <li>▪ Record of Site Condition</li> <li>▪ TSSA Historic Incidents</li> <li>▪ TSSA Incidents</li> </ul>	<ul style="list-style-type: none"> <li>▪ Anderson's Storage Tanks</li> <li>▪ Anderson's Waste Disposal Sites</li> <li>▪ Automobile Wrecking &amp; Supplies</li> <li>▪ Canadian Mine Locations</li> <li>▪ Canadian Pulp and Paper</li> <li>▪ Chemical Register</li> <li>▪ ERIS Historical Searches</li> <li>▪ Oil and Gas Wells</li> <li>▪ Retail Fuel Storage Tanks</li> <li>▪ Scott's Manufacturing Directory</li> </ul>



Federal	Provincial	Private
	<ul style="list-style-type: none"> <li>▪ TSSA Pipeline Incidents</li> <li>▪ TSSA Variances for Abandonment of Underground Storage Tanks</li> <li>▪ Waste Disposal Sites – MOECC 1991 Historical Approval Inventory</li> <li>▪ Waste Disposal Sites – MOECC CA Inventory</li> <li>▪ Wastewater Discharger Registration Database</li> <li>▪ Water Well Information System</li> </ul>	

The complete EcoLog ERIS report, including a brief description of each of the databases searched for the Phase One ESA, is included in Appendix B.

The following is a summary of the findings as identified within the EcoLog ERIS report for the Site and for the surrounding properties within the Phase One Study Area:

### **On-Site**

Noteworthy records for the Phase One Property included the following:

- Borehole (BORE) – There are records of three boreholes on the Site. The boreholes were completed in 1990 for geotechnical/geological purposes; just west of Borrisokane Road. The depth of the boreholes ranged from 3.0 to 3.2 metres below ground surface (mbgs).

### **Surrounding Properties within 250 metres of the Site**

Noteworthy records for the Phase One Study Area (excluding the Phase One Property) included the following:

- Borehole (BORE) – There are seven borehole listings within the Phase One Study Area. The boreholes were between August 1963 and January 1990 to depths ranging between 3.0 mbgs to 23.4 mbgs;
- Certificates of Approval (CA) – The EcoLog ERIS report identified one Certificate of Approval (C of A) listing within the Phase One Study Area. The C of A was issued for municipal water in 1986;
- ERIS Historical Searches (EHS) – The EcoLog ERIS report identified five historical search listings that were completed within the Phase One Study Area; and,
- Water Well Information System (WWIS) – There are eleven water wells within the Phase One Study Area. They were constructed between August 1963 and July 2015 to depths ranging between 13.10 mbgs to 55.47 and 3.66 and 9.75 mbgs. The static water levels ranged from 2.87 mbgs to 10.44 mbgs. Additional information regarding the water wells is included in the EcoLog ERIS report in Appendix B.

The EcoLog ERIS report did not identify any PCAs on the Site or within the Phase One Study Area.



### **3.2.2 Ministry of the Environment and Climate Change**

The Ottawa district office of the Ontario Ministry of Environment and Climate Change (MOECC) was contacted (refer to copy of correspondence in Appendix A) to provide an Index Report with respect to active orders and approvals for the Site as detailed below:

- Active orders under the Environmental Protection Act (EPA), the *Ontario Water Resources Act* (OWRA), and the *Pesticides Act* (PA).
- Approvals under Sections 9 and 39 of the EPA as well as Sections 52 and 53 of the OWRA.

A formal response from the MOECC was received by Golder on February 15, 2017. The review of the MOECC response indicated that no Active Orders, Certificate of Approvals or Environmental Compliance Approvals have been issued for the Site.

### **3.2.3 City of Ottawa**

Golder forwarded a request (refer to copy of correspondence in Appendix A) to the City of Ottawa (City), for the following information:

- Active orders under the EPA, the OWRA, and the PA
- Approvals
- Reports relating to environmental concerns
- Records of non-compliance or regulatory concerns
- Dumping infractions, spills or discharges to the environment
- Violations of sewer use or environmental by-laws
- Historic information related to landfill or dump sites on or in proximity to the Site
- Any other environmental information

The City responded to Golder's request on December 13, 2016 which included a copy of the City of Ottawa HLUI of the Site and surrounding properties within 50 m of the Site (refer to copy of the HLUI in Appendix A). Based on the review of the City of Ottawa HLUI and correspondence did not identify any records for the Site or the Phase One Study Area; however, it did indicate that the Site was located within 3 kilometres of a few waste facilities in the Trail Road vicinity. These facilities are located beyond the Phase One Study Area and greater than 2 kilometres from the Site and as such, are not considered to be issues of concern for the Site.

### **3.2.4 Ministry of Natural Resources and Forestry (MNR)**

An information request was sent to the Ministry of Natural Resources and Forestry (MNR) on February 1, 2017. Records requested included any information relating to areas of natural significance in the vicinity of the Site, as well as any other environmental concerns that may be related to the Site and surrounding area.



On July 18, 2017, Jane Devlin, Management Biologist of the MNRF reported in a letter sent by e-mail that the following Natural Heritage Features (e.g., Provincially Significant Wetlands, Areas of Natural and Scientific Interest, etc.) were identified on or in close proximity to the Site:

- Fish Nursery, Carps and Minnows Nursery Area (Non-Sensitive)
- Fish Nursery, Northern Pike Nursery Area (Non-Sensitive)
- Fish Nursery, Rock Bass Nursery Area (Non-Sensitive)
- Fish Nursery, Unidentifiable Nursery Area (Non-Sensitive)
- Fish Nursery, Walleye Nursery Area (Non-Sensitive)
- Fish Nursery, White Sucker Nursery Area (Non-Sensitive)
- Municipal Drain, O'Keefe Drain (Non-Sensitive)
- Pit, 4046 (Non-Sensitive)
- Pit, 4052 (Non-Sensitive)
- Pit, 4126 (Non-Sensitive)
- Pond (Non-Sensitive)
- Private Drain, Foster Drain (Non-Sensitive)
- Private Drain, Fraser-Clarke Drain (Non-Sensitive)
- River, Jock River (Non-Sensitive)
- Spawning Area, Pumpkinseed Spawning Area
- Spawning Area, Shorthead Spawning Area
- Spawning Area, Smallmouth Redhorse Spawning Area
- Spawning Area, Walleye Spawning Area
- Unevaluated Wetland (Not evaluated per Ontario Wetland Evaluation System).

Municipal Official Plans contain additional information related to natural heritage features. The local municipal Official Plan may need to be reviewed for more information such as policies and direction pertaining to activities which may impact natural heritage features.



The MNRF indicated that there is a potential for significant woodlands to be present on the Site. In addition, the MNRF indicated that there is a potential for the following Threatened (THR) and/or Endangered (END) species to be present on the Site or in proximity to it:

- Bank Swallow (THR);
- Blanding's Turtle (THR);
- Bobolink (END);
- Butternut (THR);
- Barn Swallow (THR); and,
- Eastern Meadowlark (THR).

These species, as well as their habitats, are protected by the Endangered Species Act and it is recommended that field surveys be conducted if the proposed development work involves removal or disturbance of natural areas (including overgrown grass areas) or disturbance to structures where nests may be present. If the proposed development is expected to have an impact on these species, a permit under the Endangered Species Act may be required. The MNRF recommends that the MNRF Kemptville office be contacted prior to any activities being carried out.

The MNRF also indicated that there is a potential for Special Concern (SC) species, specifically the Eastern Wood-Pewee, the Snapping Turtle and the Wood Thrush, to be present on the Site or in proximity to it. Species listed as Special Concern are not protected under the Endangered Species Act; however, some may be protected under the Fish and Wildlife Conservation Act.

### **3.2.5 Technical Standards and Safety Authority, Fuel Safety Division Records**

The Technical Standards and Safety Authority (TSSA) maintains records related to registered underground storage tanks (USTs) for petroleum-related products. The TSSA was contacted to establish the status of the Site and to identify outstanding instructions, incident reports, fuel oil spills or contamination records.

Ms. Prem Lal of the TSSA replied on February 1, 2017 and indicated that the TSSA did not have any records for the addresses searched for the Phase One Property or in the Phase One Study Area.

## **3.3 Physical Setting Sources**

### **3.3.1 Aerial Photographs**

Aerial photographs of the Site and neighbouring properties were obtained from the National Air Photo Library (Natural Resources Canada) for the years 1946, 1956, 1964 and 1985. In addition, the aerial photographs for 1976, 1991, 2002, 2008 and 2014 from the City of Ottawa geo-map (<http://maps.ottawa.ca/geoOttawa/>) were reviewed on-line. Golder selected aerial photographs based on availability and date intervals to help develop an understanding of the history of the development of the Phase One Property and Phase One Study Area. The information obtained from the aerial photographs was limited by the quality and scale of the available aerial photographs. The earliest aerial photograph available was from 1946. The aerial photographs from 1946, 1956, 1964 and 1985 are included in Appendix D.



**PHASE ONE ESA – 4305 MCKENNA CASEY DRIVE  
3285, 3288 AND 3300 BORRISOKANE ROAD, OTTAWA ON**

Information obtained from the review of the aerial photographs is summarized in the following table:

Year	Site	Surrounding Area
1946	One of the properties on the Site (3288 Borrisokane Road) appears to be occupied by a farm property with a farm house and barn as well as agricultural land. The remainder of the Site is undeveloped and primarily occupied by agricultural lands. The Jock River is located on the southwest corner of the Site and a tributary to the Jock River intersects the eastern portion of the Site.	<p><b>North:</b> The majority of the lands north of the Site are not visible; however, the areas that are visible are primarily occupied by agricultural fields. A railway running southwest to northeast is also located immediately north of the westernmost portion of the Site.</p> <p><b>East:</b> Agricultural lands.</p> <p><b>South:</b> Agricultural and vacant land followed by the Jock River. The tributary to the Jock River that is located on the Site intersects the southeast portion of the Phase One Study Area.</p> <p><b>West:</b> Agricultural lands and the Jock River which extends west from the southwest corner of the Site and intersects the western portion of the Phase One Study Area.</p>
1956	As per 1946.	<p><b>North:</b> The northern portion of the Phase One Study Area is fully visible and is occupied by agricultural and/or vacant land and a residential or farm property located on the west side of Borrisokane Road. McKenna Casey Drive is also located immediately north of the western portion of the Site.</p> <p><b>East:</b> As per 1946.</p> <p><b>South:</b> As per 1946.</p> <p><b>West:</b> As per 1946.</p>
1964	As per 1956.	<p><b>North:</b> Similar to 1956 with the addition of a small commercial-type building on the property located at 4378 McKenna Casey Drive. The easternmost portion of the land north of the Site is not visible.</p> <p><b>East:</b> Not visible.</p> <p><b>South and West:</b> As per 1956.</p>
1976 City of Ottawa geomap	Similar to 1964. There appears to be a few more small farm-related structures on the farm property at 3288 Borrisokane Road.	<p><b>North:</b> Similar to 1976; however, the residential or farm property located along the west side of Borrisokane Road is no longer present and a residential house has been constructed on the south side of McKenna Casey Drive, west of Borrisokane Road. In addition, there appears to be a few cell towers located property at 4378 McKenna Casey Drive. The commercial-type building that was visible on this property in the 1964 aerial photograph is likely a communications building for the cell towers.</p> <p><b>East:</b> As per 1956.</p> <p><b>South and West:</b> As per 1964.</p>



**PHASE ONE ESA – 4305 MCKENNA CASEY DRIVE  
3285, 3288 AND 3300 BORRISOKANE ROAD, OTTAWA ON**

<b>Year</b>	<b>Site</b>	<b>Surrounding Area</b>
1985	As per 1976.	<b>North:</b> As per 1976. <b>East:</b> Similar to 1976; however, the Kennedy-Burnett storm water management pond is located immediately west of the Site. <b>South and West:</b> As per 1976.
1991 City of Ottawa geomap	Similar to 1985; however, a north-south oriented drainage ditch has been constructed on the agricultural fields located on the west side of the Site at 3288 and 3300 Borrisokane Road. In addition, a silo is located on the farm property at 3288 Borrisokane Road.	<b>North:</b> Similar to 1985 with the addition of a farm property along the east side of Borrisokane Road. <b>East:</b> As per 1985. <b>South:</b> Similar to 1985; however, a portion of land immediately south of 3300 Borrisokane Road appears to have been excavated for the construction of a shallow settling pond which collects surface water run-off and shallow groundwater from the nearby agricultural fields and discharges it to the Jock River. The pond appears to be dry in this aerial photograph. The drainage ditch recently constructed on the western portion of the Site extends to this pond. In addition, a dirt and gravel road has been constructed on the west side of Borrisokane Road and provides access to this area. <b>West:</b> As per 1976.
2002 City of Ottawa geomap	Similar to 1985. There appears to be storage of vehicles and a boat on the property at 3288 Borrisokane Road.	<b>North, South, East and West:</b> As per 1991.
2008 City of Ottawa geomap	As per 2002.	<b>North:</b> Similar to 2002 with the addition of a stormwater management pond located north of the western portion of the Site on the north side of McKenna Casey Drive <b>East:</b> As per 2002. <b>South:</b> Similar to 2002. Water is now present in the settling pond. <b>West:</b> As per 2002.
2014 City of Ottawa geomap	As per 2008.	<b>North, South, East and West:</b> As per 2008.

Based on the aerial photographs, the Phase One Property has been developed with the current farm house and associated farm structures located at 3288 Borrisokane Road since prior to 1946. The remainder of the Site has been occupied by agricultural lands since prior to 1946.



The surrounding lands have been occupied by agricultural and/or vacant fields since at least 1946 with the exception of a few residential and farm properties located on the surrounding properties north of the Site and a railway that has been located immediately north of the westernmost portion of the Site since prior to 1946.

The aerial photograph review of the Site and surrounding area (within approximately 250 m) did not identify any PCAs on the Site; however, it did indicate an off-Site PCA associated with the current railway located within the Phase One Study Area.

### 3.3.2 Topography, Hydrology and Geology

The following records were reviewed to identify topographic, geologic and hydrogeological conditions at the Site. A topographic map (Ontario Base Map) showing the Site and the Phase One Study Area and the location of any water bodies is provided in Figure 3. Additional information on Site features, as observed at the time of the Site visit, is provided in Section 5.

Topic	Conditions	Comment / Source
<b>Topography of Site and Surrounding Area</b>	The topography of the Site and surrounding area is generally flat; however, the adjacent land south of the Site along the banks of the Jock River slope downwards towards to the river.	Site and surrounding area observations and Figure 3 – Topographic Map and Areas of Natural Significance
<b>Overburden Soils</b>	Topsoil underlain by Offshore Marine Deposits (clay, silty clay and silt).	Bélanger, J. R. 2008 Urban Geology of the National Capital Area, Geological Survey of Canada, Open File 5311, 1 DVD.  Geotechnical investigation currently being completed at the Site by Golder
<b>Type of Bedrock</b>	<u>Oxford Formation</u> : dolostone, minor shale and sandstone.	Armstrong, D.K. and Dodge, J.E.P. 2007. Paleozoic Geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release – Data 219
<b>Depth to Bedrock</b>	The depth to bedrock is expected to be between 10 and 15 metres below ground surface (mbgs) with the exception of the northeast portions of the 4305 McKenna Casey Drive and 3288 Borrisokane Drive where the depth to bedrock is expected to be between 15 mbgs and 25 mbgs.	2010 Bélanger, J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open File D3256, 2001



Topic	Conditions	Comment / Source
<b>Inferred Near Surface Groundwater Flow</b>	Local groundwater is anticipated to flow south towards the Jock River, to a tributary to the Jock River that intersects the eastern portion of the Site or to nearby drainage ditches which flow into the Jock River. The Jock River is located on the southwest corner of the Site and intersects the southern portion of the Phase One Study Area.	Site and surrounding area observations, Figure 1 – Key Plan and Figure 3 – Topographic Map and Areas of Natural Significance
<b>Site Grade Relative to the Adjoining Properties</b>	The Site appears to follow the topography of the area and is generally at grade with the surrounding properties north, east and west of the Site and above the grade of the surrounding properties south of the Site.	Site and surrounding area observations and Figure 3 – Topographic Map and Areas of Natural Significance
<b>Depth to Groundwater</b>	Not identified.	N/A

It should be noted that local groundwater flow may be influenced by underground utilities (i.e., service trenches) and building structures. For example, the gravel pack used around utilities, such as a water line, can act as interceptors and redirect groundwater flow along the direction of the pipe. If a more accurate description of geology, groundwater flow and groundwater quality is required, a subsurface investigation would be necessary.

### 3.3.3 Fill Materials

Topic	Conditions	Comment / Source
<b>Fill Materials</b>	No fill materials were observed or reported. No piles of fill material were observed on the Site.	Site observations

### 3.3.4 Water Bodies and Areas of Natural Significance

Topic	Conditions	Comment / Source
<b>Nearest Open Water Body</b>	The Jock River is located on the southwest corner of the Site and intersects the southern portion of the Phase One Study Area. A stormwater management pond is also located on the northeast corner of the property at 4305 McKenna Casey Drive. There is also a tributary to the Jock River that intersects the portion of the Site east of Borrisokane Road and several streams and/or drainage ditches intersect the Site.	Site observations and Figure 1 – Key Plan
<b>Areas of Natural Significance</b>	No areas of natural and scientific interest (ANSI) are known to be located on the Site or on the Phase One Study Area. Based on available information, the Site is not considered to be an environmentally sensitive area. However, a response from the MNRF has not been received to confirm this. As such, the Site is not considered an area of natural significance.	Figure 3 (Topographic Map and Areas of Natural Significance)



### 3.3.5 Well Records

Topic	Conditions	Comment / Source
<b>Water Wells on Site</b> (location, stratigraphy of the overburden, from ground surface to bedrock, depth to bedrock, depth to water table, drilling date, use)	At the time of the Site visit, one water well was observed on the farm property at 3288 Borrisokane Road, near a small storage shed on the west side of the farm house. In addition, five stick up monitoring wells are located on the Site. These monitoring wells were recently installed as part of the geotechnical investigation currently being completed for the Site and are identified as monitoring wells 17-01, 17-05, 17-09, 17-11 and 17-15 as shown on Figure 2.	EcoLog ERIS Report and Site observations
<b>Water Wells on the Neighbouring Properties</b> (location, stratigraphy of the overburden, from ground surface to bedrock, depth to bedrock, depth to water table, drilling rate, use)	Based on the EcoLog ERIS report, 11 water wells were constructed within the Phase One Study Area. They were constructed between August 1963 and July 2015 to depths ranging between 13.10 mbgs to 55.47 and 3.66 and 9.75 mbgs. The static water levels ranged from 2.87 mbgs to 10.44 mbgs. Additional information regarding the water wells is included in the EcoLog ERIS report in Appendix B.	EcoLog ERIS Report

## 3.4 Site Operating Records

The Site has always been used for agricultural and residential purposes. No Site operating records were provided to Golder for review.

## 4.0 INTERVIEWS

At the time of the Site visit, Golder conducted an interview with Andrew Finnsen of BCI (hereinafter referred to as the “Site Representative”) to discuss information about the historical and current activities carried out on the Site. Pursuant to the requirements O.Reg. 153/04, the Site Representative was interviewed as the “current owner” with knowledge of current Site operations.

Relevant information obtained during the interview and Site visit is provided in Section 5.0.

## 5.0 SITE RECONNAISSANCE

### 5.1 General Requirements

Alyssa Troke of Golder visited the Site on February 16, 2017. The Site visit consisted of a walk-around the Site along with a cursory inspection of surrounding properties from the Site and publicly accessible areas. The weather conditions were sunny and the temperature was approximately -5°C. At the time of the Site visit, three of the four properties located on the Site (4305 McKenna Casey Drive and 3285 and 3300 Borrisokane Road) were undeveloped and primarily consisted of agricultural fields. The other property located on the Site (3288 Borrisokane Road) was developed as a farm property that consisted of a farm house, a barn, a wooden storage shed, a silo, a few other small wooden storage sheds and agricultural fields. At the time of the Site visit, the Site was covered with snow which restricted observations for the potential presence of stains, sheens, distressed vegetation or discoloration. In addition, there was no access to the interior portions of the structures located on the on-Site farm property.



Photographs of relevant features noted during the Site visit are provided in Appendix C.

## 5.2 Specific Observations at Phase One Property

The specific observations made during the Site visit are presented in the following sections.

Topic	Observations	Source
<p><b><u>Structures</u></b> <b>Number and Age of Buildings on the Site</b></p>	<p>The only structures present on the Site were located on the farm property at 3288 Borrisokane Road. The main structures located on this property were a farm house, a barn and a storage shed which may have been a former parking garage associated with the farm house. These structures were constructed prior to 1946. There was also a silo and a few other small storage sheds present on this property.</p>	<p>Site observations and Site Representative</p>
<p><b>General Descriptions of Each Building (including improvements)</b></p>	<p>The farm house is a two-storey residential house with no basement level. The western portion of the farm house is constructed with brick on a poured concrete foundation and construction of the eastern portion of the farm house is vinyl siding on a wood frame on a poured concrete foundation. Access was not provided to the interior of the residential building.</p> <p>The barn is a two-storey building that is constructed with vertical wood board on wooden stacked walls. Access was not provided to the interior of the barn; however, it is likely used for the storage of farm equipment and hay.</p> <p>The storage shed is constructed with wooden shingle siding on concrete block. A single car garage door was located on the eastern side of the storage shed and as such, it is likely this structure was formerly used as a parking garage for the farm. However, it does not appear to be used as a parking garage anymore. Access was not provided to the interior of the barn.</p>	<p>Site observations and Site Representative</p>
<p><b>Building Areas</b></p>	<p>Farm House: approximately 130 m<sup>2</sup> Barn: approximately 255 m<sup>2</sup> Barn: approximately 40 m<sup>2</sup></p>	<p>N/A</p>



**PHASE ONE ESA – 4305 MCKENNA CASEY DRIVE  
3285, 3288 AND 3300 BORRISOKANE ROAD, OTTAWA ON**

<b>Topic</b>	<b>Observations</b>	<b>Source</b>
<b>Number of Floors (include all levels, whether above or below ground)</b>	The farm house and barn have two aboveground levels and the storage shed has one aboveground level. None of the on-Site structures have below grade levels.	Site observations
<b>Number, Age, and Depth of Levels Below Ground Level</b>	None of the structures on the Site have below ground levels.	Site observations
<b>Number and Details of all Aboveground Storage Tanks (ASTs)</b>	No evidence (fill/vent pipes extending through walls or slabs/ground surface, no staining or any obvious odours) was observed during the Site visit to indicate the current or former presence of fuel or chemical ASTs on the Site.	Site observations and Site Representative
<b>Number and Details of all Underground Storage Tanks (USTs)</b>	No evidence (fill/vent pipes extending through walls or slabs/ground surface, no staining or any obvious odours) was observed during the Site visit to indicate the current or former presence of fuel or chemical USTs on the Site.	Site observations and Site Representative
<b>Asbestos-Containing Materials (ACMs)</b>	Based on the age of the farm house and farm buildings (prior to 1946), potential ACMs such as floor tiles, dry wall compounds, stucco ceilings, mortar and window caulking may be present in the Site buildings.	Site observations
<b>Lead-Based Paints (LBPs)</b>	Based on the age of the farm house and farm buildings (prior to 1946), there is a potential for lead-based paints to be present within these buildings.	Site observations
<b>Polychlorinated Biphenyls (PCB) Containing Materials and Equipment</b>	A pole-mounted transformer owned by Hydro Ottawa was located on the farm property located on the Site. In addition, several pole-mounted transformers owned by Hydro Ottawa were noted adjacent to the roads within the Phase One Study Area. No evidence of spills or leaks were noted in the area of the transformers at the time of the Site visit. No labels indicating whether the transformers are PCB-contained or not were noted on any of the transformers.	Site observations



<b>Topic</b>	<b>Observations</b>	<b>Source</b>
<b>Underground Utilities Potable and Non-Potable Water Sources</b>	<p>Given the rural location of the Site, it is unlikely that the Site is connected to the municipal water supply. There is also a potable water well located on the farm property at 3288 Borrisokane Road, near a storage shed on the west side of the farm house. It is unknown if this well is currently operational or if it is currently being used.</p> <p>At the time of the Site visit, there were five stick up monitoring wells located on the Site. These monitoring wells were recently installed as part of the geotechnical investigation currently being completed for the Site.</p>	Site observations
<b>Utility Lines Present (i.e., Electrical, Natural Gas, other)</b>	Overhead electrical lines are present along the northern property boundary of 4305 McKenna Casey Drive, the eastern property boundary of 3288 and 3300 Borrisokane Road and along the western property boundary of 3285 Borrisokane Road. In addition, overhead electrical lines are present in the vicinity of the structures located on the farm property at 3288 Borrisokane Road.	Site observations
<b>Sanitary/Process Wastewater Receptor</b>	Sanitary wastewater is generated from the farm house and discharges to a septic tank located on the farm property. No process wastewater is generated on-Site.	Site observations
<b>Sanitary Sewer Connection</b>	The Site is not connected to the municipal sanitary sewer.	Site observations
<b>Septic Systems</b>	The Site Representative indicated that there is a septic system on the farm property at 3288 Borrisokane Road; however, the exact location is unknown.	Site observations
<b>Storm Water Flow</b>	Storm water run-off flows to drainage ditches that intersect the Site, to a tributary to the Jock River that intersects the eastern most of the Site, to the Jock River located on the southwest corner of the Site, to a stormwater management pond located on the northeast corner of 4305 McKenna Casey Drive and through natural soil infiltration.	Site observations



**PHASE ONE ESA – 4305 MCKENNA CASEY DRIVE  
3285, 3288 AND 3300 BORRISOKANE ROAD, OTTAWA ON**

<b>Topic</b>	<b>Observations</b>	<b>Source</b>
<b>Storm Sewer Connection</b>	The Site is not connected to the municipal storm sewer.	Site observations
<b><u>Interior of Structures</u> Entry and Exit Points for Site Buildings</b>	The farm house has three entry and exit points. The barn and main storage shed have one entry point.	Site observations
<b>Existing and Former Heating System(s) (include fuel type / source)</b>	The farm house is heated via electric baseboards and a wood stove. The Site Representative reported that these have been the only heating sources for the farm house. At the time of the Site visit, a wood stove chimney was observed on the storage shed and as such, it is likely that this building is currently or was formerly heated via a wood stove.	Site observations and Site Representative
<b>Existing and Former Cooling System(s) (include fuel type / source)</b>	None identified.	Site observations
<b>Drains, Pits, and Sumps (include current use, if any, and former use)</b>	None identified.	Site observations
<b>Unidentified Substances</b>	None identified.	Site observations
<b>Floor Stains or Corrosion Located near a Potential Discharge Location</b>	None identified.	Site observations
<b><u>Miscellaneous Exterior</u> Location of any Current and Former Wells</b>	One water well was observed on the farm property at 3288 Borrisokane Road, near a storage shed on the west side of the farm house. In addition, five stick up monitoring wells are located on the Site. These monitoring wells were recently completed as part of the geotechnical investigation currently being completed for the Site and are identified as monitoring wells 17-01, 17-05, 17-09, 17-11 and 17-15 as shown on Figure 2.	Site observations
<b>Ground Cover (i.e., grass, gravel, soil, or pavement, etc.)</b>	The majority of the Site is covered with agricultural fields. Grassed areas are present around the farm house and farm-related structures at 3288 Borrisokane Road and the driveway of this farm property was covered with gravel.	Site observations
<b>Current or Former Railway Lines or Spurs</b>	None observed or reported on the Site.	Site observations



Topic	Observations	Source
<b>Presence of Stained Soil, Vegetation, or Pavement</b>	None observed; however, the Site was primarily snow covered at the time of the Site visit which restricted observations for the potential presence of stained ground surfaces. In addition, no access was provided to the structures on the farm property at 3288 Borrisokane Road and as such, no observations for potential presence of staining were made in these structures.	Site observations
<b>Presence of Stressed Vegetation</b>	None identified; however, the Site was primarily snow covered at the time of the Site visit which restricted observations for the potential presence of stressed vegetation.	Site observations
<b>Areas Where Fill and/or Debris Materials Appear to Have Been Placed</b>	No piles of fill material were observed during the Site visit; however, debris was observed around the barn located on the farm property at 3288 Borrisokane Road. The debris included, but was not limited to, abandoned vehicles, boats and trailers, a plastic drum, wood and metal debris.	Site observations
<b>Potentially Contaminating Activity</b>	None identified.	Site observations and Site Representative
<b>Unidentified Substances</b>	None identified.	Site observations

### 5.2.1 Enhanced Investigation Property

The Site has only been used for agricultural and residential purposes has not been used as an automotive garage, a bulk liquid dispensing facility or a dry cleaning facility. As such, the Site is not considered to be an enhanced investigation property as defined by O. Reg. 153/04.

### 5.3 Surrounding Land Use

During the Site visit, a visual reconnaissance of the outdoor operations in the Phase One Study Area was carried out from the Site and publicly accessible areas.

The surrounding properties include residential and agricultural land uses as well as greenspaces/vacant land, as illustrated on Figure 2.

**North:** Primarily agricultural and vacant land with a farm property located on the east side of Borrisokane Road. Two stormwater management ponds were also located within the northern portion of the Phase One Study Area. One was located land north of 3288 Borrisokane Road and east of 4305 McKenna Casey Drive. This stormwater management pond extended onto the northeast corner of 4305 McKenna Casey Drive. The other stormwater management pond was located on the north side of McKenna Casey Drive. Cell towers and an associated



communications building were also located on the surrounding lands northwest of the Site and a railway running southwest to northeast was located immediately north of the westernmost portion of the Site (4305 McKenna Casey Drive). In addition, a pile of fill material was present on the property at 4235 McKenna Casey Drive which is the property located between the 4305 McKenna Casey Drive and McKenna Case Drive. The fill material was located immediately west of the stormwater management pond located on the northeast corner of 4305 McKenna Casey Drive. Based on the review of the aerial photographs, this stormwater management pond and the pile of fill material have been present on these lands since sometime between 2014 and the time of the Site visit. As such, it is likely that the fill material is excavated material for the construction of the stormwater management ponds.

**East:** The Kennedy-Burnett storm water management pond followed by agricultural land.

**South:** Agricultural and vacant land followed by the Jock River which intersects the southern portion of the Phase One Study Area from east to west. A settlement pond is also located immediately south of 3300 Borriskane Road and a dirt and gravel road extends west from Borriskane Road to this pond. In addition, the tributary to the Jock River that is located on the Site intersects the southeast portion of the Phase One Study Area.

**West:** Agricultural lands with some trees. The Jock River also extends west from the southwest corner of the Site and intersects the western portion of the Phase One Study Area.

## **5.4 Written Description of Investigation**

The Site is located at 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borriskone Road in Ottawa, Ontario. At the time of the Site visit, which was conducted on February 16, 2017, the Site consisted of approximately 251.50 acre (101.78 hectare) of land that was primarily occupied by agricultural fields and was snow covered at the time of the Site visit. More specifically, three of the four properties located on the Site (4305 McKenna Casey Drive and 3285 and 3300 Borriskane Road) were undeveloped and primarily consisted of agricultural fields. The other property located on the Site (3288 Borriskane Road) was developed as a farm property that consisted of a farm house, a barn, a wooden storage shed, a silo, a few other small wooden storage sheds and agricultural fields. In addition, a picnic table and fire pit was observed on the south side of the barn. No access was not provided to the interior portions of the structures located on the on-Site farm property.

During the Site visit, debris was observed in the vicinity of the barn located on the farm property at 3288 Borriskane Road. The debris included, but was not limited to, abandoned vehicles, boats and trailers, a plastic drum, wood and metal debris.

The surrounding properties within the Phase One Study Area included residential and agricultural land uses as well as some vacant land.

At the time of the Site visit, a pile of fill material that was vegetated and snow covered was present on an adjacent property north of the Site at 4235 McKenna Casey Drive. This property is located between the 4305 McKenna Casey Drive and McKenna Case Drive. The fill material was located immediately west of the stormwater management pond located on the northeast corner of 4305 McKenna Casey Drive and, based on the review of the aerial photographs, this stormwater management pond and the pile of fill material have been present on these lands since sometime between 2014 and the time of the Site visit. As such, it is likely that the fill material is material was excavated for the construction of the stormwater management pond located on-Site



and adjacent to the Site. Given that the origin of the fill material is known, the presence of the fill material on the adjacent land north of the Site not considered to be a PCA. It was also noted during the Site visit that a southwest-northeast oriented railway was located immediately north of the westernmost portion of the Site (4305 McKenna Casey Drive). The current presence of the railway is considered to be an off-Site PCA.

## 6.0 REVIEW AND EVALUATION OF INFORMATION

### 6.1 Current and Past Uses of the Site

The following summarizes the current and past uses of the Phase One Property:

Year(s)	Name of Owner(s)	Description of Property Use	Property Land Use according to Reg.153/04	Other Observations from Aerial Photographs, Fire Insurance Plans, Etc.
Prior to 1946 to Present (2016)	The four properties on the Site are each owned by private individuals; however, the name of prior owners is unknown.	The Site was occupied by agricultural fields with the exception of a farm property that is located at 3288 Borrisokane Road.	Agricultural or other use/Residential	The 1946 and subsequent aerial photographs show the Site is developed with a farm (farm house and farm related structures) located at 3288 Borrisokane Road and that the remainder of the Site has been undeveloped, agricultural and/or vacant land. At the time of the Site visit, the Site was occupied by a farm property at 3288 Borrisokane Road and agricultural fields. No aerial photograph coverage was available for prior to 1946.

### 6.2 Potentially Contaminating Activity

Potentially contaminating activities, which if currently or historically carried out at a Site, may contribute to an area of potential environmental concern (APEC). Based on the information obtained as part of this Phase One ESA, the following PCA was identified within the Phase One Study Area:

Location	Potentially Contaminating Activity	Information Source	Rationale for Potential Contribution of the PCA to an APEC
Phase One Study Area	<b>#46. Rail Yards, Tracks and Spurs</b> – Current presence of a railway located immediately north of the westernmost portion of the Site.	FIPs, aerial photographs and Site observations	Given that the railway is located off-Site, that there have been no reported spills along the railway and that future redevelopment of the Site is likely to include the removal of any soil impacts on the Site, this PCA is not considered to represent an APEC on the Site.

In addition, debris, including abandoned vehicles, boats and trailers, a steel drum, wood and metal debris, was observed around the barn located on the farm property at 3288 Borrisokane Road. The presence of this waste is not considered to be an on-Site PCA; however, it is considered to be a property management issue and should be removed from the Site prior to development.



### **6.3 Areas of Potential Environmental Concern**

Based on the information obtained as part of this Phase One ESA, none of the PCAs identified were considered to represent an APEC on the Phase One Property.

### **6.4 Conceptual Site Model**

A Conceptual Site Model of the Phase One Study Area (as required by O.Reg. 153/04) is presented in a series of Figures 1 to 8 (Figure 1: Key Plan, Figure 2: Site Plan, Figure 3: Topographic Map and Areas of Natural Significance, Figure 4: Surficial Geology, Figure 5: Bedrock Geology, Figure 6: Drift Thickness, Figure 7: Soil Survey Complex (Ontario Soils), and Figure 8: Physiography Map).

The combined set of figures shows:

- Existing buildings and structures
- Water bodies and Areas of Natural Significance (if present) located in the Phase One Study Area
- Drinking water wells on the Phase One Property
- Roads (including names) within the Phase One Study Area
- Uses of properties adjacent to the Phase One Property
- Location of identified PCAs in the Phase One Study Area (including any storage tanks)

The following describes the Phase One ESA Conception Site Model (CSM) for the Site based on the information obtained and reviewed as part of this Phase One ESA:

- At the time of the Site visit, which was conducted on February 16, 2017, the Site consisted of approximately 251.50 acre (101.78 hectare) of land that was primarily occupied by agricultural fields. The only development on the Site was a farm property located at 3288 Borrisokane Road which consisted of a farm house, a barn, a wooden storage shed, a silo and a few other small wooden storage sheds.
- At the time of the Site visit, one drinking water well was observed on the farm property at 3288 Borrisokane Road, near a storage shed on the west side of the farm house.
- The nearest open body of water is the Jock River which is located on the southwest corner of the Site and intersects the southern portion of the Phase One Study Area. A stormwater management pond is also located on the northeast corner of the property at 4305 McKenna Casey Drive. There is also a tributary to the Jock River that intersects the portion of the Site east of Borrisokane Road and several streams and/or drainage ditches intersect the Site.
- No areas of natural and scientific interest (ANSI) are known to be located on the Site or on the Phase One Study Area. Based on available information, the Site is not considered to be an environmentally sensitive area. However, a response from the MNRF has not been received to confirm this. As such, the Site is not considered an area of natural significance.
- At the time of the Phase One ESA, the surrounding properties within the Phase One Study Area were comprised of residential and agricultural land uses or were vacant land.



- The roads located within the Phase One Study Area at the time of the Site visit were Borrissokane Road, McKenna Case Drive and Strandherd Drive.
- Soil at the Site consists of clay, silty clay and silt and bedrock at the Site is of the Oxford Formation (dolostone, minor shale and sandstone).
- Groundwater is anticipated to flow south towards the Jock River, to a tributary to the Jock River that intersects the eastern portion of the Site or to nearby drainage ditches which flow into the Jock River.

The following PCA that may have resulted in an APEC on the Site has been identified:

Location	Potentially Contaminating Activity	Information Source	Rationale for Potential Contribution of the PCA to an APEC
Phase One Study Area	<b>#46. Rail Yards, Tracks and Spurs</b> – Current presence of a railway located immediately north of the westernmost portion of the Site.	FIPs, aerial photographs and Site observations	Given that the railway is located off-Site, that there have been no reported spills along the railway and that future redevelopment of the Site is likely to include the removal of any soil impacts on the Site, this PCA is not considered to represent an APEC on the Site.

#### 6.4.1 Uncertainty and Absence of Information

At the time of preparation of this report, a response to Golder’s request for information had not been received from the City or the MNR. In addition, Golder was unable to access the interior portions of the on-Site buildings during the Site visit. However, based on the body of information acquired, it is considered that the absence of this information should not likely affect the final conclusion of the Phase One ESA. Golder will review responses to these regulatory requests upon their receipt and, should the responses affect the findings of this Phase One ESA, they will be forwarded to BCI. There were no material deviations to the Phase One ESA requirements set out in O.Reg. 153/04 that would cause uncertainty or absence of information that would affect the validity of the Phase One Conceptual Site Model or the findings of this Phase One ESA.

## 7.0 CONCLUSIONS

Given that no APECs were identified on the Site during the Phase One ESA, a Phase Two ESA is not recommended to be carried out at the Site at this time.

### 7.1 Record of Site Condition Based on Phase One Environmental Site Assessment Alone

Given that the Phase One Property has been used for agricultural and residential purposes and is to be redeveloped with residential dwellings, a stormwater management pond, schools and community parks, there will be no change in the land use from less sensitive to more sensitive. As such, there is no mandatory requirement for a RSC to be filed for the Site.



## 8.0 REFERENCES

The following documents and/or data were cited in this report:

Source	Date
Ontario Regulation 153/04 as amended	October 31, 2011
Bélanger, J. R. 2008 Urban Geology of the National Capital Area, Geological Survey of Canada, Open File 5311, 1 DVD.	2008
Armstrong, D.K. and Dodge, J.E.P. 2007. Paleozoic Geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 219	2007
2010 Bélanger, J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open File D3256, 2001	2010
Aerial Photographs – National Air Photo Library (Natural Resources Canada)	1946, 1956, 1964 and 1985
Aerial Photograph Images – geoOttawa ( <a href="http://maps.ottawa.ca/geoOttawa/">http://maps.ottawa.ca/geoOttawa/</a> )	1976, 1991, 2002, 2008 and 2014
EcoLog ERIS report	February 6, 2017
Ontario Ministry of the Environment and Climate Change	February 15, 2017
City of Ottawa	Pending response
Ministry of Natural Resources and Forestry	Pending response
Technical Standards and Safety Authority	February 1, 2017



## **9.0 LIMITATIONS AND USE OF REPORT**

This report (the “Report”) was prepared for the exclusive use of Barrhaven Conservancy Inc. for the express purpose of providing advice with respect to the environmental condition of the Site. In evaluating the Site, Golder Associates Ltd. (Golder) has relied in good faith on information provided by others as noted in the Report. We have assumed that the information provided is factual and accurate. We accept no responsibility for any deficiency, misstatement or inaccuracy contained in this Report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted, or incomplete or inaccurate historical information from the various agencies. Any use which a third party makes of this Report, or any reliance on or decisions to be made based on it, is the sole responsibility of such third party. If a third party requires reliance on this Report, prior written authorization from Golder is required. Golder disclaims any responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The scope and the period of Golder’s assessment are described in this Report, and are subject to restrictions, assumptions and limitations. Except as noted herein, the work was conducted in accordance with the scope of work and terms and conditions of Golder’s proposal. Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the Site referenced in the Report. Conditions may therefore exist which were not detected given the limited nature of the assessment Golder was retained to undertake with respect to the Site and additional environmental studies and actions may be required. In addition, it is recognized that the passage of time affects the information provided in the Report. Golder’s opinions are based upon information that existed at the time of the writing of the Report. It is understood that the services provided for in the scope of work allowed Golder to form no more than an opinion of the actual conditions at the Site at the time the Site was visited, and cannot be used to assess the effect of any subsequent changes in any laws, regulations, the environmental quality of the Site or its surroundings. Asbestos and mould surveys were not performed. If a service is not expressly indicated, do not assume it has been provided.

The results of an assessment of this nature should in no way be construed as a warranty that the Site is free from any and all contamination from past or current practices.

## **10.0 STATEMENT OF COMPLETION**

The undersigned confirm that this Phase One Environmental Site Assessment was conducted in a manner consistent with the expected standard of care for the consulting industry in Ontario and meets the requirements for Phase One ESAs as set out in O.Reg. 153/04, however this report has not been completed with the intent of filing a Record of Site Condition.



## **11.0 CLOSURE**

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.

### **GOLDER ASSOCIATES LTD.**

Alyssa Troke, B.Sc., E.I.T.  
Environmental Consultant

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Geoscientist/Associate

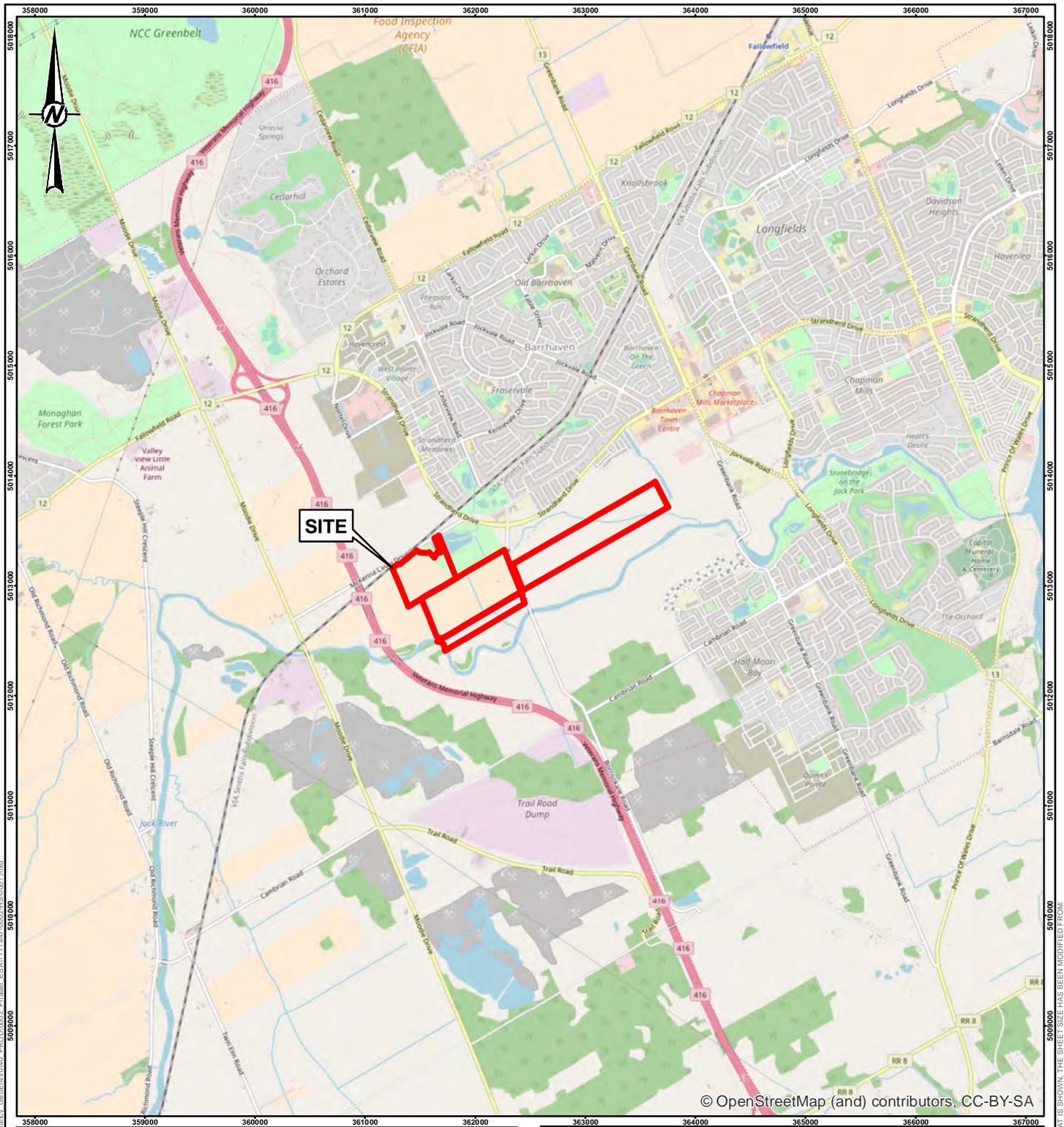
AT/KPH/ob/hw

\\golder.gds\gal\ottawa\active\2017\3 proj\1771847 caivan barrhaven conservancy lands ottawa\04\_reporting\phase i esa\final report\1771847-1000 - phase i esa - coversancy lands.docx

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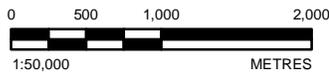
# FIGURES



© OpenStreetMap (and) contributors, CC-BY-SA

**LEGEND**

 PHASE ONE SITE



**NOTE(S)**

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**

1. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT  
**BARRHAVEN CONSERVANCY INC.**

PROJECT  
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
BORRISOKANE ROAD, OTTAWA, ONTARIO**

TITLE  
**KEY PLAN**

CONSULTANT



YYYY-MM-DD 2017-02-09

DESIGNED ----

PREPARED JEM

REVIEWED AT

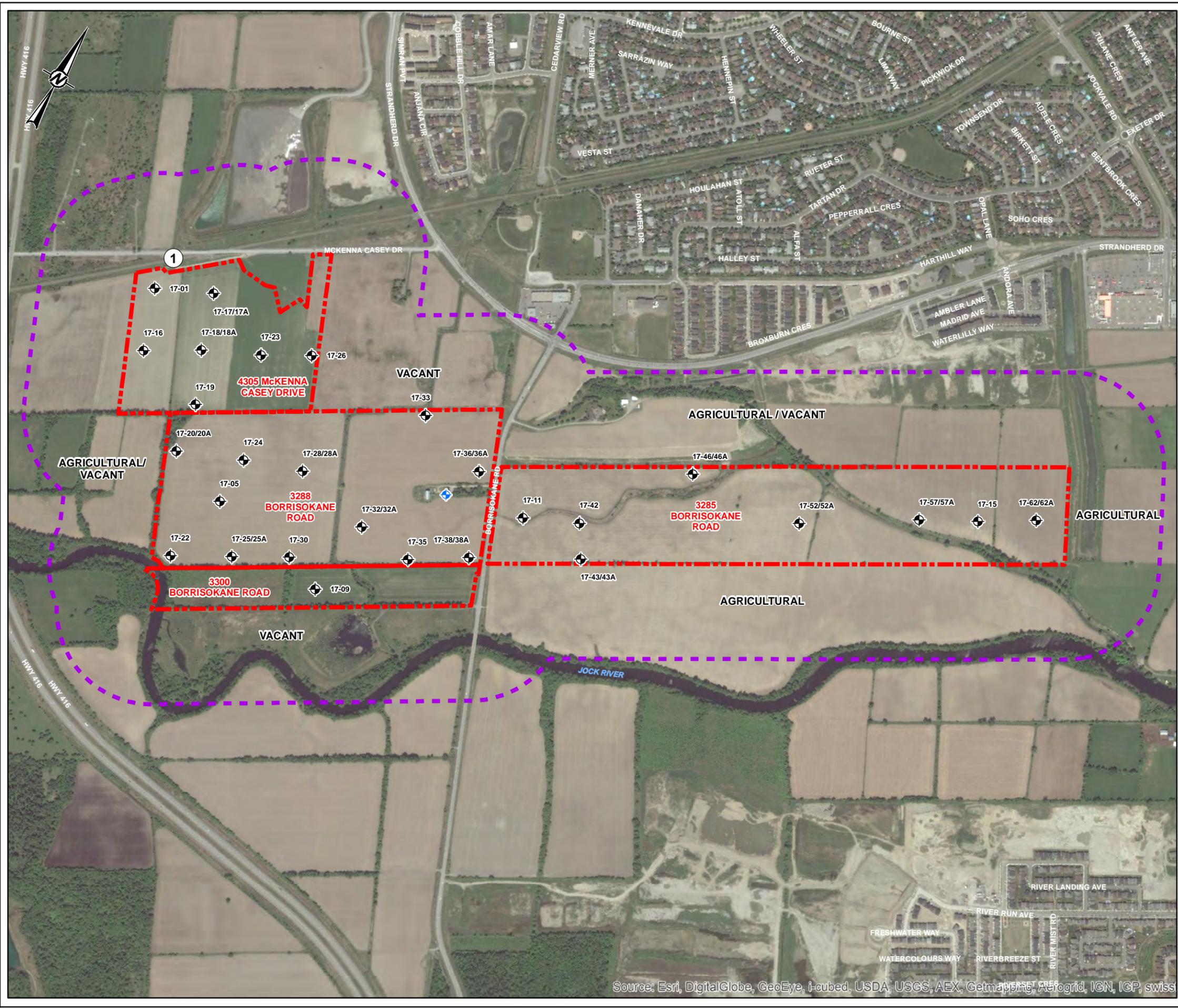
APPROVED KPH

PROJECT NO.  
1771847

CONTROL  
0002

REV.  
0

FIGURE  
**1**



**LEGEND**

- POTABLE WATER WELL OBSERVED DURING PHASE ONE ESA SITE VISIT
- APPROXIMATE BOREHOLE/MONITORING WELL LOCATION, CURRENT GEOTECHNICAL INVESTIGATION
- PHASE ONE SITE
- PHASE ONE STUDY AREA

Potentially Contaminating Activity (PCA)		
Location	Detail	PCA #
1	Rail Yards, Tracks and Spurs – Current presence of a railway located immediately north of the westernmost portion of the Site.	46

**NOTE(S)**  
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**  
 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES. © QUEENS PRINTER 2014  
 2. SOURCE: ESRI, DIGITAL GLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGIRD, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY  
 3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT  
 BARRHAVEN CONSERVANCY INC.

PROJECT  
 PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
 4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300 BORRISOKANE ROAD, OTTAWA, ONTARIO

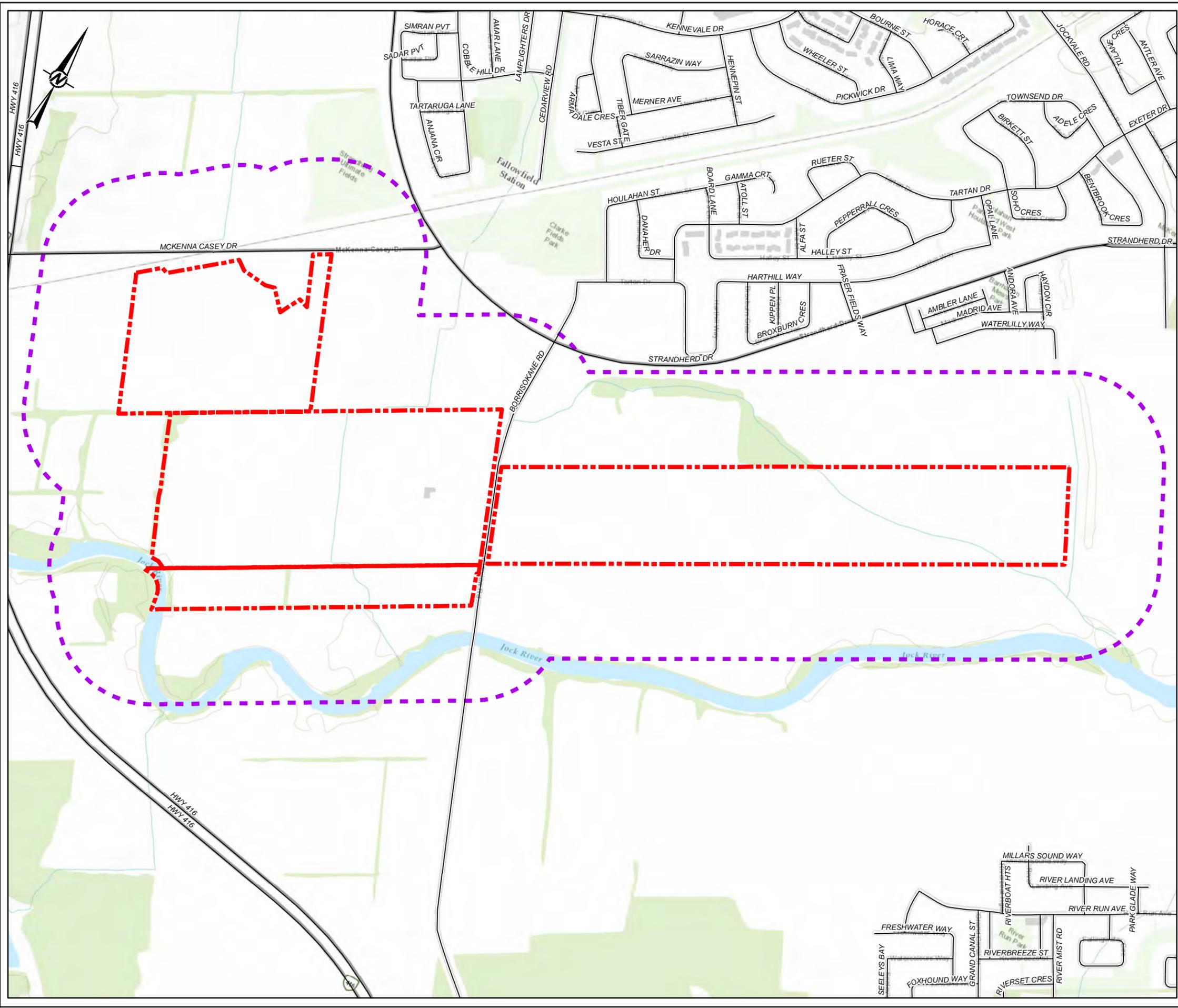
TITLE  
**SITE PLAN**

CONSULTANT	YYYY-MM-DD	2017-02-09
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	KPH	

PROJECT NO. 1771847 CONTROL 0002 REV. 0 FIGURE 2

Path: N:\Active\Spatial\_McKennaConservancy\_Lands\99\_PROD\1771847\_BarrhavenConservancy\_Geoenvironmental\_ESA\1771847-0002-18-002.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 28mm

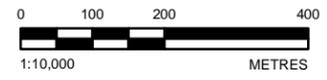


**LEGEND**

- ROADWAY
- PHASE ONE SITE
- PHASE ONE STUDY AREA

**NOTE(S)**  
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**  
 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014  
 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, DELORME, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
 3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT  
 BARRHAVEN CONSERVANCY INC.

PROJECT  
 PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
 4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
 BORRISOKANE ROAD, OTTAWA, ONTARIO

TITLE  
**TOPOGRAPHIC MAP AND AREAS OF NATURAL SIGNIFICANCE**

CONSULTANT	YYYY-MM-DD	2017-02-09
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	KPH	

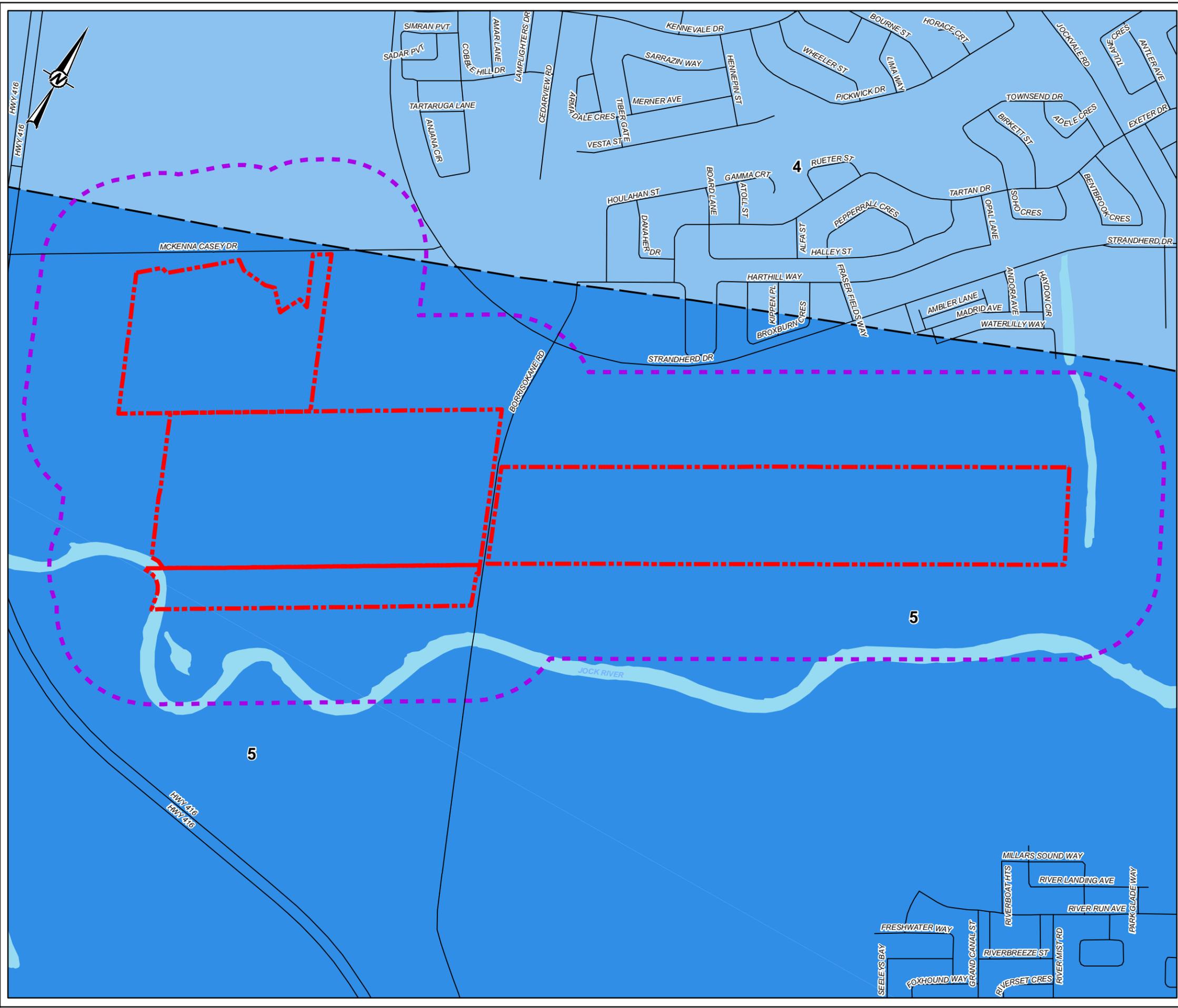


PROJECT NO. 1771847 CONTROL 0002 REV. 0 FIGURE 3

Print: N:\Vector\Spatial\_Maps\BarrhavenConservancy\_Lands\B9\_PROD\1771847\_BarrhavenConservancy\_GIS\Enviro\00\_002\HS\0000.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 297mm





**LEGEND**

- ROADWAY
- WATERBODY
- PHASE ONE SITE
- PHASE ONE STUDY AREA
- 5: OXFORD FORMATION - DOLOSTONE, MINOR SHALE AND SANDSTONE
- 4: MARCH FORMATION - SANDSTONE, DOLOMITIC SANDSTONE, DOLOSTONE

**NOTE(S)**  
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**  
 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014  
 2. ARMSTRONG, D.K. AND DODGE, J.E.P. 2007. PALEOZOIC GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE--DATA 219  
 3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT  
**BARRHAVEN CONSERVANCY INC.**

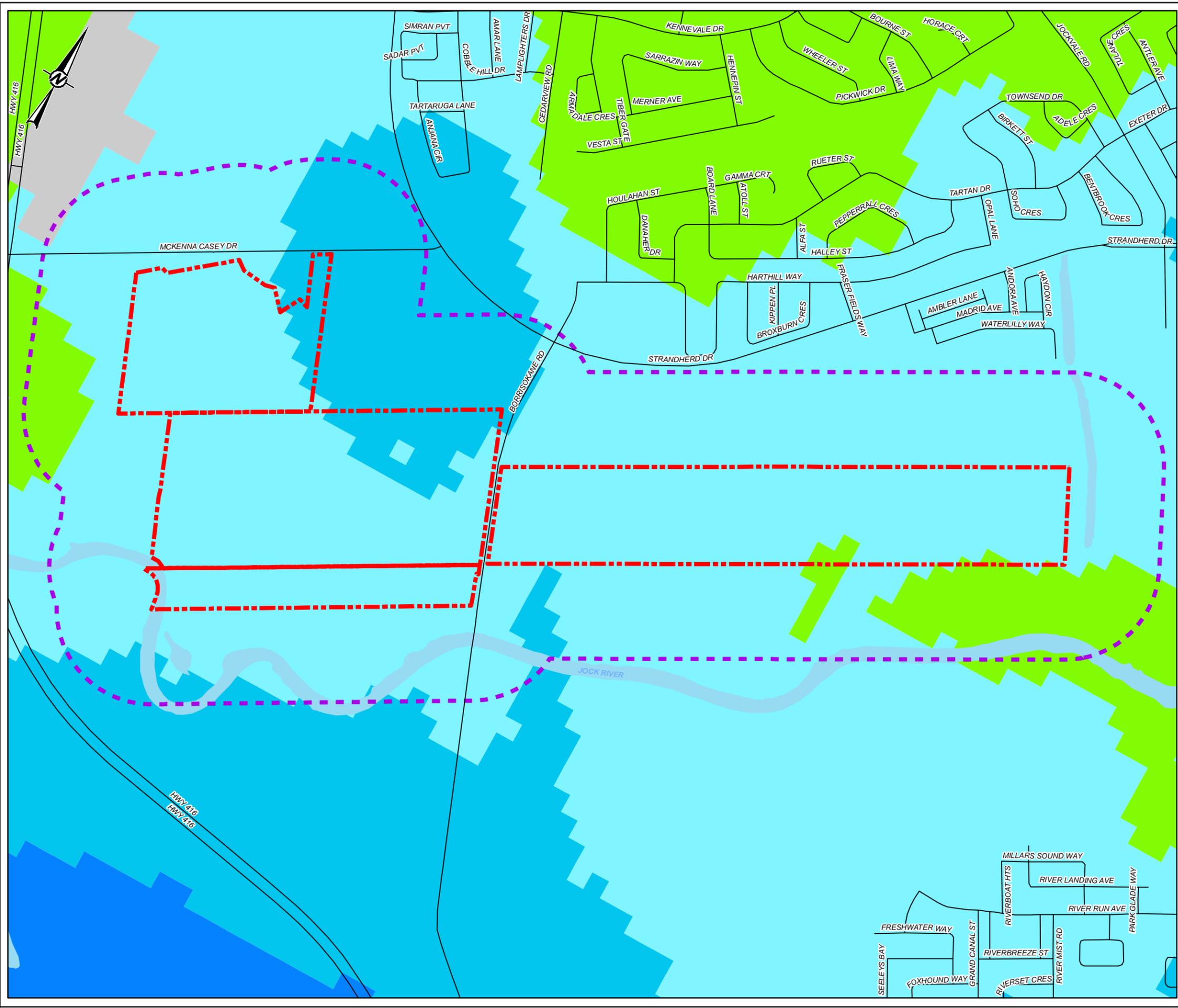
PROJECT  
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
 4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
 BORRISOKANE ROAD, OTTAWA, ONTARIO**

TITLE  
**BEDROCK GEOLOGY**

CONSULTANT	YYYY-MM-DD	2017-02-09
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	KPH	

Path: N:\Vector\Spatial - MCKenCon\Conservancy - Lands\99 - PROJ\1771847 - BarrhavenConservancy - GeoEnviro\00 - PROJ\0002 - Phase1 - ESA\1771847-0002-HS-0006.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 297mm



**LEGEND**

- ROADWAY
- WATERBODY
- PHASE ONE SITE
- PHASE ONE STUDY AREA

**TREND IN DEPTH TO BEDROCK (METRES)**

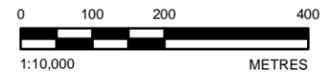
- 0 to 1
- 1 to 2
- 2 to 3
- 3 to 5
- 5 to 10
- 10 to 15
- 15 to 25
- 25 to 50
- 50 to 100
- 100 to 200

**NOTE(S)**

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. 2010 BÉLANGER, J. R., URBAN GEOLOGY OF THE NATIONAL CAPITAL AREA, GEOLOGICAL SURVEY OF CANADA, OPEN FILE D3256, 2001
3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT  
BARRHAVEN CONSERVANCY INC.

PROJECT  
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
BORRISOKANE ROAD, OTTAWA, ONTARIO

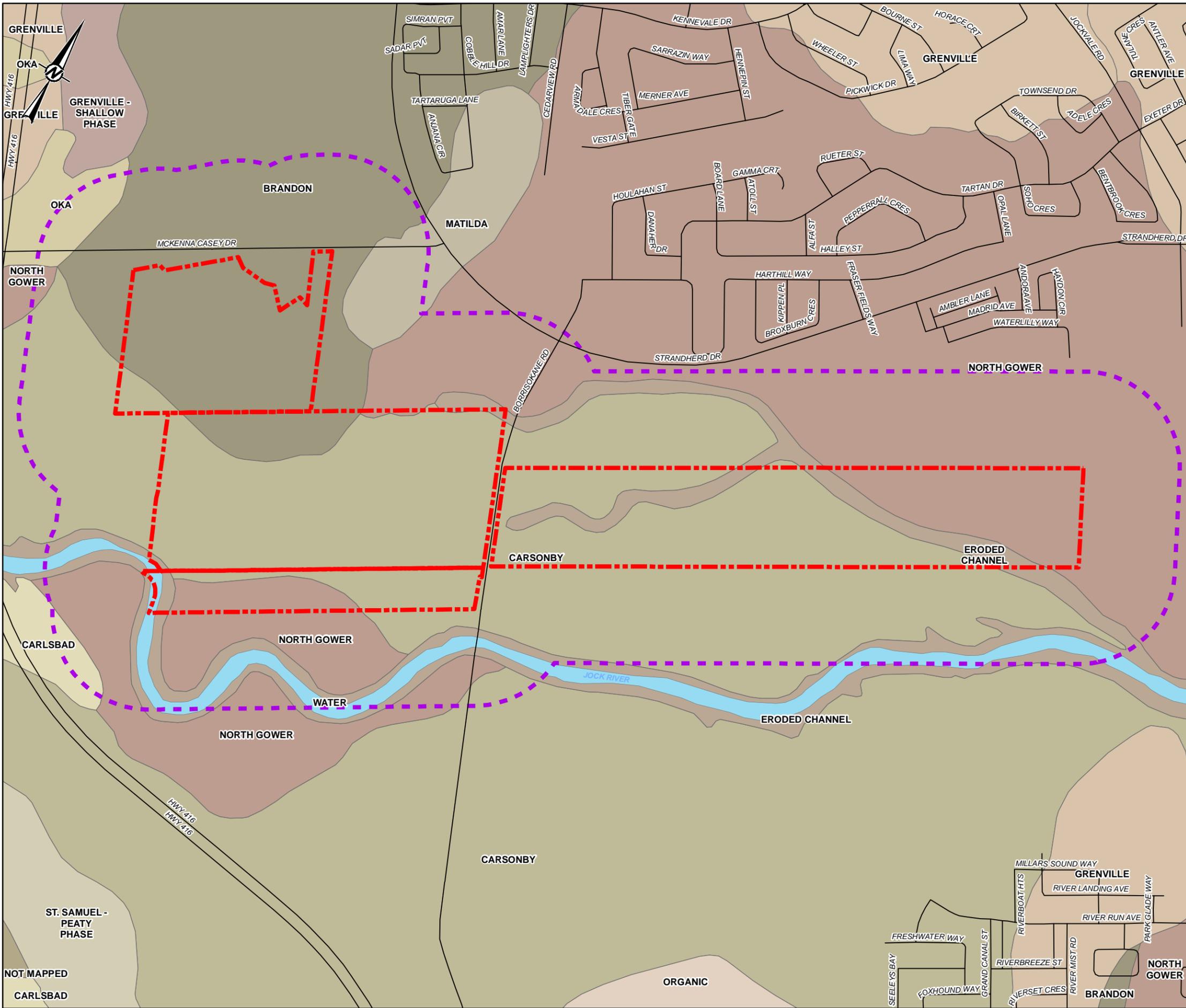
TITLE  
**DRIFT THICKNESS**

CONSULTANT	YYYY-MM-DD	2017-02-09
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	KPH	

PROJECT NO. 1771847 CONTROL 0002 REV. 0 FIGURE 6

Path: N:\Vector\Spatial\_MCH\BarrhavenConservancy\_Lands\99\_PROD\1771847\_BarrhavenConservancy\_GeEnviro\00\_PROD\0002\_Phase1\_ESA\1771847-0002-HS-0008.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 297mm

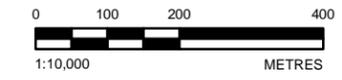


**LEGEND**

- ROADWAY
- PHASE ONE SITE
- PHASE ONE STUDY AREA
- WATER
- BRANDON
- CARLSBAD
- CARP
- CARSONBY
- CHATEAUGUAY - MARL PHASE
- ERODED CHANNEL
- GRENVILLE
- GRENVILLE - SHALLOW PHASE
- KARS
- MATILDA
- MILLE ISLE
- NORTH GOWER
- NOT MAPPED
- OKA
- ORGANIC
- ST. SAMUEL - PEATY PHASE

**NOTE(S)**  
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**  
 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014  
 2. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT  
 BARRHAVEN CONSERVANCY INC.

PROJECT  
 PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
 4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
 BORRISOKANE ROAD, OTTAWA, ONTARIO

TITLE  
**SOIL SURVEY COMPLEX (ONTARIO SOILS)**

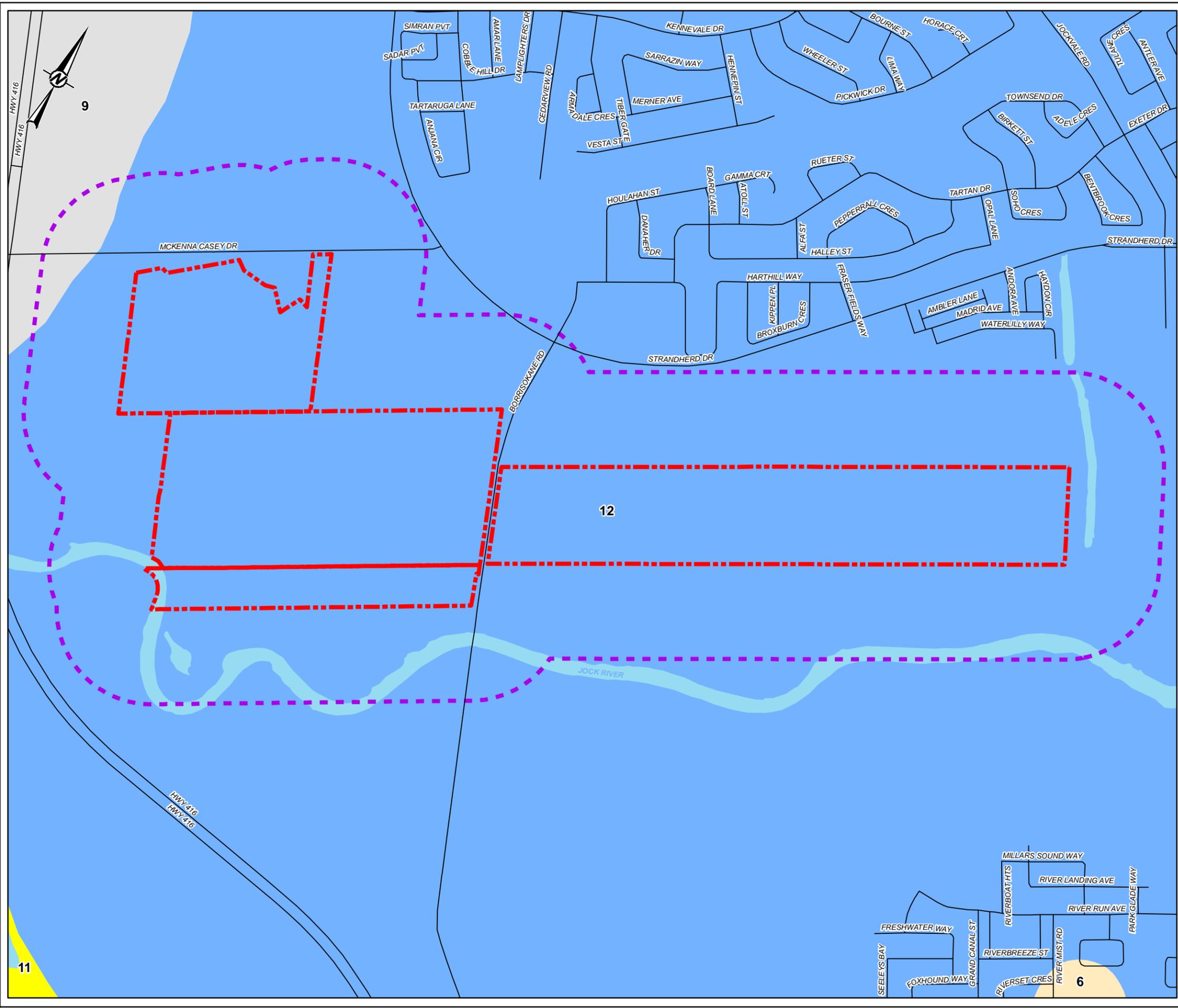
CONSULTANT	YYYY-MM-DD	2017-02-09
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	KPH	

PROJECT NO. 1771847 CONTROL 0002 REV. 0

FIGURE 7

Path: N:\Vector\Spatial\_Maps\BarrhavenConservancy\_Lands\B9\_PROD\1771847\_BarrhavenConservancy\_GIS\Enviro\02\_Phenol\_ESA\1771847-BarrhavenConservancy\_GIS\Enviro\02\_Phenol\_ESA\1771847-002-HS-002.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 28mm



**LEGEND**

- ROADWAY
- WATERBODY
- PHASE ONE SITE
- PHASE ONE STUDY AREA
- 6: TILL PLAINS (DRUMLINIZED)
- 9: LIMESTONE PLAINS
- 11: SAND PLAINS
- 12: CLAY PLAINS

**NOTE(S)**

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014  
 2. CHAPMAN, L.J. AND PUTNAM, D.F. 2007. PHYSIOGRAPHY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE-DATA 228  
 3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28

**CLIENT**  
BARRHAVEN CONSERVANCY INC.

**PROJECT**  
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300 BORRISOKANE ROAD, OTTAWA, ONTARIO

**TITLE**  
PHYSIOGRAPHY MAP

**CONSULTANT**

YYYY-MM-DD	2017-02-09
DESIGNED	---
PREPARED	JEM
REVIEWED	AT
APPROVED	KPH

0 100 200 400  
1:10,000 METRES

**PROJECT NO.** 1771847    **CONTROL** 0002    **REV.** 0    **FIGURE** 8

**Golder Associates**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 28mm

Path: N:\Vector\Spatial\_1\MC\BarrhavenConservancy\_Lands\99\_PROD\1771847\_BarrhavenConservancy\_GeEnviro\002\_Phase1\_ESA\1771847-0002-HS-0009.mxd



# **APPENDIX A**

## **Regulatory Responses**

**From:** Troke, Alyssa  
**To:** ["Desaulniers-Veilleux, Johanne \(MOECC\)"](#)  
**Subject:** Property Information Request for 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road, Ottawa, Ontario  
**Date:** February-01-17 9:10:00 AM

---

Hi Johanne,

Could you please check for approvals and orders for the following properties:

- 4305 McKenna Casey Drive, Ottawa, ON
- 3285 Borrisokane Road, Ottawa, ON
- 3288 Borrisokane Road, Ottawa, ON
- 3300 Borrisokane Road, Ottawa, ON

Please let me know if you have any questions.

Kindest Regards,

Alyssa Troke

---

**Alyssa Troke (B.Eng., E.I.T.)** | Environmental Consultant | **Golder Associates Ltd.**

1931 Robertson Road, Ottawa, Ontario, Canada, K2H 5B7

**T:** +1 (613) 592 9600 | **D:** +1 (613) 592 4299 | **F:** +1 (613) 592 9601 | **C:** +1 (613) 290 8736 | **E:**

[Alyssa\\_Troke@golder.com](mailto:Alyssa_Troke@golder.com) | [www.golder.com](http://www.golder.com)

### ***Work Safe, Home Safe***

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**Please consider the environment before printing this email.**

Ministry of the Environment  
and Climate Change  
Ottawa District Office  
2430 Don Reid Drive, Suite 103  
Ottawa Ontario  
K1H 1E1  
613-521-3450 or 1-800-860-2195  
Fax: 613-521-5437

Ministère de l'Environnement et de  
l'Action en matière de changement climatique  
Bureau du district d'Ottawa  
2430, promenade Don Reid, Unité 103  
Ottawa (Ontario)  
K1H 1E1  
613-521-3450 ou 1-800-860-2195  
Télééc. : 613-521-5437



OTT File No: 16

**INDEX REVIEW REPORT  
COMMERCIAL/INDUSTRIAL/AGRICULTURAL**

Attention: <b>Alyssa Troke</b> <b>Golder Associates</b>	Your File: Date Received: February 1, 2017
--	---

Thank you for your inquiry requesting a search of records from the Ministry of the Environment and Climate Change (ministry). The ministry encourages you to use the available on-line resources to access publically-available information which may assist with your inquiry.

<b><u>PROPERTY OWNER AND LOCATION</u></b>		
Location:	Municipality:	<b>Ottawa</b>
	Address:	<b>4305 McKenna Casey Dr; 3285, 3288, 3300 Borrisokane Rd</b>
		Lot Concession Township

<b><u>INDEX OF NAMES FOR ORDERS</u></b>
We have searched the <i>Ottawa</i> District Index Record of Active Orders under the Environmental Protection Act (EPA), Ontario Water Resources Act (OWRA) and the Pesticides Act (PA) issued to: and the following information has been found:
<input checked="" type="checkbox"/> No Active Orders are outstanding
<b>Please Note:</b> <i>For information related to any ministry Orders issued to the property in question, please request this information from the property owner. If you would like further information regarding a specific Order issued, please contact the Ottawa District Office.</i>
Date of Search: February 15, 2017

<b><u>RECORD OF SITE CONDITION</u></b>
For information on <b>Records of Site Condition</b> filed on the Environmental Site Registry since October 1, 2004, please use the following links: For records of site condition filed between October 1, 2004 and June 30, 2011 <a href="https://www.lrcsde.lrc.gov.on.ca/besrWebPublic/generalSearch">https://www.lrcsde.lrc.gov.on.ca/besrWebPublic/generalSearch</a> , and for records of site condition filed since July 1, 2011 <a href="https://www.ontario.ca/environment-and-energy/records-site-condition">https://www.ontario.ca/environment-and-energy/records-site-condition</a>

## INDEX REVIEW REPORT COMMERCIAL/INDUSTRIAL/AGRICULTURAL

### INDEX OF NAMES FOR APPROVALS ISSUED SINCE 1999

A search of the Index Record of names of all persons to whom approvals have been issued, maintained by the Director, Approvals Branch and the Regional Director, *Eastern Region*, and the District Manager, *Ottawa District*, under Section 19 EPA and Section 13 OWRA and the following information has been provided :

<u>Type</u>	<u>Number</u>	<u>Issued To</u>	<u>Issue Date</u>
Section 9 EPA (Air)			
Section 39 EPA (Waste Management)			
Section 52 OWRA (Water)			
Section 53 OWRA (Municipal/Private/ Industrial Sewage)			
Other			

The **ministry's Access Environment** is an on-line, map-based search tool designed to allow the public, quick and easy access to the ministry approvals and registration information from December 1999 onward. Access Environment currently displays Environmental Compliance Approvals (ECA), Renewable Energy Approvals (REA) and registrations on the Environmental Activity and Sector Registry (EASR). ECAs include all Certificates of Approval (CofAs) previously issued under the Environmental Protection Act (EPA) and approvals previously issued under s.53 of the Ontario Water Resources Act (OWRA). You can access this information from the ministry website or at the following link:

[www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action?search=basic&lang=en](http://www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action?search=basic&lang=en)

Copies of **ECAs issued before January 1, 2000** can be obtained by submitting a Request for a Copy of an Environmental Compliance Approval

**Please Note:**

- 1) The information provided above is based solely on the address(es) and name(s) of the present and past owners provided by you.
- 2) The Index Record of Names to whom approvals have been issued, maintained by the Regional Director and District Manager, has been searched back to 1999.
- 3) A search of our records does **NOT** indicate whether there are:
  - other uses for which an approval may have been required, nor
  - other uses on the property or in the vicinity that may affect the suitability of the property, for the use proposed to be made of it.If a comprehensive knowledge of the property and the nearby lands and their environmental condition is required, you must examine them and other relevant records yourself, with the aid of a qualified person, if needed.

No Approvals have been issued.

Date of Search: February 15, 2017

**INDEX REVIEW REPORT  
COMMERCIAL/INDUSTRIAL/AGRICULTURAL**

Additional site information related to the **location of landfill sites** in the province can be found at the following link:

<http://www.ontario.ca/environment-and-energy/small-landfill-sites>

<http://www.ontario.ca/environment-and-energy/map-large-landfill-sites>

The **ministry's Hazardous Waste Information Network (HWIN)** can also be accessed to search for information on generators, carriers, and receivers of subject waste in the province at the following link: [www.hwinc.ca](http://www.hwinc.ca)

The **ministry's Environmental Compliance Reports** provide information about contaminant discharges to water and emissions to air that exceed limits found in legislation, environmental approvals, orders and/or policies/guidelines and can be accessed at the following link: <http://www.ontario.ca/environment-and-energy/environmental-compliance-reports>

Information on **Environmental Penalties**, which are monetary penalties that can be imposed by the ministry for some industrial spills, can be assessed at the following link: <https://www.ontario.ca/search/search-results?query=environmental%20penalties>

Additional ministry information can be accessed through the **Government of Ontario's Open Data Catalogue**: <http://www.ontario.ca/government/open-data-ontario>

The ministry also encourages you to consider best practices and standards of care used within the legal community and through your associations as a guide to obtaining information related to specific property for any legal purpose.

We trust this information will help meet your requirements quickly and effectively.

Please advise your colleagues that responses to requests for searches always take some time. As a result the Ministry of the Environment and Climate Change may not be able to meet deadlines imposed by other parties on real estate and other transactions.

Thank you for your inquiry.

Signature:	
Contact Name:	Johanne Veilleux
Title:	Administrative Assistant
Address:	Ministry of the Environment and Climate Change 2430 Don Reid Drive, Unit 103 Ottawa, ON K1H 1E1
Phone:	(613) 521-3450 Ext 221
Date:	February 15, 2017
	E&OE

**Please Note:** If you would like to receive an email with all the environmental links above, please contact me at [johanne.veilleux@ontario.ca](mailto:johanne.veilleux@ontario.ca) and I will be pleased to send them to you.

Office Use Only

Application Number: \_\_\_\_\_ Ward Number: \_\_\_\_\_ Application Received: (dd/mm/yyyy): \_\_\_\_\_  
Client Service Centre Staff: \_\_\_\_\_ Fee Received: \$ \_\_\_\_\_



# Historic Land Use Inventory

## Application Form

### Notice of Public Record

All information and materials required in support of your application shall be made available to the public, as indicated by Section 1.0.1 of *The Planning Act*, R.S.O. 1990, C.P.13.

### Municipal Freedom of Information and Protection Act

Personal information on this form is collected under the authority the *Planning Act*, RSO 1990, c. P. 13 and will be used to process this application. Questions about this collection may be directed by mail to Manager, Business Support Services, Planning Infrastructure and Economic Development Department, 110 Laurier Avenue West, Ottawa, K1P 1J1, or by phone at (613) 580-2424, ext. 24075

### Background Information

\*Site Address or Location: 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road, City of Ottawa  
PINs: 045950057, 045950025, 045950023 and 045951742

\* Mandatory Field

### Applicant/Agent Information:

Name: Alyssa Troke  
Mailing Address: 1931 Robertson Road, Ottawa, ON  
Telephone: 613-290-8736 Email Address: atroke@golder.com

### Registered Property Owner Information: Same as above

Name: Hill, Pavoc, Nam Dam and Epcon  
Mailing Address: 223 Colonnade Road South, Suite 204, Ottawa, ON  
Telephone: 343-998-9395 Email Address: andrew.finnson@caivan.com

### Site Details

Legal Description and PIN:

Part 1 of Lot 14, Concession 3 and Parts 3, 4 and 5 of Lot 13, Part 1 of Lot 14 and Part of Lot 15, Concession, Ottawa  
PINs: 045950057, 045950025, 045950023 and 045951742

What is the land currently used for?

Agricultural

Lot frontage:  m Lot depth:  m Lot area: \_\_\_\_\_ m<sup>2</sup>

OR Lot area: (irregular lot)  m<sup>2</sup>

Does the site have Full Municipal Services:  Yes  No

### Required Fees

Please don't hesitate to visit [the Historic Land Use Inventory website](#) more information. Fees must be paid in full at the time of application submission.

Planning Fee

\$100.00

### Submittal Requirements

The following are required to be submitted with this application:

- 1. Consent to Disclose Information:** Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, **the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner.** This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.
- 2. Disclaimer:** Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, Infrastructure and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3.** A site plan or key plan of the property, its location and particular features.
- 4.** Any significant dates or time frames that you would like researched.

## Disclaimer For use with HLUI Database

CITY OF OTTAWA ("the City") is the owner of the Historical Land Use Inventory ("HLUI"), a database of information on the type and location of land uses within the geographic area of Ottawa, which had or have the potential to cause contamination in soil, groundwater or surface water.

The City, in providing information from the HLUI, to Golder Associates Ltd. ("the Requester") does so only under the following conditions and understanding:

1. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.
2. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information provided by the City to the Requester is provided on the assumption that it will not be relied upon by any person whatsoever. The City denies all liability to any such persons attempting to rely on any information provided from the HLUI database.
3. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
4. Copyright is reserved to the City.
5. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
6. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
7. All information collected under this request and all records provided in response to this request are subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56, as amended.

Signed: Alyssa Troke

Dated (dd/mm/yyyy): 09/03/2017

Per: Alyssa Troke

(Please print name)

Title: Environmental Consultant

Company: Golder Associates Ltd.



## DISCLAIMER

For use with HLUI Database

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*The City, in providing information from the HLUI, to Golder Associates Ltd. ("the Requester") does so only under the following conditions and understanding:*

1. This is a free service offered by the City.
2. The information which is contained in the HLUI has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided "as is".
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4. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
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7. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
8. All information collected under this request and all records provided in response to this request are subject to the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990,c. M56, as amended.

Signed: Alyssa Troke

Per: Alyssa Troke

(Please print name)

Title: Environmental Consultant

Company: Golder Associates Ltd.

Dated: March 9, 2017

# CONFIDENTIAL

File No.: 1771847  
Deadline for Response: ASAP

Phase 1 – Environmental Site Assessment

## Request for Information

(Informal Request)\*

### 1. REQUESTER INFORMATION

- a) Name of Requester: Alyssa Troke
- b) Address of Requester: 1931 Robertson Road, Ottawa, ON, K2H 5B7
- c) Telephone Number: 613-592-9600 x 4299
- d) Site Address: Lot- \_\_\_\_\_ Concession: \_\_\_\_\_  
Street: 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane  
Road City/Town: Ottawa  
Postal Code: \_\_\_\_\_
- e) Legal Plan Attached: Yes ( ) No ( X )
- f) Site Owner: Caivan Development Corporation
- g) Adjacent Property Owners: \_\_\_\_\_
- h) \_\_\_\_\_
- i) Date of Ownership: \_\_\_\_\_  
Previous Owner(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- j) Type of Site: ( ) vacant, ( X ) residential, ( ) commercial,  
( ) other (specify) \_\_\_\_\_
- k) Requestors relationship to Site: Consultant
- l) Date of Previous Request: -
- m) Date of Previous ESA: -
- n) Information Requested: As per cover sheet

### 2. CONFIDENTIALITY

- a) Consent Required: ( X ) Owner ( ) Tenant ( ) Purchaser ( ) Legal\*\*
- b) Consent Obtained: ( X ) Owner ( ) Tenant ( ) Purchaser ( ) Legal\*\*

\*(If formal MFIPPA request, please forward to Corporate Access and Privacy  
Coordinator, Clerk's Department)

\*\* (Consent letters must contain the information required, give authorization to requestor,  
and be dated and signed)

This form has been prepared by Golder Associates, for client use, with regard to submissions to the City of Ottawa ("City") for environmental related information on the property noted below. It will be used by Golder Associates, who have been retained to carry out a Phase I Environmental Site Assessment.

This form is to be completed by the property owner/agent and forwarded to Golder Associates Ltd. who will then append it with a request for information to the City. The intent of the form is to notify the City that Golder Associates Ltd. is authorised to access the requested environmental information.

.....

**Property Location Information:**

Civic Address            4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road  
                                  Ottawa, ON, K2J 4S8

Legal Description        Part 1 of Lot 14, Concession 3 and Parts 3, 4 and 5 of Lot 13, Part 1 of Lot 14  
                                  and Part of Lot 15, Concession 4, Ottawa, Ontario  
                                  Pins 045950057, 045950025, 045950023 and 045951742

**Property Contact Information:**

Owner                     Hill, Pavic, Nam Dem, Epcor

Phone Number          343-998-9395

Fax Number             \_\_\_\_\_

Owner Representative    Andrew Finkson

Owner Representative    Andrew Finkson  
Signature

Date                      3/8/2017



File Number: D06-03-17-0028

March 27<sup>th</sup>, 2017

Alyssa Troke  
1931 Robertson Road  
Ottawa, ON

*Sent via email [atroke@golder.com]*

Dear Alyssa,

**Re: Information Request  
<< 4305 McKenna Casey Drive>>, Ottawa, Ontario (“Subject Property”)**

### **Internal Department Circulation**

The Planning, Infrastructure and Economic Development Department has the following information in response to your request for information regarding the Subject Property:

Information was returned on the Subject Property from Departmental circulation:

- From the Solid Waste Diversion Branch, the property is located within 3 kilometers radius of Trail Waste Facility on 4309 Trail Rd and Plasco Waste Conversion Facility on 4478 Trail Road. The subject property 4.5 kilometers away from Barnsdale YLW on 4296 Barnsdale Road.

### **Search of Historical Land Use Inventory**

**This acknowledges receipt of the signed Disclaimer regarding your request for information from the City’s Historical Land Use Inventory (HLUI 2005) database for the Subject Property.**

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

The HLUI database was also searched for activity associated with properties located within 50m of the Subject Property. The search revealed the following:

- There are no activities associated with the properties located within 50m of the Subject Property.

*Shaping our future together  
Ensemble, formons notre avenir*

City of Ottawa  
Planning, Infrastructure and Economic  
Development Department

110 Laurier Avenue West, 4th Floor  
Ottawa, ON K1P 1J1  
Tel: (613) 580-2424 ext. 14743  
Fax: (613) 560-6006  
www.ottawa.ca

Ville d'Ottawa  
Services de la planification, de l'infrastructure et  
du développement économique

110, avenue Laurier Ouest, 4e étage  
Ottawa (Ontario) K1P 1J1  
Tél.: (613) 580-2424 ext. 14743  
Télééc: (613) 560-6006  
www.ottawa.ca

## **Ontario's Environmental Registry**

The Environmental Registry found at <http://www.ebr.gov.on.ca/ERS-WEB-External/> contains "public notices" about environmental matters being proposed by all government ministries covered by the Environmental Bill of Rights. The public notices may contain information about proposed new laws, regulations, policies and programs or about proposals to change or eliminate existing ones. By using key words i.e. name of proponent/owner and the address one can ascertain if there is any information on the proponent and address under the following categories: Ministry, keywords, notice types, Notice Status, Acts, Instruments and published date (all years).

## **The Ontario Land Registry Office**

Registration of real property is recorded in the Ontario Land Registry Office through the Land Titles Act or the Registry Act. Documents relating to title and other agreements that may affect your property are available to the public for a fee. It is recommended that a property search at the Land Registry Office be included in any investigation as to the historic use of your property. The City of Ottawa cannot comment on any documents to which it is not a party.

Court House  
161 Elgin Street 4th Floor  
Ottawa ON K2P 2K1  
Tel: (613) 239-1230  
Fax: (613) 239-1422

**Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.**

**Furthermore, the HLUI database and the results of this search in no way confirm the presence or absence of contamination or pollution of any kind. This information is provided on the assumption that it will not be relied upon by any person for any purpose whatsoever. The City of Ottawa denies all liability to any persons attempting to rely on any information provided from the HLUI database.**

**Please note that in responding to your request, the City of Ottawa does not guarantee or comment on the environmental condition of the Subject Property.**

**You may wish to contact the Ontario Ministry of Environment and Climate Change for additional information.**

If you have any further questions or comments, please contact Micaela Butron at 613-580-2424 ext. 24856 or [HLUI@ottawa.ca](mailto:HLUI@ottawa.ca)

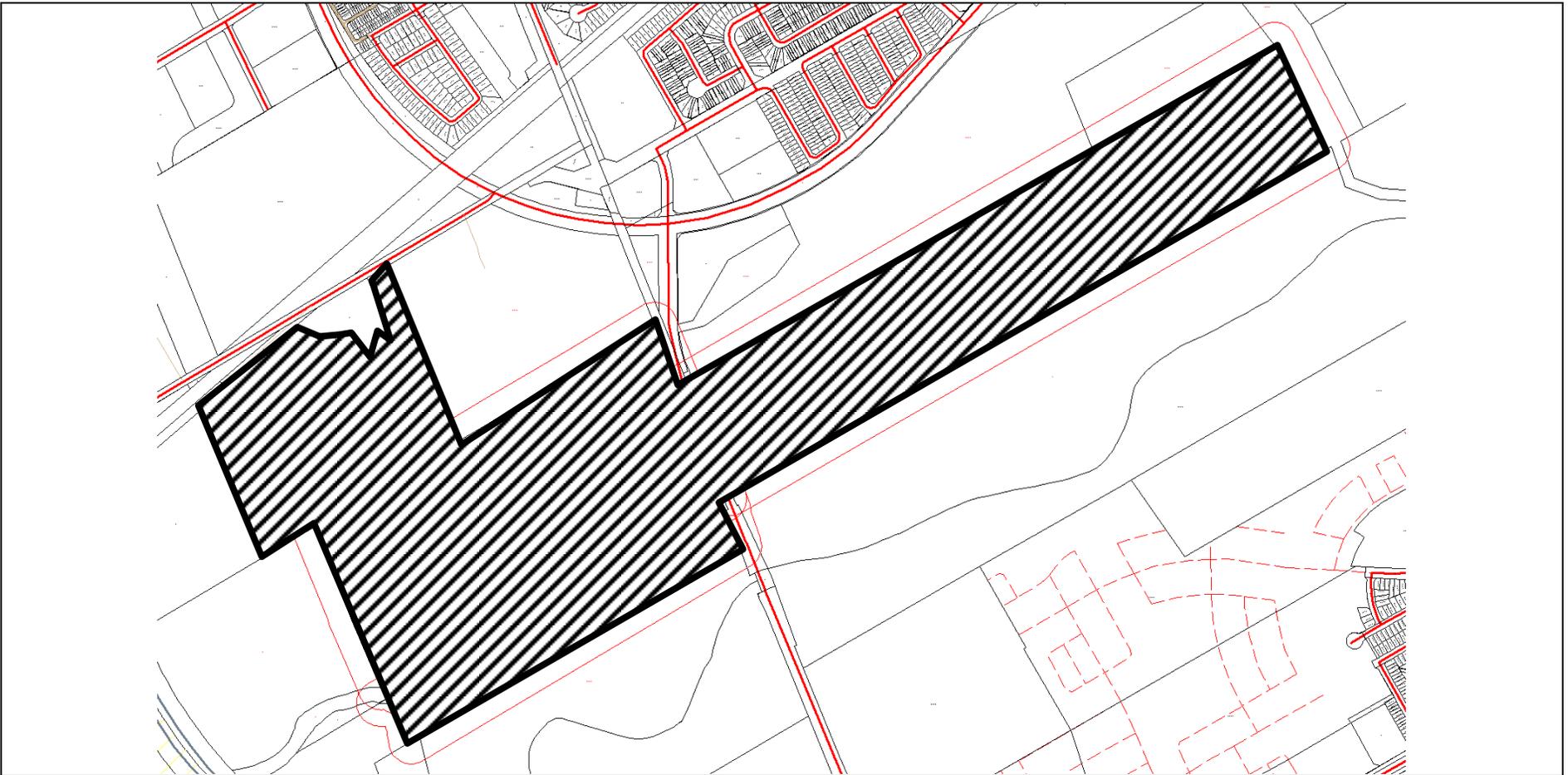
Sincerely,

A handwritten signature in black ink that reads "Micaela Butron". The signature is written in a cursive, flowing style.

For  
Michael Boughton, MCIP, RPP  
Senior Planner  
Development Review East  
Planning Services  
Planning, Infrastructure and Economic Development Department

MB/MB

D06-03-17-00028



Scale 1: n/a

4305 McKenna Casey Drive & 3285, 3288, 3300  
Borrisokane Rd  
Ottawa, ON  
File # D06-03-17-0028  
Micaela Butron



Overview

ID# = Activity Identification Number

 = Subject Site



# Natural Areas and Features Information Request Form

## Contact Information

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Owner Consultant

E-mail Address: \_\_\_\_\_

**\*All red fields are mandatory**

*This includes X & Y Coordinates.*

*Please see \_\_\_\_\_ for assistance.*

## Site Information

Project Name: \_\_\_\_\_

Township: \_\_\_\_\_ Lot: \_\_\_\_\_ Concession: \_\_\_\_\_

X: \_\_\_\_\_ Y: \_\_\_\_\_ Address: \_\_\_\_\_

*\*\*If more than 1 site, please provide all individual coordinates in an attached spreadsheet*

## Type of Proposal

- Severance / Zoning
- Drains / Roads / Culverts
- Hydroline clearing
- Small Scale Projects (less than 5 hectares)
- RE Projects
- Large Scale Projects (5 hectares or greater)
- Aggregate Project
- Other: \_\_\_\_\_

## Attachments **\*\*\*Please attach a Site Map showing the area of interest**

- Picture
- Map(s)
- Engineered Drawings
- Other: \_\_\_\_\_

## Request

I would like to request the following information for the property identified above:

To better respond to your request please briefly outline the purpose for which this information is required (e.g. proposed development, lot severance, etc. or attach details):

Date of works proposed: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

*Personal information contained in this form is collected in order to fulfill your request, respond to your inquiries and for other administration purposes. With regard to the personal information it collects, the ministry is bound by privacy protection rules under the Freedom of Information and Protection of Privacy Act and takes all necessary steps to safeguard personal information collected.*

**Please Note: This request MUST be made by the property owner or by someone acting on their behalf. Depending on the nature of the request, it may take 6-8 weeks to respond to your inquiry. If the request does not include the mandatory information, it may delay response time.**

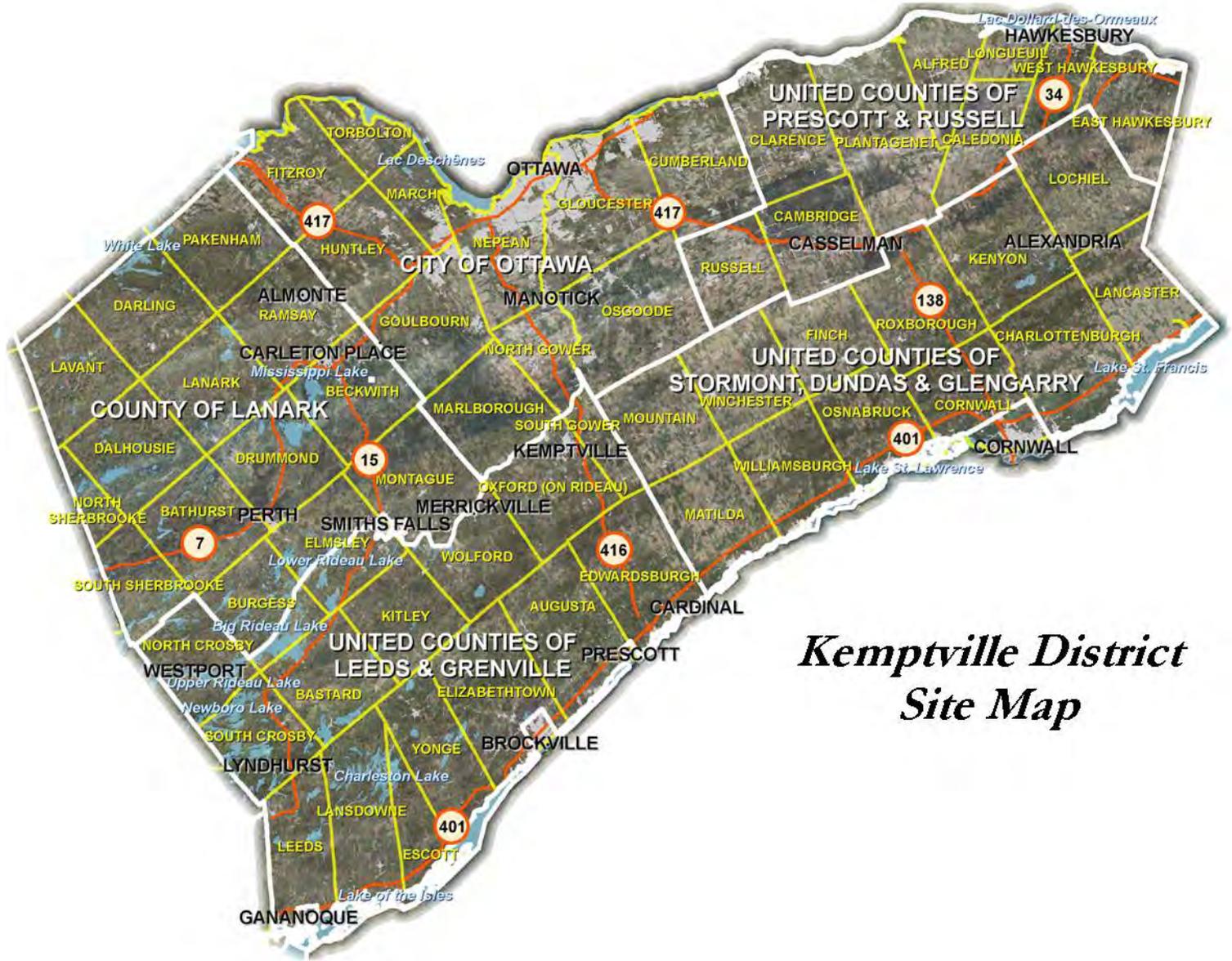
**I have read the above and agree to all Terms and Conditions**

Please forward the completed form to:

OR Fax: 613-258-3920

Attention: Information Requests  
10 Campus Drive, Postal Bag 2002  
Kempenville, ON K0G 1J0

MNR File Number: \_\_\_\_\_



## *Kemptville District Site Map*

### How to get X, Y coordinates from Google Maps (2 options):

- 1.) Right-click on the map, at the point of interest, and select 'What's here?'.  
-The Latitude & Longitude of the mouse click, in decimal degrees, will automatically appear in the Search box.

**OR**

- 2.) Click on 'Maps Labs' in Google Maps.  
-The following window will appear:

[Maps Labs](#) - [Help](#)  
 Google Maps - ©2012 Google - [Terms of Use](#)

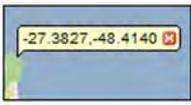


**LatLng Tooltip**  
Marcelo C

Displays a tooltip next to the mouse cursor showing the latlng directly underneath it. Press SHIFT to activate tooltip.

Enable  
 Disable

---



**LatLng Marker**  
Marcelo C

Adds an option to the context menu that lets you drop a mini marker showing the latlng of the position that the cursor was pointing at when the context menu was evoked

Enable  
 Disable

**Important:** To save your enabled Labs for next time, you must [sign in to your Google account.](#)

- Enable the LatLng Tooltip and then Save Changes.
- Now every time the **SHIFT** button is pressed in Google Maps, a Tool tip will appear with the Latitude and Longitude of the mouse location in decimal degrees.

Kemptville District

District de Kemptville

10 Campus Drive  
Postal Box 2002  
Kemptville ON K0G 1J0  
Tel.: 613 258-8204  
Fax: 613 258-3920

10, promenade Campus  
Case postale, 2002  
Kemptville ON K0G 1J0  
Tél.: 613 258-8204  
Télééc.: 613 258-3920

Tue. Jul 18, 2017

Alyssa Troke  
Golder Associates  
1931 Robertson Rd  
Ottawa, Ontario  
K2H 5B7  
(613) 592-9600  
atroke@golder.com

Attention: Alyssa Troke

**Subject: Information Request - Developments**  
**Project Name: Phase I Environmental Site Assessment for the site located at 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road**  
**Site Address: 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road, Nepean, Ontario**  
**Our File No. 2017\_NEP-4106**

### **Natural Heritage Values**

The Ministry of Natural Resources and Forestry (MNRF) Kemptville District has carried out a preliminary review of the above mentioned area in order to identify any potential natural resource and natural heritage values.

The following Natural Heritage values were identified for the general subject area:

- Fish Nursery, Carps and Minnows Nursery Area (Non-Sensitive)
- Fish Nursery, Northern Pike Nursery Area (Non-Sensitive)
- Fish Nursery, Rock Bass Nursery Area (Non-Sensitive)
- Fish Nursery, Unidentifiable Nursery Area
- Fish Nursery, Walleye Nursery Area (Non-Sensitive)
- Fish Nursery, White Sucker Nursery Area (Non-Sensitive)
- Municipal Drain, O'Keefe Drain (Non-Sensitive)
- Pit, 4046 (Non-Sensitive)
- Pit, 4052 (Non-Sensitive)
- Pit, 4126 (Non-Sensitive)
- Pond (Non-Sensitive)
- Private Drain, Foster Drain (Non-Sensitive)
- Private Drain, Fraser-Clarke Drain (Non-Sensitive)

- River, Jock River (Non-Sensitive)
- Spawning Area, Pumpkinseed Spawning Area
- Spawning Area, Shorthead Redhorse Spawning Area
- Spawning Area, Smallmouth Bass Spawning Area
- Spawning Area, Walleye Spawning Area
- Unevaluated Wetland (Not evaluated per OWES)

Municipal Official Plans contain information related to natural heritage features. Please see the local municipal Official Plan for more information, such as specific policies and direction pertaining to activities which may impact natural heritage features. For planning advice or Official Plan interpretation, please contact the local municipality. Many municipalities require environmental impact studies and other supporting studies be carried out as part of the development application process to allow the municipality to make planning decisions which are consistent with the Provincial Policy Statement (PPS, 2014).

The MNRF strongly encourages all proponents to contact partner agencies and appropriate municipalities early on in the planning process. This provides the proponent with early knowledge regarding agency requirements, authorizations and approval timelines; Ministry of the Environment and Climate Change (MOECC) and the local Conservation Authority may require approvals and permitting where natural values and natural hazards (e.g., floodplains) exist.

As per the Natural Heritage Reference Manual (NHRM, 2010) the MNRF strongly recommends that an ecological site assessment be carried out to determine the presence of natural heritage features and species at risk and their habitat on site. The MNRF can provide survey methodology for particular species at risk and their habitats.

The NHRM also recommends that cumulative effects of development projects on the integrity of natural heritage features and areas be given due consideration. This includes the evaluation of the past, present and possible future impacts of development in the surrounding area that may occur as a result of demand created by the presently proposed project.

In Addition, the following Fish species were identified: banded killifish, blackchin shiner, blacknose shiner, bluntnose minnow, brassy minnow, bridle shiner, brook silverside, brook stickleback, brown bullhead, Carps and Minnows, central mudminnow, common carp, common shiner, creek chub, eastern blacknose dace, fallfish, fathead minnow, finescale dace, golden shiner, greater redhorse, hornyhead chub, johnny darter, johnny darter/tesselated darter, logperch, longnose dace, mottled sculpin, muskellunge, northern pike, northern redbelly dace, pumpkinseed, rock bass, shorthead redhorse, silver redhorse, smallmouth bass, spottail shiner, stonecat, walleye, white sucker.

### **Wildland Fire**

MNRF woodland data shows that the site contains woodlands. The lands should be assessed for the risk of wildland fire as per PPS 2014, Section 3.1.8 "*Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire. Development may however be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and*

*mitigation standards*". Further discussion with the local municipality should be carried out to address how the risks associated with wildland fire will be covered for such a development proposal. Please see the Wildland Fire Risk Assessment and Mitigation Guidebook (2016) for more information.

### **Significant Woodlands**

Section 2.1.5 b) of the PPS states: *Development and site alteration shall not be permitted in significant woodlands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.* The 2014 PPS directs that significant woodlands must be identified following criteria established by the Ontario Ministry of Natural Resources and Forestry, i.e. the Natural Heritage Reference Manual (NHRM), 2010. Where the local or County Official Plan has not yet updated significant woodland mapping to reflect the 2014 PPS, all wooded areas should be reviewed on a site specific basis for significance. The MNRF Kemptville District modelled locations of significant woodlands in 2011 based on NHRM criteria. The presence of significant woodland on site or within 120 metres should trigger an assessment of the impacts to the feature and its function from the proposed development.

### **Significant Wildlife Habitat**

Section 2.1.5 d) of the PPS states: *Development and site alteration shall not be permitted in significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.* It is the responsibility of the approval authority to identify significant wildlife habitat or require its identification. The MNRF has several guiding documents which may be useful in identification of significant wildlife habitat and characterization of impacts and mitigation options:

- Significant Wildlife Habitat Technical Guide, 2000
- The Natural Heritage Reference Manual, 2010
- Significant Wildlife Habitat Mitigation Support Tool, 2014
- Significant Wildlife Habitat Criteria Schedule for Ecoregion 5E and 6E, 2015

The habitat of special concern species (as identified by the Species at Risk in Ontario list) and Natural Heritage Information Centre tracked species with a conservation status rank of S1, S2 and S3 may be significant wildlife habitat and should be assessed accordingly.

### **Water**

If any in-water works are to occur, there are timing windows for which work in water should not take place (see below). Appropriate measures should be taken to minimize and mitigate impact on water quality and fish habitat, including:

- installation of sediment and erosion control measures;
- avoiding the removal, alteration, or covering of substrates used for fish spawning, feeding, over-wintering or nursery areas; and
- debris control measures to manage falling debris (e.g. spalling).

### **Timing windows (no in-water works) in MNRF Kemptville District\*:**

Warmwater and cool water → March 15 – June 30

St. Lawrence River & Ottawa River → March 15 – July 15  
 Coldwater → October 1 – May 31  
 Big Rideau Lake & Charleston Lake → October 1 – June 30

\* Please note: Additional timing restrictions may apply as they relate to endangered and threatened species for works in both water and wetland areas.

Timing windows when in-water work is restricted – based on species presence:

	FISH SPECIES	TIMING WINDOW (No in-water works)
<b>Spring:</b>	Walleye	March 15 to May 31
	Northern Pike	March 15 to May 31
	Lake Sturgeon	May 1 to June 30
	Muskellunge	March 15 to May 31
	Largemouth/Smallmouth Bass	May 1 to July 15
	Rainbow Trout	March 15 to June 15
	Other /Unknown Spring Spawning Species	March 15 to July 15

	FISH SPECIES	TIMING WINDOW (No in-water works)
<b>Fall:</b>	Lake Trout	October 1 to May 31
	Brook Trout	October 1 to May 31
	Pacific Salmon	September 15 to May 31
	Lake Whitefish	October 15 to May 31
	Lake Herring	October 15 to May 31
	Other /Unknown Fall Spawning Species	October 1 to May 31

Additional approvals and permits may be required under the Fisheries Act. Please contact Fisheries and Oceans Canada to determine requirements and next steps. There may also be approvals required by the local Conservation Authority or Transport Canada. As the MNRF is responsible for the management of provincial fish populations, we request ongoing involvement in such discussions in order to ensure population conservation.

### Species at Risk

A review of the Natural Heritage Information Centre (NHIC) and internal records indicate that there is a potential for the following threatened (THR) and/or endangered (END) species on the site or in proximity to it:

- Bank Swallow (THR)
- Blanding's Turtle (THR)
- Bobolink (THR)
- Butternut (END)
- Barn Swallow (THR)
- Eastern Meadowlark (THR)

All endangered and threatened species receive individual protection under section 9 of the ESA and receive general habitat protection under Section 10 of the ESA, 2007. Thus any potential

works should consider disturbance to the individuals as well as their habitat (e.g. nesting sites). General habitat protection applies to all threatened and endangered species. Note some species in Kemptville District receive regulated habitat protection. The habitat of these listed species is protected from damage and destruction and certain activities may require authorization(s) under the ESA. For more on how species at risk and their habitat is protected, please see: <https://www.ontario.ca/page/how-species-risk-are-protected>.

If the proposed activity is known to have an impact on any endangered or threatened species at risk (SAR), or their habitat, an authorization under the ESA may be required. It is recommended that MNRF Kemptville be contacted prior to any activities being carried out to discuss potential survey protocols to follow during the early planning stages of a project, as well as mitigation measures to avoid contravention of the ESA. Where there is potential for species at risk or their habitat on the property, an Information Gathering Form should be submitted to Kemptville MNRF at [sar.kemptonville@ontario.ca](mailto:sar.kemptonville@ontario.ca).

The Information Gathering Form may be found here:

<http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm&ACT=RDR&TAB=PROFILE&ENV=WWE&NO=018-0180E>

For more information on the ESA authorization process, please see:

<https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization>

One or more special concern species has been documented to occur either on the site or nearby. Species listed as special concern are not protected under the ESA, 2007. However, please note that some of these species may be protected under the Fish and Wildlife Conservation Act and/or Migratory Birds Convention Act. Again, the habitat of special concern species may be significant wildlife habitat and should be assessed accordingly. Species of special concern for consideration:

- Eastern Wood-Pewee (SC)
- Snapping Turtle (SC)
- Wood Thrush (SC)

If any of these or any other species at risk are discovered throughout the course of the work, and/or should any species at risk or their habitat be potentially impacted by on site activities, MNRF should be contacted and operations be modified to avoid any negative impacts to species at risk or their habitat until further direction is provided by MNRF.

Please note that information regarding species at risk is based largely on documented occurrences and does not necessarily include an interpretation of potential habitat within or in proximity to the site in question. Although this data represents the MNRF's best current available information, it is important to note that a lack of information for a site does not mean that additional features and values are not present. It is the responsibility of the proponent to ensure that species at risk are not killed, harmed, or harassed, and that their habitat is not damaged or destroyed through the activities carried out on the site.

The MNRF continues to strongly encourage ecological site assessments to determine the potential for SAR habitat and occurrences. When a SAR or potential habitat for a SAR does occur on a site,

it is recommended that the proponent contact the MNRF for technical advice and to discuss what activities can occur without contravention of the Act. For specific questions regarding the Endangered Species Act (2007) or SAR, please contact MNRF Kemptville District at [sar.kemptville@ontario.ca](mailto:sar.kemptville@ontario.ca).

The approvals processes for a number of activities that have the potential to impact SAR or their habitat have recently changed. For information regarding regulatory exemptions and associated online registration of certain activities, please refer to the following website: <https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization>.

Please note: The advice in this letter may become invalid if:

- The Committee on the Status of Species at Risk in Ontario (COSSARO) re-assesses the status of the above-named species OR adds a species to the SARO List such that the section 9 and/or 10 protection provisions apply to those species; or
- Additional occurrences of species are discovered on or in proximity to the site.

**This letter is valid until: Wed. Jul 18, 2018**

The MNRF would like to request that we continue to be circulated on information with regards to this project. If you have any questions or require clarification please do not hesitate to contact me.

Sincerely,

Jane Devlin  
Management Biologist  
[jane.devlin@ontario.ca](mailto:jane.devlin@ontario.ca)

Encl.\  
-ESA Infosheet  
-NHIC/LIO Infosheet

---

**From:** Prem Lal <plal@tssa.org> on behalf of Public Information Services  
<publicinformationservices@tssa.org>  
**Sent:** February-01-17 4:13 PM  
**To:** Troke, Alyssa  
**Subject:** RE: TSSA Search - 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road, Ottawa, Ontario

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Alyssa:

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail ([publicinformationservices@tssa.org](mailto:publicinformationservices@tssa.org)) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Thank you Alyssa.

Prem



**Prem Lal | Public Information Coordinator**

Facilities and Business Services  
345 Carlingview Drive  
Toronto, Ontario M9W 6N9  
Tel: +1-416-734-3570 | Fax: +1-416-734-3568 | E-Mail: [plal@tssa.org](mailto:plal@tssa.org)  
[www.tssa.org](http://www.tssa.org)



---

**From:** Troke, Alyssa [mailto:[Alyssa\\_Troke@golder.com](mailto:Alyssa_Troke@golder.com)]  
**Sent:** Wednesday, February 01, 2017 11:27 AM  
**To:** Public Information Services  
**Subject:** TSSA Search - 4305 McKenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road, Ottawa, Ontario

Hello,

Could you please perform a TSSA database search for any underground storage tanks, registered fuel tanks, outstanding instructions, incident reports, fuel oil spills or contaminations records for the following properties:

- 4305 McKenna Casey Drive, Ottawa, ON
- 3285 Borrisokane Road, Ottawa, ON

- 3288 Borrisokane Road, Ottawa, ON
- 3300 Borrisokane Road, Ottawa, ON
- 4235 McKenna Casey Drive, Ottawa, ON
- 3231 Borrisokane Road, Ottawa, ON
- 3288 Greenbank Road, Ottawa, ON
- 4376 McKenna Casey Drive, Ottawa, ON
- 4005 Strandherd Drive, Ottawa, ON
- 3300 Borrisokane Road, Ottawa, ON

Please let me know if you have any questions.

Kindest Regards,

Alyssa Troke

---

**Alyssa Troke (B.Eng., E.I.T.)** | Environmental Consultant | **Golder Associates Ltd.**

1931 Robertson Road, Ottawa, Ontario, Canada, K2H 5B7

**T:** +1 (613) 592 9600 | **D:** +1 (613) 592 4362 | **F:** +1 (613) 592 9601 | **C:** +1 (613) 290 8736 | **E:**

[Alyssa\\_Troke@golder.com](mailto:Alyssa_Troke@golder.com) | [www.golder.com](http://www.golder.com)

### **Work Safe, Home Safe**

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# **APPENDIX B**

## **EcoLog ERIS Report**

**ERIS**  
ENVIRONMENTAL RISK INFORMATION SERVICES



# DATABASE REPORT

**Project Property:** *1771847 - Barrhaven Phase I ESA  
4305 McKenna Casey Drive and 3285,  
3288 and 3300 Borrisokane Road  
Ottawa ON*

**Project No:**

**Report Type:** *Quote - Custom-Build Your Own Report*

**Order No:** *20170201029*

**Requested by:** *Golder Associates Ltd.*

**Date Completed:** *February 6, 2017*

**Environmental Risk  
Information Services**  
A division of Glacier Media Inc.  
P: 1.866.517.5204  
E: [info@erisinfo.com](mailto:info@erisinfo.com)

**[www.erisinfo.com](http://www.erisinfo.com)**

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## **Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY**

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# Executive Summary

## **Property Information:**

**Project Property:**

*1771847 - Barrhaven Phase I ESA  
4305 Mckenna Casey Drive and 3285, 3288 and 3300 Borrisokane Road Ottawa ON*

**Project No:**

## **Order Information:**

**Order No:**

*20170201029*

**Date Requested:**

*February 1, 2017*

**Requested by:**

*Golder Associates Ltd.*

**Report Type:**

*Quote - Custom-Build Your Own Report*

## **Additional Products:**

## Executive Summary: Report Summary

<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Boundary to 0.25km</b>	<b>Total</b>
AAGR	<i>Abandoned Aggregate Inventory</i>	Y	0	0	0
AGR	<i>Aggregate Inventory</i>	Y	0	0	0
AMIS	<i>Abandoned Mine Information System</i>	Y	0	0	0
ANDR	<i>Anderson's Waste Disposal Sites</i>	Y	0	0	0
AUWR	<i>Automobile Wrecking &amp; Supplies</i>	Y	0	0	0
BORE	<i>Borehole</i>	Y	3	7	10
CA	<i>Certificates of Approval</i>	Y	0	1	1
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
COAL	<i>Inventory of Coal Gasification Plants and Coal Tar Sites</i>	Y	0	0	0
CONV	<i>Compliance and Convictions</i>	Y	0	0	0
CPU	<i>Certificates of Property Use</i>	Y	0	0	0
DRL	<i>Drill Hole Database</i>	Y	0	0	0
EASR	<i>Environmental Activity and Sector Registry</i>	Y	0	0	0
EBR	<i>Environmental Registry</i>	Y	0	0	0
ECA	<i>Environmental Compliance Approval</i>	Y	0	0	0
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	0	5	5
EIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
EMHE	<i>Emergency Management Historical Event</i>	Y	0	0	0
EXP	<i>List of TSSA Expired Facilities</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FOFT	<i>Fisheries &amp; Oceans Fuel Tanks</i>	Y	0	0	0
FST	<i>Fuel Storage Tank</i>	Y	0	0	0
FSTH	<i>Fuel Storage Tank - Historic</i>	Y	0	0	0
GEN	<i>Ontario Regulation 347 Waste Generators Summary</i>	Y	0	0	0
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
HINC	<i>TSSA Historic Incidents</i>	Y	0	0	0
IAFT	<i>Indian &amp; Northern Affairs Fuel Tanks</i>	Y	0	0	0
INC	<i>TSSA Incidents</i>	Y	0	0	0
LIMO	<i>Landfill Inventory Management Ontario</i>	Y	0	0	0
MINE	<i>Canadian Mine Locations</i>	Y	0	0	0
MNR	<i>Mineral Occurrences</i>	Y	0	0	0
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0

<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Boundary to 0.25km</b>	<b>Total</b>
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0
NDFT	<i>National Defense &amp; Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense &amp; Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence &amp; Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBW	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGW	<i>Oil and Gas Wells</i>	Y	0	0	0
OOGW	<i>Ontario Oil and Gas Wells</i>	Y	0	0	0
OPCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
ORD	<i>Orders</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PES	<i>Pesticide Register</i>	Y	0	0	0
PINC	<i>TSSA Pipeline Incidents</i>	Y	0	0	0
PRT	<i>Private and Retail Fuel Storage Tanks</i>	Y	0	0	0
PTTW	<i>Permit to Take Water</i>	Y	0	0	0
REC	<i>Ontario Regulation 347 Waste Receivers Summary</i>	Y	0	0	0
RSC	<i>Record of Site Condition</i>	Y	0	0	0
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	0	0
SPL	<i>Ontario Spills</i>	Y	0	0	0
SRDS	<i>Wastewater Discharger Registration Database</i>	Y	0	0	0
TANK	<i>Anderson's Storage Tanks</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
VAR	<i>TSSA Variances for Abandonment of Underground Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Sites - MOE CA Inventory</i>	Y	0	0	0
WDSH	<i>Waste Disposal Sites - MOE 1991 Historical Approval Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Information System</i>	Y	0	11	11
<b>Total:</b>			3	24	27

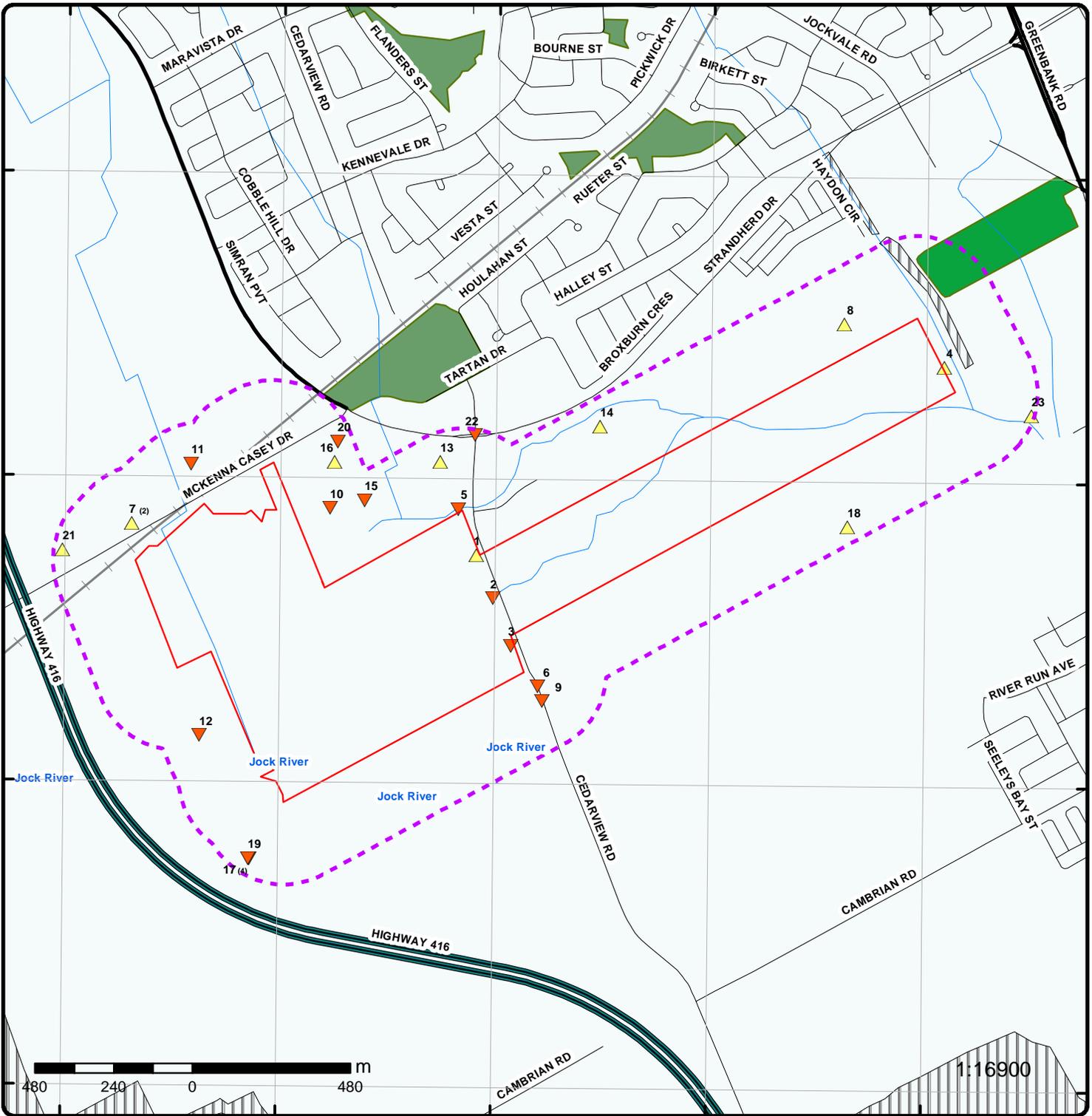
## Executive Summary: Site Report Summary - Project Property

<i>DB</i>	<i>Map Key</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
BORE	<a href="#">1</a>		ON	-/0.0	0.43	<a href="#">12</a>
BORE	<a href="#">2</a>		ON	-/0.0	0.00	<a href="#">12</a>
BORE	<a href="#">3</a>		ON	-/0.0	-1.41	<a href="#">12</a>

## Executive Summary: Site Report Summary - Surrounding Properties

<i>DB</i>	<i>Map Key</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
BORE	<a href="#">4</a>		ON	ENE/4.8	0.45	<a href="#">13</a>
BORE	<a href="#">5</a>		ON	NNW/9.0	-0.73	<a href="#">13</a>
BORE	<a href="#">6</a>		ON	SSE/59.4	-0.18	<a href="#">14</a>
BORE	<a href="#">7</a>		ON	W/87.1	0.61	<a href="#">14</a>
BORE	<a href="#">9</a>		ON	SSE/104.4	-0.41	<a href="#">15</a>
BORE	<a href="#">11</a>		ON	WNW/128.0	-0.47	<a href="#">15</a>
BORE	<a href="#">13</a>		ON	NNW/163.2	0.41	<a href="#">16</a>
CA	<a href="#">22</a>	BARRHAVEN PROPERTIES	TARTAN DR. PH. 1 STRANDHERD RD NEPEAN CITY ON	N/231.1	-0.40	<a href="#">16</a>
EHS	<a href="#">8</a>		Greenbank Road & Jockvale Road Ottawa ON	NE/90.5	1.20	<a href="#">16</a>
EHS	<a href="#">10</a>		4235 McKenna Casey Dr Ottawa ON	WNW/106.8	-0.98	<a href="#">17</a>
EHS	<a href="#">14</a>		Cedarview Rd Strandherd Dr Ottawa ON	NE/169.0	0.83	<a href="#">17</a>
EHS	<a href="#">15</a>		4235 McKenna Casey Drive Ottawa ON K2J 4S8	WNW/171.7	-1.89	<a href="#">17</a>
EHS	<a href="#">23</a>		3201 Greenbank Road Ottawa ON	ENE/242.5	0.26	<a href="#">17</a>
WWIS	<a href="#">7</a>		lot 16 con 4 ON	W/87.1	0.61	<a href="#">18</a>
WWIS	<a href="#">12</a>		lot 14 con 4 ON	WSW/131.3	-0.39	<a href="#">20</a>
WWIS	<a href="#">16</a>		lot 15 con 4 BARRHAVEN ON	NW/173.1	1.12	<a href="#">22</a>
WWIS	<a href="#">17</a>		lot 13 con 4 ON	SW/199.9	-1.00	<a href="#">24</a>
WWIS	<a href="#">17</a>		lot 13 con 4 ON	SW/199.9	-1.00	<a href="#">27</a>
WWIS	<a href="#">17</a>		lot 13 con 4 ON	SW/199.9	-1.00	<a href="#">30</a>
WWIS	<a href="#">17</a>		lot 13 con 4 ON	SW/199.9	-1.00	<a href="#">32</a>
WWIS	<a href="#">18</a>		lot 13 con 3 ON	E/200.9	1.50	<a href="#">35</a>
WWIS	<a href="#">19</a>		lot 13 con 4 ON	SW/201.7	-1.12	<a href="#">38</a>
WWIS	<a href="#">20</a>		lot 15 con 4 ON	NW/205.0	-0.51	<a href="#">39</a>

<i>DB</i>	<i>Map Key</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
WWIS	<a href="#">21</a>		lot 16 con 4 ON	W/223.7	1.71	<a href="#">41</a>



### Map : 0.25 Kilometer Radius

Order No: 20170201029

Address: 4305 Mckenna Casey Drive and 3285, 3288 and 3300 Borriskane Road, Ottawa



Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range
Eris Sites with Lower Elevation	Local road	Abandoned Line	Park or Sports Field
Eris Sites with Unknown Elevation	Trail	Proposed Road	Other Recreation Area
	Proposed Road		
	Ferry Route/Ice Road		



380 190 0 380 m

1:15300

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Aerial

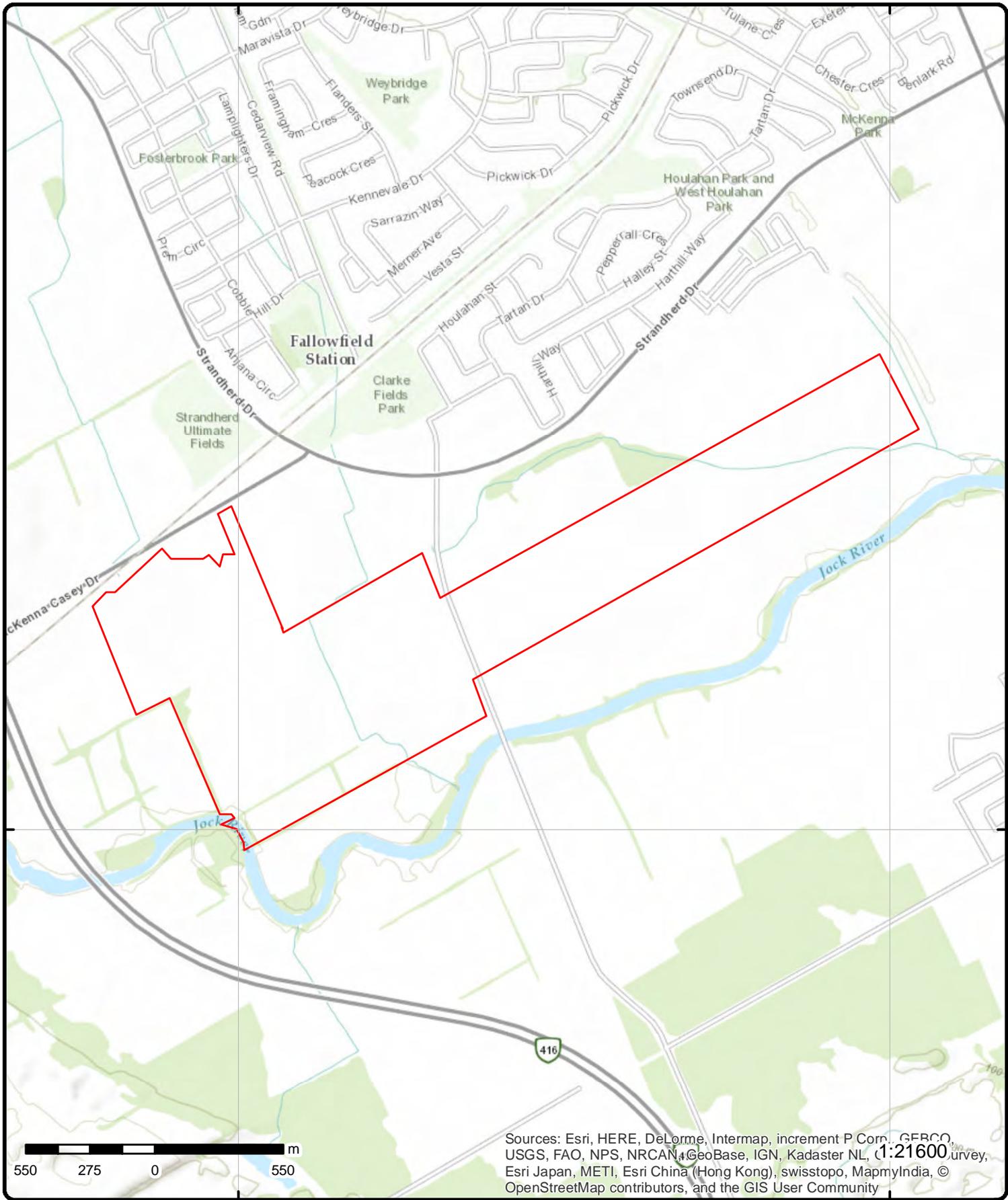
Order No: 20170201029

Address: 4305 Mckenna Casey Drive and 3285, 3288 and 3300 Borrisc



Source: ESRI World Imagery

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# Topographic Map

Address: 4305 Mckenna Casey Drive and 3285, 3288 and 3300 Borrison

Source: ESRI World Topographic Map

Order No: 20170201029



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# Detail Report

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>BORE</b>	<u>1</u>	1 of 1	-/0.0	92.5	<b>ON</b>
<b>Borehole ID:</b> 807827					
<b>Use:</b> Geotechnical/Geological Investigation					
<b>Drill Method::</b> Other Method					
<b>Easting::</b> 439787.5					
<b>Location Accuracy::</b>					
<b>Elev. Reliability Note::</b>					
<b>Total Depth m::</b> 3.2					
<b>Township::</b>					
<b>Lot::</b>					
<b>Completion Date::</b> 04-JAN-1990					
<b>Primary Water Use::</b>					
<b>Type:</b> Borehole					
<b>Status::</b>					
<b>UTM Zone::</b> 18					
<b>Northing::</b> 5011703.28					
<b>Orig. Ground Elev m::</b> 91.5					
<b>DEM Ground Elev m::</b> 91.8					
<b>Primary Name::</b> TP 90-19					
<b>Concession::</b>					
<b>Municipality:</b>					
<b>Static Water Level::</b> -999.9					
<b>Sec. Water Use::</b>					
<b>--Details--</b>					
<b>Stratum ID:</b> 218594250					
<b>Bottom Depth(m):</b> 0.5					
<b>Top Depth(m):</b> 0.0					
<b>Stratum Desc:</b> Topsoil					
<b>Stratum ID:</b> 218594251					
<b>Bottom Depth(m):</b> 3.2					
<b>Top Depth(m):</b> 0.5					
<b>Stratum Desc:</b> Grey-Brown Silty Clay					
<b>BORE</b>	<u>2</u>	1 of 1	-/0.0	92.1	<b>ON</b>
<b>Borehole ID:</b> 807825					
<b>Use:</b> Geotechnical/Geological Investigation					
<b>Drill Method::</b> Other Method					
<b>Easting::</b> 439837.62					
<b>Location Accuracy::</b>					
<b>Elev. Reliability Note::</b>					
<b>Total Depth m::</b> 3					
<b>Township::</b>					
<b>Lot::</b>					
<b>Completion Date::</b> 04-JAN-1990					
<b>Primary Water Use::</b>					
<b>Type:</b> Borehole					
<b>Status::</b>					
<b>UTM Zone::</b> 18					
<b>Northing::</b> 5011572.36					
<b>Orig. Ground Elev m::</b> 91.5					
<b>DEM Ground Elev m::</b> 90.5					
<b>Primary Name::</b> TP 90-18					
<b>Concession::</b>					
<b>Municipality:</b>					
<b>Static Water Level::</b> -999.9					
<b>Sec. Water Use::</b>					
<b>--Details--</b>					
<b>Stratum ID:</b> 218594245					
<b>Bottom Depth(m):</b> 0.4					
<b>Top Depth(m):</b> 0.0					
<b>Stratum Desc:</b> Topsoil					
<b>Stratum ID:</b> 218594246					
<b>Bottom Depth(m):</b> 3.0					
<b>Top Depth(m):</b> 0.4					
<b>Stratum Desc:</b> Grey-Brown Silty Clay					
<b>BORE</b>	<u>3</u>	1 of 1	-/0.0	90.7	<b>ON</b>
<b>Borehole ID:</b> 807824					
<b>Use:</b> Geotechnical/Geological Investigation					
<b>Drill Method::</b> Other Method					
<b>Easting::</b> 439893.12					
<b>Location Accuracy::</b>					
<b>Orig. Ground Elev m::</b> 91.5					
<b>Type:</b> Borehole					
<b>Status::</b>					
<b>UTM Zone::</b> 18					
<b>Northing::</b> 5011427.85					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Elev. Reliability Note::</b>					
	3.1			<b>DEM Ground Elev m::</b> 92	
<b>Total Depth m::</b>				<b>Primary Name::</b> TP 90-17	
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b> 04-JAN-1990				<b>Static Water Level::</b> -999.9	
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
<b>--Details--</b>					
<b>Stratum ID:</b>	218594243			<b>Top Depth(m):</b> 0.0	
<b>Bottom Depth(m):</b>	0.2			<b>Stratum Desc:</b> Topsoil	
<b>Stratum ID:</b>	218594244			<b>Top Depth(m):</b> 0.2	
<b>Bottom Depth(m):</b>	3.1			<b>Stratum Desc:</b> Grey-Brown Silty Clay	

<b>BORE</b>	<b>4</b>	<b>1 of 1</b>	<b>ENE/4.8</b>	<b>92.6</b>	<b>ON</b>
<b>Borehole ID:</b>	800201			<b>Type:</b>	Borehole
<b>Use:</b>	Geotechnical/Geological Investigation			<b>Status::</b>	
<b>Drill Method::</b>	Hollow stem auger			<b>UTM Zone::</b>	18
<b>Easting::</b>	441210.55			<b>Northing::</b>	5012274.73
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	92.1
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	92.2
<b>Total Depth m::</b>	3			<b>Primary Name::</b>	BH 38
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b> 05-DEC-1974				<b>Static Water Level::</b>	-999.9
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
<b>--Details--</b>					
<b>Stratum ID:</b>	218564024			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.2			<b>Stratum Desc:</b>	Topsoil
<b>Stratum ID:</b>	218564025			<b>Top Depth(m):</b>	0.2
<b>Bottom Depth(m):</b>	3.0			<b>Stratum Desc:</b>	Grey-Brown Very Stiff Weathered Crust Silty Clay Occasional: Sa very stiff grey brown SILTY CLAY with occasional sand seams (weathered crust)

<b>BORE</b>	<b>5</b>	<b>1 of 1</b>	<b>NNW/9.0</b>	<b>91.4</b>	<b>ON</b>
<b>Borehole ID:</b>	807831			<b>Type:</b>	Borehole
<b>Use:</b>	Geotechnical/Geological Investigation			<b>Status::</b>	
<b>Drill Method::</b>	Other Method			<b>UTM Zone::</b>	18
<b>Easting::</b>	439733.83			<b>Northing::</b>	5011843.26
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	91.2
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	90.1
<b>Total Depth m::</b>	3.1			<b>Primary Name::</b>	TP 90-20
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b> 04-JAN-1990				<b>Static Water Level::</b>	-999.9
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
<b>--Details--</b>					
<b>Stratum ID:</b>	218594260			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.3			<b>Stratum Desc:</b>	Topsoil
<b>Stratum ID:</b>	218594261			<b>Top Depth(m):</b>	0.3
<b>Bottom Depth(m):</b>	2.7			<b>Stratum Desc:</b>	Grey-Brown Silty Clay

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
<b>Stratum ID:</b>	218594262			<b>Top Depth(m):</b>	2.7
<b>Bottom Depth(m):</b>	3.1			<b>Stratum Desc:</b>	Grey-Brown Silty Clay
<hr/>					
<b>BORE</b>	<b>6</b>	<b>1 of 1</b>	<b>SSE/59.4</b>	<b>91.9</b>	<b>ON</b>
<b>Borehole ID:</b>	848008			<b>Type:</b>	Borehole
<b>Use:</b>	Geotechnical/Geological Investigation			<b>Status::</b>	Decommissioned
<b>Drill Method::</b>	Boring			<b>UTM Zone::</b>	18
<b>Easting::</b>	439974			<b>Northing::</b>	5011305
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	60.6
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	91.5
<b>Total Depth m::</b>	23.4			<b>Primary Name::</b>	
<b>Township::</b>	NEPEAN			<b>Concession::</b>	
<b>Lot::</b>	ROAD			<b>Municipality:</b>	
<b>Completion Date::</b>	30-JUL-1968			<b>Static Water Level::</b>	-999.9
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
 <b>--Details--</b>					
<b>Stratum ID:</b>	6559577			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.1			<b>Stratum Desc:</b>	TOPSOIL
<b>Stratum ID:</b>	6559578			<b>Top Depth(m):</b>	0.1
<b>Bottom Depth(m):</b>	1.5			<b>Stratum Desc:</b>	LOOSE BROWN SILTY SAND, TRACE OF CLAY (ALLUVIUM)
<b>Stratum ID:</b>	6559579			<b>Top Depth(m):</b>	1.5
<b>Bottom Depth(m):</b>	3.4			<b>Stratum Desc:</b>	STIFF TO FIRM BROWN SILTY CLAY
<b>Stratum ID:</b>	6559580			<b>Top Depth(m):</b>	3.4
<b>Bottom Depth(m):</b>	14.3			<b>Stratum Desc:</b>	FIRM TO GREY SILTY CLAY, 2' BOULDER AT 63' DEPTH
<b>Stratum ID:</b>	6559581			<b>Top Depth(m):</b>	14.3
<b>Bottom Depth(m):</b>	23.4			<b>Stratum Desc:</b>	SOUND GREY LIMESTONE BEDROCK, SOME DARK GREY SHALE LAYERS

<b>BORE</b>	<b>7</b>	<b>1 of 2</b>	<b>W/87.1</b>	<b>92.7</b>	<b>ON</b>
<b>Borehole ID:</b>	610471			<b>Type:</b>	Borehole
<b>Use:</b>				<b>Status::</b>	
<b>Drill Method::</b>				<b>UTM Zone::</b>	18
<b>Easting::</b>	438741			<b>Northing::</b>	5011802
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	93
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	92.2
<b>Total Depth m::</b>	13.1			<b>Primary Name::</b>	
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b>	AUG-1963			<b>Static Water Level::</b>	-999.9
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
 <b>--Details--</b>					
<b>Stratum ID:</b>	218385667			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.6			<b>Stratum Desc:</b>	SOIL,SAND.
<b>Stratum ID:</b>	218385668			<b>Top Depth(m):</b>	0.6
<b>Bottom Depth(m):</b>	3.4			<b>Stratum Desc:</b>	CLAY. BLUE.
<b>Stratum ID:</b>	218385669			<b>Top Depth(m):</b>	3.4
<b>Bottom Depth(m):</b>	11.9			<b>Stratum Desc:</b>	CLAY,STONES. BLUE.

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Stratum ID:</b>	218385670			<b>Top Depth(m):</b>	11.9
<b>Bottom Depth(m):</b>	13.1			<b>Stratum Desc:</b>	SAND, GRAVEL. 00040= 4900. BEDROCK. SEISMIC VELOCITY = 17500. SILT. GREY, FIRM. 00035004

<b>BORE</b>	<b>9</b>	<b>1 of 1</b>	<b>SSE/104.4</b>	<b>91.7</b>	<b>ON</b>
<b>Borehole ID:</b>	848009			<b>Type:</b>	Borehole
<b>Use:</b>	Geotechnical/Geological Investigation			<b>Status::</b>	Decommissioned
<b>Drill Method::</b>	Boring			<b>UTM Zone::</b>	18
<b>Easting::</b>	439988			<b>Northing::</b>	5011259
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	90.2
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	90.2
<b>Total Depth m::</b>	22.9			<b>Primary Name::</b>	
<b>Township::</b>	NEPEAN			<b>Concession::</b>	
<b>Lot::</b>	ROAD			<b>Municipality:</b>	
<b>Completion Date::</b>	31-JUL-1968			<b>Static Water Level::</b>	-999.9
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
<b>--Details--</b>					
<b>Stratum ID:</b>	6559582			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.1			<b>Stratum Desc:</b>	TOPSOIL
<b>Stratum ID:</b>	6559583			<b>Top Depth(m):</b>	0.1
<b>Bottom Depth(m):</b>	1.7			<b>Stratum Desc:</b>	LOOSE BROWN SILTY SAND, TRACE OF CLAY (ALLUVIUM)
<b>Stratum ID:</b>	6559584			<b>Top Depth(m):</b>	1.7
<b>Bottom Depth(m):</b>	3.5			<b>Stratum Desc:</b>	VERY LOOSE ORGANIC SANDY SILT, SOME WOOD, OCCASIONAL FINE SAND SEAM
<b>Stratum ID:</b>	6559585			<b>Top Depth(m):</b>	3.5
<b>Bottom Depth(m):</b>	15.2			<b>Stratum Desc:</b>	SOFT TO FIRM GREY SENSITIVE SILTY CLAY, TRACE TO SOME ORGANIC MATERIAL
<b>Stratum ID:</b>	6559586			<b>Top Depth(m):</b>	15.2
<b>Bottom Depth(m):</b>	20.0			<b>Stratum Desc:</b>	FIRM GREY SILTY CLAY
<b>Stratum ID:</b>	6559587			<b>Top Depth(m):</b>	20.0
<b>Bottom Depth(m):</b>	20.8			<b>Stratum Desc:</b>	VERY LOOSE GREY SANDY SILT, SOME CLAY AND GRAVEL
<b>Stratum ID:</b>	6559588			<b>Top Depth(m):</b>	20.8
<b>Bottom Depth(m):</b>	22.9			<b>Stratum Desc:</b>	SOUND GREY LIMESTONE BEDROCK, SOME DARK GREY SHALE LAYERS

<b>BORE</b>	<b>11</b>	<b>1 of 1</b>	<b>WNW/128.0</b>	<b>91.6</b>	<b>ON</b>
<b>Borehole ID:</b>	610478			<b>Type:</b>	Borehole
<b>Use:</b>				<b>Status::</b>	
<b>Drill Method::</b>				<b>UTM Zone::</b>	18
<b>Easting::</b>	438921			<b>Northing::</b>	5011982
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	96
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	91.9
<b>Total Depth m::</b>	-999			<b>Primary Name::</b>	
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b>				<b>Static Water Level::</b>	2.7
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>--Details--</b>					
<b>Stratum ID:</b>	218385689			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.6			<b>Stratum Desc:</b>	SILT,SAND.
<b>Stratum ID:</b>	218385690			<b>Top Depth(m):</b>	0.6
<b>Bottom Depth(m):</b>	3.4			<b>Stratum Desc:</b>	CLAY.
<b>Stratum ID:</b>	218385691			<b>Top Depth(m):</b>	3.4
<b>Bottom Depth(m):</b>	11.9			<b>Stratum Desc:</b>	CLAY,STONES. WATER STABLE AT 306.1 FEET.
<b>Stratum ID:</b>	218385692			<b>Top Depth(m):</b>	11.9
<b>Bottom Depth(m):</b>				<b>Stratum Desc:</b>	SAND,GRAVEL. BEDROCK. SEISMIC VELOCITY = 15000. SILT. GREY,FIRM. 00035004. 000080110

<b>BORE</b>	<b>13</b>	<b>1 of 1</b>	<b>NNW/163.2</b>	<b>92.5</b>	<b>ON</b>
<b>Borehole ID:</b>	807832			<b>Type:</b>	Borehole
<b>Use:</b>	Geotechnical/Geological Investigation			<b>Status::</b>	
<b>Drill Method::</b>	Other Method			<b>UTM Zone::</b>	18
<b>Easting::</b>	439678.35			<b>Northing::</b>	5011988.27
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b>	92.2
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b>	92.5
<b>Total Depth m::</b>	2.9			<b>Primary Name::</b>	TP 90-21
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b>	04-JAN-1990			<b>Static Water Level::</b>	-999.9
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
<b>--Details--</b>					
<b>Stratum ID:</b>	218594263			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	0.6			<b>Stratum Desc:</b>	Topsoil
<b>Stratum ID:</b>	218594264			<b>Top Depth(m):</b>	0.6
<b>Bottom Depth(m):</b>	2.9			<b>Stratum Desc:</b>	Grey-Brown Silty Clay

<b>CA</b>	<b>22</b>	<b>1 of 1</b>	<b>N/231.1</b>	<b>91.7</b>	<b>BARRHAVEN PROPERTIES TARTAN DR. PH. 1 STRANDHERD RD NEPEAN CITY ON</b>
<b>Certificate #:</b>	7-0015-86-				
<b>Application Year:</b>	86				
<b>Issue Date:</b>	1/17/1986				
<b>Approval Type:</b>	Municipal water				
<b>Status:</b>	Approved				
<b>Application Type:</b>					
<b>Client Name::</b>					
<b>Client Address::</b>					
<b>Client City::</b>					
<b>Client Postal Code::</b>					
<b>Project Description::</b>					
<b>Contaminants::</b>					
<b>Emission Control::</b>					

<b>EHS</b>	<b>8</b>	<b>1 of 1</b>	<b>NE/90.5</b>	<b>93.3</b>	<b>Greenbank Road &amp; Jockvale Road Ottawa ON</b>
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DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Postal Code:</b> <b>City:</b> Ottawa <b>Address2:</b> <b>Address1:</b> Greenbank Road & Jockvale Road <b>Provstate:</b> ON <b>Order No.:</b> 20150616087 <b>Addit. Info Ordered::</b> Aerial Photos <b>Report Date:</b> 18-JUN-15 <b>Report Type:</b> Custom Report <b>Search Radius (km):</b> .1					
<b>EHS</b>	<b><u>10</u></b>	<b>1 of 1</b>	<b>WNW/106.8</b>	<b>91.1</b>	<b>4235 McKenna Casey Dr Ottawa ON</b>
<b>Postal Code:</b> <b>City:</b> <b>Address2:</b> <b>Address1:</b> <b>Provstate:</b> <b>Order No.:</b> 20090717012 <b>Addit. Info Ordered::</b> <b>Report Date:</b> 7/29/2009 <b>Report Type:</b> Custom Report <b>Search Radius (km):</b> 0.25					
<b>EHS</b>	<b><u>14</u></b>	<b>1 of 1</b>	<b>NE/169.0</b>	<b>92.9</b>	<b>Cedarview Rd Strandherd Dr Ottawa ON</b>
<b>Postal Code:</b> <b>City:</b> Ottawa <b>Address2:</b> <b>Address1:</b> Cedarview Rd Strandherd Dr <b>Provstate:</b> ON <b>Order No.:</b> 20141120083 <b>Addit. Info Ordered::</b> <b>Report Date:</b> 27-NOV-14 <b>Report Type:</b> Standard Report <b>Search Radius (km):</b> .25					
<b>EHS</b>	<b><u>15</u></b>	<b>1 of 1</b>	<b>WNW/171.7</b>	<b>90.2</b>	<b>4235 McKenna Casey Drive Ottawa ON K2J 4S8</b>
<b>Postal Code:</b> <b>City:</b> <b>Address2:</b> <b>Address1:</b> <b>Provstate:</b> <b>Order No.:</b> 20140724082 <b>Addit. Info Ordered::</b> <b>Report Date:</b> 31-JUL-14 <b>Report Type:</b> Custom Report <b>Search Radius (km):</b> .25					
<b>EHS</b>	<b><u>23</u></b>	<b>1 of 1</b>	<b>ENE/242.5</b>	<b>92.4</b>	<b>3201 Greenbank Road Ottawa ON</b>
<b>Postal Code:</b> <b>City:</b> Ottawa <b>Address2:</b>					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Address1:</b>		3201 Greenbank Road			
<b>Provstate:</b>		ON			
<b>Order No.:</b>		20150930171			
<b>Addit. Info Ordered::</b>					
<b>Report Date:</b>		07-OCT-15			
<b>Report Type:</b>		Custom Report			
<b>Search Radius (km):</b>		.1			

WWIS	<u>7</u>	2 of 2	W/87.1	92.7	lot 16 con 4 ON
<b>Well ID:</b>		1506084			<b>Lot:</b> 016
<b>Construction Date::</b>					<b>Concession:</b> 04
<b>Primary Water Use::</b>		Commerical			<b>Concession Name:</b> RF
<b>Sec. Water Use::</b>					<b>Easting NAD83::</b>
<b>Final Well Status::</b>		Water Supply			<b>Northing NAD83::</b>
<b>Specific Capacity::</b>					<b>Zone::</b>
<b>Municipality:</b>		NEPEAN TOWNSHIP			<b>UTM Reliability::</b>
<b>County:</b>		OTTAWA-CARLETON			
<b>Bore Hole Information</b>					
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<b>Bore Hole ID:</b>		10028127			
<b>DP2BR:</b>					
<b>Code OB:</b>		o			
<b>Code OB Description:</b>		Overburden			
<b>Open Hole:</b>					
<b>Date Completed:</b>		05-AUG-63			
<b>Remarks:</b>					
<b>Zone:</b>		18			
<b>East 83:</b>		438740.7			
<b>North 83:</b>		5011802			
<b>UTMRC:</b>		5			
<b>UTMRC Description:</b>		margin of error : 100 m - 300 m			
<b>Location Method:</b>		p5			
<b>Org CS:</b>					
<b>Elevation:</b>		92.18			
<b>Elevrc:</b>					
<b>Elevrc Description:</b>					
<b>Location Source Date:</b>					
<b>Source Revision Comment:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
--					
<b>Overburden and Bedrock Materials Interval</b>					
--					
<b>Formation ID:</b>		931003755			
<b>Layer:</b>		1			
<b>General Color:</b>					
<b>Most Common Material:</b>		TOPSOIL			
<b>Other Materials:</b>		MEDIUM SAND			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		2			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931003756			
<b>Layer:</b>		2			
<b>General Color:</b>		BLUE			
<b>Most Common Material:</b>		CLAY			
<b>Other Materials:</b>					
<b>Other Materials:</b>					

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
	<b>Formation Top Depth:</b>	2			
	<b>Formation End Depth:</b>	11			
	<b>Formation End Depth UOM:</b>	ft			
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	<b>Formation ID:</b>	931003757			
	<b>Layer:</b>	3			
	<b>General Color:</b>	BLUE			
	<b>Most Common Material:</b>	CLAY			
	<b>Other Materials:</b>	STONES			
	<b>Other Materials:</b>				
	<b>Formation Top Depth:</b>	11			
	<b>Formation End Depth:</b>	39			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Formation ID:</b>	931003758			
	<b>Layer:</b>	4			
	<b>General Color:</b>				
	<b>Most Common Material:</b>	COARSE SAND			
	<b>Other Materials:</b>	GRAVEL			
	<b>Other Materials:</b>				
	<b>Formation Top Depth:</b>	39			
	<b>Formation End Depth:</b>	43			
	<b>Formation End Depth UOM:</b>	ft			
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	<b>Method of Construction &amp; Well Use</b>				
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	<b>Method Construction ID:</b>	961506084			
	<b>Method Construction Code:</b>	1			
	<b>Method Construction:</b>	Cable Tool			
	<b>Other Method Construction:</b>				
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	<b>Pipe Information</b>				
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	<b>Pipe ID:</b>	10576697			
	<b>Casing Number:</b>	1			
	<b>Comment:</b>				
	<b>Alt Name:</b>				
	--	--			
	<b>Construction Record - Casing</b>				
	--	--			
	<b>Casing ID:</b>	930049000			
	<b>Layer:</b>	1			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	42			
	<b>Casing Diameter:</b>	7			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
	--	--			
	<b>Casing ID:</b>	930049001			
	<b>Layer:</b>	2			
	<b>Open Hole or Material:</b>				
	<b>Depth From:</b>				
	<b>Depth To:</b>	43			
	<b>Casing Diameter:</b>	7			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
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	<b>Well Yield Testing</b>				
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	<b>Pump Test ID:</b>	991506084			
	<b>Pump Set At:</b>				
	<b>Static Level:</b>	0			
	<b>Final Level After Pumping:</b>	12			
	<b>Recommended Pump Depth:</b>	10			
	<b>Pumping Rate:</b>	20			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Flowing Rate:</b>					
	<b>Recommended Pump Rate:</b>	4			
	<b>Levels UOM:</b>	ft			
	<b>Rate UOM:</b>	GPM			
	<b>Water State After Test Code:</b>	1			
	<b>Water State After Test:</b>	CLEAR			
	<b>Pumping Test Method:</b>	1			
	<b>Pumping Duration HR:</b>	3			
	<b>Pumping Duration MIN:</b>	0			
	<b>Flowing:</b>	N			
	--	--			
<b>Water Details</b>					
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	<b>Water ID:</b>	933460160			
	<b>Layer:</b>	1			
	<b>Kind Code:</b>	1			
	<b>Kind:</b>	FRESH			
	<b>Water Found Depth:</b>	40			
	<b>Water Found Depth UOM:</b>	ft			
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WWIS	<u>12</u>	1 of 1	WSW/131.3	91.7	lot 14 con 4 ON
<b>Well ID:</b>	1524165			<b>Lot:</b>	014
<b>Construction Date::</b>				<b>Concession:</b>	04
<b>Primary Water Use::</b>	Domestic			<b>Concession Name:</b>	
<b>Sec. Water Use::</b>				<b>Easting NAD83::</b>	
<b>Final Well Status::</b>	Water Supply			<b>Northing NAD83::</b>	
<b>Specific Capacity::</b>				<b>Zone::</b>	
<b>Municipality:</b>	NEPEAN TOWNSHIP			<b>UTM Reliability::</b>	
<b>County:</b>	OTTAWA-CARLETON				
<b>Bore Hole Information</b>					
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<b>Bore Hole ID:</b>	10045937				
<b>DP2BR:</b>	56				
<b>Code OB:</b>	r				
<b>Code OB Description:</b>	Bedrock				
<b>Open Hole:</b>					
<b>Date Completed:</b>	03-NOV-84				
<b>Remarks:</b>					
<b>Zone:</b>	18				
<b>East 83:</b>	438945.7				
<b>North 83:</b>	5011156				
<b>UTMRC:</b>	9				
<b>UTMRC Description:</b>	unknown UTM				
<b>Location Method:</b>	lot				
<b>Org CS:</b>					
<b>Elevation:</b>	90.62				
<b>Elevrc:</b>					
<b>Elevrc Description:</b>					
<b>Location Source Date:</b>					
<b>Source Revision Comment:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
	--	--			
<b>Overburden and Bedrock</b>					
<b>Materials Interval</b>					
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<b>Formation ID:</b>	931057043				
<b>Layer:</b>	1				
<b>General Color:</b>	GREY				

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
	<b>Most Common Material:</b>	SAND			
	<b>Other Materials:</b>	GRAVEL			
	<b>Other Materials:</b>	BOULDERS			
	<b>Formation Top Depth:</b>	0			
	<b>Formation End Depth:</b>	20			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Formation ID:</b>	931057044			
	<b>Layer:</b>	2			
	<b>General Color:</b>	GREY			
	<b>Most Common Material:</b>	CLAY			
	<b>Other Materials:</b>	GRAVEL			
	<b>Other Materials:</b>				
	<b>Formation Top Depth:</b>	20			
	<b>Formation End Depth:</b>	56			
	<b>Formation End Depth UOM:</b>	ft			
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	<b>Formation ID:</b>	931057045			
	<b>Layer:</b>	3			
	<b>General Color:</b>	GREY			
	<b>Most Common Material:</b>	LIMESTONE			
	<b>Other Materials:</b>				
	<b>Other Materials:</b>				
	<b>Formation Top Depth:</b>	56			
	<b>Formation End Depth:</b>	182			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Method of Construction &amp; Well Use</b>				
	--	--			
	<b>Method Construction ID:</b>	961524165			
	<b>Method Construction Code:</b>	5			
	<b>Method Construction:</b>	Air Percussion			
	<b>Other Method Construction:</b>				
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	<b>Pipe Information</b>				
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	<b>Pipe ID:</b>	10594507			
	<b>Casing Number:</b>	1			
	<b>Comment:</b>				
	<b>Alt Name:</b>				
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	<b>Construction Record - Casing</b>				
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	<b>Casing ID:</b>	930080427			
	<b>Layer:</b>	1			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	59			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
	--	--			
	<b>Casing ID:</b>	930080428			
	<b>Layer:</b>	2			
	<b>Open Hole or Material:</b>				
	<b>Depth From:</b>				
	<b>Depth To:</b>	182			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
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	<b>Well Yield Testing</b>				
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	<b>Pump Test ID:</b>	991524165			
	<b>Pump Set At:</b>				
	<b>Static Level:</b>	20			

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
<i>Final Level After Pumping:</i>		60			
<i>Recommended Pump Depth:</i>		60			
<i>Pumping Rate:</i>		10			
<i>Flowing Rate:</i>					
<i>Recommended Pump Rate:</i>		8			
<i>Levels UOM:</i>		ft			
<i>Rate UOM:</i>		GPM			
<i>Water State After Test Code:</i>		2			
<i>Water State After Test:</i>		CLOUDY			
<i>Pumping Test Method:</i>		1			
<i>Pumping Duration HR:</i>		1			
<i>Pumping Duration MIN:</i>		0			
<i>Flowing:</i>		N			
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<i>Draw Down &amp; Recovery</i>					
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<i>Pump Test Detail ID:</i>		934107746			
<i>Pump Test ID:</i>		991524165			
<i>Test Type:</i>					
<i>Test Duration:</i>		15			
<i>Test Level:</i>		60			
<i>Test Level UOM:</i>		ft			
--		--			
<i>Pump Test Detail ID:</i>		934391975			
<i>Pump Test ID:</i>		991524165			
<i>Test Type:</i>					
<i>Test Duration:</i>		30			
<i>Test Level:</i>		60			
<i>Test Level UOM:</i>		ft			
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<i>Pump Test Detail ID:</i>		934652945			
<i>Pump Test ID:</i>		991524165			
<i>Test Type:</i>					
<i>Test Duration:</i>		45			
<i>Test Level:</i>		60			
<i>Test Level UOM:</i>		ft			
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<i>Pump Test Detail ID:</i>		934910145			
<i>Pump Test ID:</i>		991524165			
<i>Test Type:</i>					
<i>Test Duration:</i>		60			
<i>Test Level:</i>		60			
<i>Test Level UOM:</i>		ft			
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<i>Water Details</i>					
--		--			
<i>Water ID:</i>		933482719			
<i>Layer:</i>		1			
<i>Kind Code:</i>		1			
<i>Kind:</i>		FRESH			
<i>Water Found Depth:</i>		178			
<i>Water Found Depth UOM:</i>		ft			
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**WWIS**

**16**

**1 of 1**

**NW/173.1**

**93.2**

**lot 15 con 4  
BARRHAVEN ON**

*Well ID:* 7247771  
*Construction Date::*  
*Primary Water Use::* Domestic  
*Sec. Water Use::*  
*Final Well Status::* Abandoned-Other  
*Specific Capacity::*  
*Municipality:* NEPEAN TOWNSHIP

*Lot:* 015  
*Concession:* 04  
*Concession Name:* RF  
*Easting NAD83::*  
*Northing NAD83::*  
*Zone::*  
*UTM Reliability::*

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
<b>County:</b>		OTTAWA-CARLETON			
<b>Bore Hole Information</b>					
--					
<b>Bore Hole ID:</b>		1005667854			
<b>DP2BR:</b>					
<b>Code OB:</b>					
<b>Code OB Description:</b>					
<b>Open Hole:</b>					
<b>Date Completed:</b>		20-JUL-15			
<b>Remarks:</b>					
<b>Zone:</b>		18			
<b>East 83:</b>		439358			
<b>North 83:</b>		5011987			
<b>UTMRC:</b>		5			
<b>UTMRC Description:</b>		margin of error : 100 m - 300 m			
<b>Location Method:</b>		wwr			
<b>Org CS:</b>		UTM83			
<b>Elevation:</b>					
<b>Elevrc:</b>					
<b>Elevrc Description:</b>					
<b>Location Source Date:</b>					
<b>Source Revision Comment:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>		--			
<b>Overburden and Bedrock</b>					
<b>Materials Interval</b>					
--					
<b>Formation ID:</b>		1005732411			
<b>Layer:</b>					
<b>General Color:</b>					
<b>Most Common Material:</b>					
<b>Other Materials:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>					
<b>Formation End Depth:</b>					
<b>Formation End Depth UOM:</b>		ft			
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<b>Annular Space/Abandonment</b>					
<b>Sealing Record</b>					
--					
<b>Plug ID:</b>		1005732418			
<b>Layer:</b>		1			
<b>Plug From:</b>		0			
<b>Plug To:</b>		85.75			
<b>Plug Depth UOM:</b>		ft			
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<b>Method of Construction &amp; Well</b>					
<b>Use</b>					
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<b>Method Construction ID:</b>		1005732417			
<b>Method Construction Code:</b>					
<b>Method Construction:</b>					
<b>Other Method Construction:</b>					
--		--			
<b>Pipe Information</b>					
--					
<b>Pipe ID:</b>		1005732410			
<b>Casing Number:</b>		0			
<b>Comment:</b>					
<b>Alt Name:</b>					
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<b>Construction Record - Casing</b>					
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DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
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<b>Overburden and Bedrock Materials Interval</b>					
--					
<b>Formation ID:</b>		931046360			
<b>Layer:</b>		1			
<b>General Color:</b>		BLACK			
<b>Most Common Material:</b>		TOPSOIL			
<b>Other Materials:</b>		PEAT			
<b>Other Materials:</b>		LOOSE			
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		2			
<b>Formation End Depth UOM:</b>		ft			
--					
<b>Formation ID:</b>		931046361			
<b>Layer:</b>		2			
<b>General Color:</b>		WHITE			
<b>Most Common Material:</b>		FINE SAND			
<b>Other Materials:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		2			
<b>Formation End Depth:</b>		15			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931046362			
<b>Layer:</b>		3			
<b>General Color:</b>		BROWN			
<b>Most Common Material:</b>		MEDIUM SAND			
<b>Other Materials:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		15			
<b>Formation End Depth:</b>		31			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931046363			
<b>Layer:</b>		4			
<b>General Color:</b>		GREY			
<b>Most Common Material:</b>		MEDIUM SAND			
<b>Other Materials:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		31			
<b>Formation End Depth:</b>		49			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931046364			
<b>Layer:</b>		5			
<b>General Color:</b>		GREY			
<b>Most Common Material:</b>		CLAY			
<b>Other Materials:</b>		PACKED			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		49			
<b>Formation End Depth:</b>		51			
<b>Formation End Depth UOM:</b>		ft			
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<b>Method of Construction &amp; Well Use</b>					
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<b>Method Construction ID:</b>		961520945			
<b>Method Construction Code:</b>		4			
<b>Method Construction:</b>		Rotary (Air)			
<b>Other Method Construction:</b>					
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<b>Pipe Information</b>					

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
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	<b>Pipe ID:</b>	10591356			
	<b>Casing Number:</b>	1			
	<b>Comment:</b>				
	<b>Alt Name:</b>				
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	<b>Construction Record - Casing</b>				
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	<b>Casing ID:</b>	930074684			
	<b>Layer:</b>	1			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	46			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
		--			
	<b>Casing ID:</b>	930074685			
	<b>Layer:</b>	2			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	49			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
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		--			
	<b>Construction Record - Screen</b>				
		--			
	<b>Screen ID:</b>	933326072			
	<b>Layer:</b>	1			
	<b>Slot:</b>	012			
	<b>Screen Top Depth:</b>	46			
	<b>Screen End Depth:</b>	49			
	<b>Screen Material:</b>				
	<b>Screen Depth UOM:</b>	ft			
	<b>Screen Diameter UOM:</b>	inch			
	<b>Screen Diameter:</b>	6			
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		--			
	<b>Well Yield Testing</b>				
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	<b>Pump Test ID:</b>	991520945			
	<b>Pump Set At:</b>				
	<b>Static Level:</b>	18			
	<b>Final Level After Pumping:</b>	40			
	<b>Recommended Pump Depth:</b>	40			
	<b>Pumping Rate:</b>	20			
	<b>Flowing Rate:</b>				
	<b>Recommended Pump Rate:</b>	10			
	<b>Levels UOM:</b>	ft			
	<b>Rate UOM:</b>	GPM			
	<b>Water State After Test Code:</b>	1			
	<b>Water State After Test:</b>	CLEAR			
	<b>Pumping Test Method:</b>	1			
	<b>Pumping Duration HR:</b>	2			
	<b>Pumping Duration MIN:</b>	0			
	<b>Flowing:</b>	N			
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		--			
	<b>Draw Down &amp; Recovery</b>				
		--			
	<b>Pump Test Detail ID:</b>	934104274			
	<b>Pump Test ID:</b>	991520945			
	<b>Test Type:</b>	Draw Down			
	<b>Test Duration:</b>	15			
	<b>Test Level:</b>	40			
	<b>Test Level UOM:</b>	ft			
		--			



<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
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<b>Overburden and Bedrock Materials Interval</b>					
--					
<b>Formation ID:</b>		931051292			
<b>Layer:</b>		1			
<b>General Color:</b>		BROWN			
<b>Most Common Material:</b>		SAND			
<b>Other Materials:</b>		LOOSE			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		3			
<b>Formation End Depth UOM:</b>		ft			
--					
<b>Formation ID:</b>		931051293			
<b>Layer:</b>		2			
<b>General Color:</b>		BROWN			
<b>Most Common Material:</b>		CLAY			
<b>Other Materials:</b>		PACKED			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		3			
<b>Formation End Depth:</b>		26			
<b>Formation End Depth UOM:</b>		ft			
--					
<b>Formation ID:</b>		931051294			
<b>Layer:</b>		3			
<b>General Color:</b>		GREY			
<b>Most Common Material:</b>		CLAY			
<b>Other Materials:</b>		PACKED			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		26			
<b>Formation End Depth:</b>		92			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931051295			
<b>Layer:</b>		4			
<b>General Color:</b>		GREY			
<b>Most Common Material:</b>		SILT			
<b>Other Materials:</b>		STONES			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		92			
<b>Formation End Depth:</b>		106			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931051296			
<b>Layer:</b>		5			
<b>General Color:</b>		BROWN			
<b>Most Common Material:</b>		MEDIUM SAND			
<b>Other Materials:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		106			
<b>Formation End Depth:</b>		117			
<b>Formation End Depth UOM:</b>		ft			
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<b>Formation ID:</b>		931051297			
<b>Layer:</b>		6			
<b>General Color:</b>		GREY			
<b>Most Common Material:</b>		MEDIUM SAND			
<b>Other Materials:</b>		FINE SAND			
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		117			
<b>Formation End Depth:</b>		125			
<b>Formation End Depth UOM:</b>		ft			

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
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	<b>Annular Space/Abandonment Sealing Record</b>				
	<b>Plug ID:</b>	933109867			
	<b>Layer:</b>	1			
	<b>Plug From:</b>	0			
	<b>Plug To:</b>	20			
	<b>Plug Depth UOM:</b>	ft			
	<b>Method of Construction &amp; Well Use</b>				
	<b>Method Construction ID:</b>	961522400			
	<b>Method Construction Code:</b>	4			
	<b>Method Construction:</b>	Rotary (Air)			
	<b>Other Method Construction:</b>				
	<b>Pipe Information</b>				
	<b>Pipe ID:</b>	10592782			
	<b>Casing Number:</b>	1			
	<b>Comment:</b>				
	<b>Alt Name:</b>				
	<b>Construction Record - Casing</b>				
	<b>Casing ID:</b>	930077325			
	<b>Layer:</b>	1			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	107			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
	<b>Casing ID:</b>	930077326			
	<b>Layer:</b>	2			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	112			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
	<b>Construction Record - Screen</b>				
	<b>Screen ID:</b>	933326140			
	<b>Layer:</b>	1			
	<b>Slot:</b>	008			
	<b>Screen Top Depth:</b>	113			
	<b>Screen End Depth:</b>	116			
	<b>Screen Material:</b>				
	<b>Screen Depth UOM:</b>	ft			
	<b>Screen Diameter UOM:</b>	inch			
	<b>Screen Diameter:</b>	6			
	<b>Well Yield Testing</b>				
	<b>Pump Test ID:</b>	991522400			
	<b>Pump Set At:</b>				
	<b>Static Level:</b>	26			
	<b>Final Level After Pumping:</b>				
	<b>Recommended Pump Depth:</b>				
	<b>Pumping Rate:</b>	12			
	<b>Flowing Rate:</b>				

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Recommended Pump Rate:</b>					
	<b>Levels UOM:</b>	ft			
	<b>Rate UOM:</b>	GPM			
	<b>Water State After Test Code:</b>	1			
	<b>Water State After Test:</b>	CLEAR			
	<b>Pumping Test Method:</b>	1			
	<b>Pumping Duration HR:</b>				
	<b>Pumping Duration MIN:</b>				
	<b>Flowing:</b>	N			
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<b>Water Details</b>					
	--	--			
	<b>Water ID:</b>	933480275			
	<b>Layer:</b>	1			
	<b>Kind Code:</b>	1			
	<b>Kind:</b>	FRESH			
	<b>Water Found Depth:</b>	112			
	<b>Water Found Depth UOM:</b>	ft			
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<b>WWIS</b>	<b>17</b>	<b>3 of 4</b>	<b>SW/199.9</b>	<b>91.1</b>	<b>lot 13 con 4 ON</b>
<b>Well ID:</b>	1526791			<b>Lot:</b>	013
<b>Construction Date::</b>				<b>Concession:</b>	04
<b>Primary Water Use::</b>	Domestic			<b>Concession Name:</b>	
<b>Sec. Water Use::</b>				<b>Easting NAD83::</b>	
<b>Final Well Status::</b>	Water Supply			<b>Northing NAD83::</b>	
<b>Specific Capacity::</b>				<b>Zone::</b>	
<b>Municipality:</b>	NEPEAN TOWNSHIP			<b>UTM Reliability::</b>	
<b>County:</b>	OTTAWA-CARLETON				
<b>Bore Hole Information</b>					
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<b>Bore Hole ID:</b>	10048479				
<b>DP2BR:</b>	6				
<b>Code OB:</b>	r				
<b>Code OB Description:</b>	Bedrock				
<b>Open Hole:</b>					
<b>Date Completed:</b>	08-SEP-92				
<b>Remarks:</b>					
<b>Zone:</b>	18				
<b>East 83:</b>	439096.7				
<b>North 83:</b>	5010782				
<b>UTMRC:</b>	9				
<b>UTMRC Description:</b>	unknown UTM				
<b>Location Method:</b>	lot				
<b>Org CS:</b>					
<b>Elevation:</b>	92.03				
<b>Elevrc:</b>					
<b>Elevrc Description:</b>					
<b>Location Source Date:</b>					
<b>Source Revision Comment:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
	--	--			
<b>Overburden and Bedrock Materials Interval</b>					
	--	--			
<b>Formation ID:</b>	931065171				
<b>Layer:</b>	1				
<b>General Color:</b>	BROWN				
<b>Most Common Material:</b>	FILL				

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
		STONES			
		LOOSE			
		0			
		6			
		ft			
		--			
		931065172			
		2			
		GREY			
		LIMESTONE			
		MEDIUM-GRAINED			
		HARD			
		6			
		85			
		ft			
		--			
		--			
		933111956			
		1			
		6			
		21			
		ft			
		--			
		--			
		961526791			
		1			
		Cable Tool			
		--			
		--			
		--			
		10597049			
		1			
		--			
		--			
		930084893			
		1			
		STEEL			
		21			
		6			
		inch			
		ft			
		--			
		--			
		991526791			
		12			
		64			
		5			
		ft			
		GPM			
		1			
		CLEAR			
		1			
		1			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
--		--			
<b>Draw Down &amp; Recovery</b>					
--		--			
<b>Pump Test Detail ID:</b>		934108957			
<b>Pump Test ID:</b>		991526791			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		39			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934392591			
<b>Pump Test ID:</b>		991526791			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		24			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934653104			
<b>Pump Test ID:</b>		991526791			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		18			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934910296			
<b>Pump Test ID:</b>		991526791			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		12			
<b>Test Level UOM:</b>		ft			
--		--			
--		--			
<b>Water Details</b>					
--		--			
<b>Water ID:</b>		933486218			
<b>Layer:</b>		1			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		81			
<b>Water Found Depth UOM:</b>		ft			
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**WWIS**      17      **4 of 4**      **SW/199.9**      **91.1**      **lot 13 con 4**  
**ON**

<b>Well ID:</b>	1520946	<b>Lot:</b>	013
<b>Construction Date::</b>		<b>Concession:</b>	04
<b>Primary Water Use::</b>	Domestic	<b>Concession Name:</b>	
<b>Sec. Water Use::</b>		<b>Easting NAD83::</b>	
<b>Final Well Status::</b>	Test Hole	<b>Northing NAD83::</b>	
<b>Specific Capacity::</b>		<b>Zone::</b>	
<b>Municipality:</b>	NEPEAN TOWNSHIP	<b>UTM Reliability::</b>	
<b>County:</b>	OTTAWA-CARLETON		

**Bore Hole Information**

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**Bore Hole ID:** 10042787

**DP2BR:**

**Code OB:** o

**Code OB Description:** Overburden

**Open Hole:**

**Date Completed:** 28-AUG-86

**Remarks:**



<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
--		--			
<b>Pipe Information</b>					
--		--			
<b>Pipe ID:</b>		10591357			
<b>Casing Number:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
--		--			
<b>Construction Record - Casing</b>					
--		--			
<b>Casing ID:</b>		930074686			
<b>Layer:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>		44			
<b>Casing Diameter:</b>		6			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
--		--			
<b>Casing ID:</b>		930074687			
<b>Layer:</b>		2			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>		47			
<b>Casing Diameter:</b>		6			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
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--		--			
<b>Construction Record - Screen</b>					
--		--			
<b>Screen ID:</b>		933326073			
<b>Layer:</b>		1			
<b>Slot:</b>		010			
<b>Screen Top Depth:</b>		47			
<b>Screen End Depth:</b>		50			
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>		ft			
<b>Screen Diameter UOM:</b>		inch			
<b>Screen Diameter:</b>		6			
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--		--			
<b>Well Yield Testing</b>					
--		--			
<b>Pump Test ID:</b>		991520946			
<b>Pump Set At:</b>					
<b>Static Level:</b>		20			
<b>Final Level After Pumping:</b>		40			
<b>Recommended Pump Depth:</b>		40			
<b>Pumping Rate:</b>		20			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		10			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>		1			
<b>Water State After Test:</b>		CLEAR			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		2			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
--		--			
<b>Draw Down &amp; Recovery</b>					
--		--			
<b>Pump Test Detail ID:</b>		934104275			
<b>Pump Test ID:</b>		991520946			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		40			



DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<i>Location Source Date:</i>					
<i>Source Revision Comment:</i>					
<i>Improvement Location Source:</i>					
<i>Improvement Location Method:</i>					
<i>Supplier Comment:</i>					
<i>Spatial Status:</i>					
--					
<i>Overburden and Bedrock Materials Interval</i>					
--					
<i>Formation ID:</i> 932832388					
<i>Layer:</i> 1					
<i>General Color:</i> BROWN					
<i>Most Common Material:</i> TOPSOIL					
<i>Other Materials:</i> SANDY					
<i>Other Materials:</i> STONES					
<i>Formation Top Depth:</i> 0					
<i>Formation End Depth:</i> 12					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 932832389					
<i>Layer:</i> 2					
<i>General Color:</i> GREY					
<i>Most Common Material:</i> CLAY					
<i>Other Materials:</i> SANDY					
<i>Other Materials:</i> BOULDERS					
<i>Formation Top Depth:</i> 12					
<i>Formation End Depth:</i> 40					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 932832390					
<i>Layer:</i> 3					
<i>General Color:</i> GREY					
<i>Most Common Material:</i> LIMESTONE					
<i>Other Materials:</i>					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 40					
<i>Formation End Depth:</i> 165					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 932832391					
<i>Layer:</i> 4					
<i>General Color:</i> GREY					
<i>Most Common Material:</i> LIMESTONE					
<i>Other Materials:</i> FRACTURED					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 165					
<i>Formation End Depth:</i> 175					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Annular Space/Abandonment Sealing Record</i>					
--					
<i>Plug ID:</i> 933219738					
<i>Layer:</i> 1					
<i>Plug From:</i> 0					
<i>Plug To:</i> 43					
<i>Plug Depth UOM:</i> ft					
--					
<i>Method of Construction &amp; Well Use</i>					
--					
<i>Method Construction ID:</i> 961532290					
<i>Method Construction Code:</i> 4					
<i>Method Construction:</i> Rotary (Air)					
<i>Other Method Construction:</i>					
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<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
<b>Pipe Information</b>					
--		--			
<b>Pipe ID:</b>		11065310			
<b>Casing Number:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
--		--			
<b>Construction Record - Casing</b>					
--		--			
<b>Casing ID:</b>		930094532			
<b>Layer:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
--		--			
<b>Casing ID:</b>		930094533			
<b>Layer:</b>		2			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
--		--			
<b>Well Yield Testing</b>					
--		--			
<b>Pump Test ID:</b>		991532290			
<b>Pump Set At:</b>					
<b>Static Level:</b>		32			
<b>Final Level After Pumping:</b>		85			
<b>Recommended Pump Depth:</b>		100			
<b>Pumping Rate:</b>		12			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		5			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>					
<b>Water State After Test:</b>					
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
--		--			
<b>Draw Down &amp; Recovery</b>					
--		--			
<b>Pump Test Detail ID:</b>		934116275			
<b>Pump Test ID:</b>		991532290			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		85			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934399889			
<b>Pump Test ID:</b>		991532290			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		100			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934660411			
<b>Pump Test ID:</b>		991532290			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		173			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934917297			
<b>Pump Test ID:</b>		991532290			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		173			
<b>Test Level UOM:</b>		ft			
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--		--			
<b>Water Details</b>					
--		--			
<b>Water ID:</b>		934008463			
<b>Layer:</b>		1			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		175			
<b>Water Found Depth UOM:</b>		ft			
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WWIS	<u>19</u>	1 of 1	SW/201.7	91.0	lot 13 con 4 ON
<b>Well ID:</b>	1534268			<b>Lot:</b>	013
<b>Construction Date::</b>				<b>Concession:</b>	04
<b>Primary Water Use::</b>	Not Used			<b>Concession Name:</b>	RF
<b>Sec. Water Use::</b>				<b>Easting NAD83::</b>	
<b>Final Well Status::</b>	Abandoned-Other			<b>Northing NAD83::</b>	
<b>Specific Capacity::</b>				<b>Zone::</b>	
<b>Municipality:</b>	NEPEAN TOWNSHIP			<b>UTM Reliability::</b>	
<b>County:</b>	OTTAWA-CARLETON				
<b>Bore Hole Information</b>					
--					
<b>Bore Hole ID:</b>	11097320				
<b>DP2BR:</b>					
<b>Code OB:</b>	--				
<b>Code OB Description:</b>	No formation data				
<b>Open Hole:</b>					
<b>Date Completed:</b>	29-SEP-03				
<b>Remarks:</b>					
<b>Zone:</b>	18				
<b>East 83:</b>	439093.3				
<b>North 83:</b>	5010782				
<b>UTMRC:</b>	9				
<b>UTMRC Description:</b>	unknown UTM				
<b>Location Method:</b>	lot				
<b>Org CS:</b>					
<b>Elevation:</b>	92.04				
<b>Elevrc:</b>					
<b>Elevrc Description:</b>					
<b>Location Source Date:</b>					
<b>Source Revision Comment:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
--					
<b>Method of Construction &amp; Well Use</b>					
--					
<b>Method Construction ID:</b>	961534268				
<b>Method Construction Code:</b>	0				
<b>Method Construction:</b>	Not Known				
<b>Other Method Construction:</b>					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
--		--			
<b>Pipe Information</b>					
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Pipe ID:		11101035			
Casing Number:		1			
Comment:					
Alt Name:					
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<b>WWIS</b>	<b>20</b>	<b>1 of 1</b>	<b>NW/205.0</b>	<b>91.6</b>	<b>lot 15 con 4 ON</b>
<b>Well ID:</b>	1514917			<b>Lot:</b>	015
<b>Construction Date::</b>				<b>Concession:</b>	04
<b>Primary Water Use::</b>	Domestic			<b>Concession Name:</b>	RF
<b>Sec. Water Use::</b>				<b>Easting NAD83::</b>	
<b>Final Well Status::</b>	Water Supply			<b>Northing NAD83::</b>	
<b>Specific Capacity::</b>				<b>Zone::</b>	
<b>Municipality:</b>	NEPEAN TOWNSHIP			<b>UTM Reliability::</b>	
<b>County:</b>	OTTAWA-CARLETON				
<b>Bore Hole Information</b>					
--		--			
<b>Bore Hole ID:</b>	10036883				
<b>DP2BR:</b>	77				
<b>Code OB:</b>	r				
<b>Code OB Description:</b>	Bedrock				
<b>Open Hole:</b>					
<b>Date Completed:</b>	29-AUG-75				
<b>Remarks:</b>					
<b>Zone:</b>	18				
<b>East 83:</b>	439366.8				
<b>North 83:</b>	5012050				
<b>UTMRC:</b>	4				
<b>UTMRC Description:</b>	margin of error : 30 m - 100 m				
<b>Location Method:</b>	p4				
<b>Org CS:</b>					
<b>Elevation:</b>	92.98				
<b>Elevrc:</b>					
<b>Elevrc Description:</b>					
<b>Location Source Date:</b>					
<b>Source Revision Comment:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Supplier Comment:</b>					
<b>Spatial Status:</b>					
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<b>Overburden and Bedrock Materials Interval</b>					
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<b>Formation ID:</b>	931027678				
<b>Layer:</b>	1				
<b>General Color:</b>	BROWN				
<b>Most Common Material:</b>	SAND				
<b>Other Materials:</b>	GRAVEL				
<b>Other Materials:</b>	BOULDERS				
<b>Formation Top Depth:</b>	0				
<b>Formation End Depth:</b>	15				
<b>Formation End Depth UOM:</b>	ft				
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<b>Formation ID:</b>	931027679				
<b>Layer:</b>	2				
<b>General Color:</b>	GREY				
<b>Most Common Material:</b>	HARDPAN				
<b>Other Materials:</b>	BOULDERS				
<b>Other Materials:</b>	PACKED				

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
	<b>Formation Top Depth:</b>	15			
	<b>Formation End Depth:</b>	77			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Formation ID:</b>	931027680			
	<b>Layer:</b>	3			
	<b>General Color:</b>	GREY			
	<b>Most Common Material:</b>	LIMESTONE			
	<b>Other Materials:</b>				
	<b>Other Materials:</b>				
	<b>Formation Top Depth:</b>	77			
	<b>Formation End Depth:</b>	123			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Method of Construction &amp; Well Use</b>				
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	<b>Method Construction ID:</b>	961514917			
	<b>Method Construction Code:</b>	5			
	<b>Method Construction:</b>	Air Percussion			
	<b>Other Method Construction:</b>				
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	<b>Pipe Information</b>				
	--	--			
	<b>Pipe ID:</b>	10585453			
	<b>Casing Number:</b>	1			
	<b>Comment:</b>				
	<b>Alt Name:</b>				
	--	--			
	<b>Construction Record - Casing</b>				
	--	--			
	<b>Casing ID:</b>	930065202			
	<b>Layer:</b>	1			
	<b>Open Hole or Material:</b>	STEEL			
	<b>Depth From:</b>				
	<b>Depth To:</b>	79			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
	--	--			
	<b>Casing ID:</b>	930065203			
	<b>Layer:</b>	2			
	<b>Open Hole or Material:</b>	OPEN HOLE			
	<b>Depth From:</b>				
	<b>Depth To:</b>	123			
	<b>Casing Diameter:</b>	6			
	<b>Casing Diameter UOM:</b>	inch			
	<b>Casing Depth UOM:</b>	ft			
	--	--			
	<b>Well Yield Testing</b>				
	--	--			
	<b>Pump Test ID:</b>	991514917			
	<b>Pump Set At:</b>				
	<b>Static Level:</b>	20			
	<b>Final Level After Pumping:</b>	65			
	<b>Recommended Pump Depth:</b>	75			
	<b>Pumping Rate:</b>	10			
	<b>Flowing Rate:</b>				
	<b>Recommended Pump Rate:</b>	5			
	<b>Levels UOM:</b>	ft			
	<b>Rate UOM:</b>	GPM			
	<b>Water State After Test Code:</b>	1			
	<b>Water State After Test:</b>	CLEAR			
	<b>Pumping Test Method:</b>	1			
	<b>Pumping Duration HR:</b>	1			
	<b>Pumping Duration MIN:</b>	0			
	<b>Flowing:</b>	N			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
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<b>Draw Down &amp; Recovery</b>					
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<b>Pump Test Detail ID:</b>		934100723			
<b>Pump Test ID:</b>		991514917			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		65			
<b>Test Level UOM:</b>		ft			
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<b>Pump Test Detail ID:</b>		934384156			
<b>Pump Test ID:</b>		991514917			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		65			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934645141			
<b>Pump Test ID:</b>		991514917			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		65			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934893848			
<b>Pump Test ID:</b>		991514917			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		65			
<b>Test Level UOM:</b>		ft			
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--		--			
<b>Water Details</b>					
--		--			
<b>Water ID:</b>		933470893			
<b>Layer:</b>		1			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		120			
<b>Water Found Depth UOM:</b>		ft			
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<b>WWIS</b>	<b>21</b>	<b>1 of 1</b>	<b>W/223.7</b>	<b>93.8</b>	<b>lot 16 con 4 ON</b>
<b>Well ID:</b>	1518260			<b>Lot:</b>	016
<b>Construction Date::</b>				<b>Concession:</b>	04
<b>Primary Water Use::</b>	Domestic			<b>Concession Name:</b>	RF
<b>Sec. Water Use::</b>				<b>Easting NAD83::</b>	
<b>Final Well Status::</b>	Water Supply			<b>Northing NAD83::</b>	
<b>Specific Capacity::</b>				<b>Zone::</b>	
<b>Municipality:</b>	NEPEAN TOWNSHIP			<b>UTM Reliability::</b>	
<b>County:</b>	OTTAWA-CARLETON				
<b>Bore Hole Information</b>					
--		--			
<b>Bore Hole ID:</b>	10040130				
<b>DP2BR:</b>	43				
<b>Code OB:</b>	r				
<b>Code OB Description:</b>	Bedrock				
<b>Open Hole:</b>					
<b>Date Completed:</b>	26-APR-83				
<b>Remarks:</b>					
<b>Zone:</b>	18				
<b>East 83:</b>	438529.7				

<b>DB</b>	<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>
	<b>North 83:</b>	5011721			
	<b>UTMRC:</b>	4			
	<b>UTMRC Description:</b>	margin of error : 30 m - 100 m			
	<b>Location Method:</b>	p4			
	<b>Org CS:</b>				
	<b>Elevation:</b>	94.41			
	<b>Elevrc:</b>				
	<b>Elevrc Description:</b>				
	<b>Location Source Date:</b>				
	<b>Source Revision Comment:</b>				
	<b>Improvement Location Source:</b>				
	<b>Improvement Location Method:</b>				
	<b>Supplier Comment:</b>				
	<b>Spatial Status:</b>				
	--	--			
	<b>Overburden and Bedrock Materials Interval</b>				
	--	--			
	<b>Formation ID:</b>	931037869			
	<b>Layer:</b>	1			
	<b>General Color:</b>	BROWN			
	<b>Most Common Material:</b>	HARDPAN			
	<b>Other Materials:</b>	BOULDERS			
	<b>Other Materials:</b>				
	<b>Formation Top Depth:</b>	0			
	<b>Formation End Depth:</b>	15			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Formation ID:</b>	931037870			
	<b>Layer:</b>	2			
	<b>General Color:</b>	BROWN			
	<b>Most Common Material:</b>	CLAY			
	<b>Other Materials:</b>	GRAVEL			
	<b>Other Materials:</b>	BOULDERS			
	<b>Formation Top Depth:</b>	15			
	<b>Formation End Depth:</b>	43			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Formation ID:</b>	931037871			
	<b>Layer:</b>	3			
	<b>General Color:</b>	GREY			
	<b>Most Common Material:</b>	LIMESTONE			
	<b>Other Materials:</b>	MEDIUM-GRAINED			
	<b>Other Materials:</b>	SOFT			
	<b>Formation Top Depth:</b>	43			
	<b>Formation End Depth:</b>	125			
	<b>Formation End Depth UOM:</b>	ft			
	--	--			
	<b>Method of Construction &amp; Well Use</b>				
	--	--			
	<b>Method Construction ID:</b>	961518260			
	<b>Method Construction Code:</b>	5			
	<b>Method Construction:</b>	Air Percussion			
	<b>Other Method Construction:</b>				
	--	--			
	<b>Pipe Information</b>				
	--	--			
	<b>Pipe ID:</b>	10588700			
	<b>Casing Number:</b>	1			
	<b>Comment:</b>				
	<b>Alt Name:</b>				
	--	--			
	<b>Construction Record - Casing</b>				
	--	--			
	<b>Casing ID:</b>	930070063			
	<b>Layer:</b>	1			

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>		46			
<b>Casing Diameter:</b>		6			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
--		--			
<b>Casing ID:</b>		930070064			
<b>Layer:</b>		2			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>		125			
<b>Casing Diameter:</b>		6			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
--		--			
<b>Well Yield Testing</b>					
--		--			
<b>Pump Test ID:</b>		991518260			
<b>Pump Set At:</b>					
<b>Static Level:</b>		15			
<b>Final Level After Pumping:</b>		50			
<b>Recommended Pump Depth:</b>		60			
<b>Pumping Rate:</b>		10			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		5			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>		1			
<b>Water State After Test:</b>		CLEAR			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
--		--			
<b>Draw Down &amp; Recovery</b>					
--		--			
<b>Pump Test Detail ID:</b>		934103577			
<b>Pump Test ID:</b>		991518260			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		50			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934378329			
<b>Pump Test ID:</b>		991518260			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		50			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934639388			
<b>Pump Test ID:</b>		991518260			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		50			
<b>Test Level UOM:</b>		ft			
--		--			
<b>Pump Test Detail ID:</b>		934897849			
<b>Pump Test ID:</b>		991518260			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		50			
<b>Test Level UOM:</b>		ft			
--		--			
--		--			
<b>Water Details</b>					

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
--		--			
<b>Water ID:</b>		933474943			
<b>Layer:</b>		1			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		120			
<b>Water Found Depth UOM:</b>		ft			
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# Unplottable Summary

Total: **26** Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
AAGR		Lot 14 Con 4	Nepean ON	
CA	Melron Property Enterprises Inc.	Part of Lot 15 Junction Gore	Ottawa ON	
CA	Kemp Park Sanitary Sewer	Part of Lot 14, Concession 4 RF	Ottawa ON	
CA	Kinross Court	Part of Lot 13, Concession	Ottawa ON	
CA	IPCF PROPERTIES INC.	PT.LOT 15/CON.3, BARRHAVEN	NEPEAN CITY ON	
CA	South Ottawa Collector	Lot 15, 16, 17, 18, 19, 20, 21, 22, Conc. 1, 2, 3	Ottawa ON	
CA	Bank Street & Conroy Road	Lot 15 to 18, Concession 4&5	Ottawa ON	
CA	City of Ottawa	Part of Lot 15, Gore Junction	Ottawa ON	
CA	NEPEAN CITY	CEDARVIEW RD/BARRHAVEN MID.SCH	NEPEAN CITY ON	
CA	MINTO CONSTRUCTION LTD. FOSTER DRAIN	W. OF CEDARVIEW RD.	NEPEAN CITY ON	
CA	NEPEAN CITY-LOTS 15 & 16, CONC. 2 & 3	STRANDHERD DR/STORMWATER MANAG	NEPEAN CITY ON	
CA	DCR/PHOENIX DEVELOPMENMT CORP.	STRANDHERD DRIVE	NEPEAN CITY ON	
CA	Gerry Clarke	Strandherd Dr Lots 14/15, Concession 3	Ottawa ON	
CA	City of Ottawa	Strandherd Drive	Ottawa ON	
CA	City of Ottawa	Strandherd Drive	Ottawa ON	
CA	City of Ottawa	Lot 13	Ottawa ON	
CA	St. Vincent Hospital	Lot 1, Pt. Lot 14, RP# 11285 & Lots 1-19, RP# 3459	Ottawa ON	

CFOT	Bell Canada	Strandherd Dr, Nepean (Jockvale) ON	NEPEAN ON
EBR	Thomas Cavanagh Construction Limited	Lot 14 & the East ½ of Lot 15, Concession 11	Ottawa ON
EBR	Laurent Leblanc Ltd.,	Watson Road, Lot 13, Concession 4, formerly the Township of Cumberland (geographic township). CITY OF OTTAWA	ON
EBR	J.K. Pederson Landscaping Ltd. (614791 Ontario Ltd.)	Part Lot 16, Concession 3 CITY OF OTTAWA OSGOODE	ON
FST	HYLANDS GOLF CLUB	LOT 13 14 & 15 CON 3	OTTAWA ON
FST	HYLANDS GOLF CLUB	LOT 13 14 & 15 CON 3	OTTAWA ON
NEES	CNR		OTTAWA ON
PTTW	Shell Canada Products Ltd.Don Mills Division	Lot 16	City of Nepean ON
SPL	Geo. W. Drummond Excavating Inc<UNOFFICIAL>	Strandherd Dr and Temporary	Ottawa ON

# Unplottable Report

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**Database:** **AAGR**                      **Site:** **Lot 14 Con 4 Nepean ON**

**Type:** Pit  
**Region/County:** Ottawa-Carleton  
**Township:** Nepean  
**Concession::** 4  
**Lot::** 14  
**Size (ha)::** 2.4  
**Landuse::**  
**Comments::**

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**Database:** **CA**                      **Site:** **Melron Property Enterprises Inc.  
Part of Lot 15 Junction Gore Ottawa ON**

**Certificate #:** 6154-5JWM4C  
**Application Year:** 2003  
**Issue Date:** 2/24/2003  
**Approval Type:** Municipal and Private Sewage Works  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** **CA**                      **Site:** **Kemp Park Sanitary Sewer  
Part of Lot 14, Concession 4 RF Ottawa ON**

**Certificate #:** 6323-5BXHHL  
**Application Year:** 02  
**Issue Date:** 7/15/02  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** City of Ottawa  
**Client Address::** 110 Laurier Avenue West  
**Client City::** Ottawa  
**Client Postal Code::** K1P 1J1  
**Project Description::** Approval is sought for the construction of sanitary sewers on Kemp Dr., Robert St., Doris Ave., Melva St., Elma St., Orville St., Bank St.  
**Contaminants::**  
**Emission Control::**

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**Database:** **CA**                      **Site:** **Kinross Court  
Part of Lot 13, Concession Ottawa ON**

**Certificate #:** 0660-53CRDY

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**Application Year:** 01  
**Issue Date:** 10/11/01  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** Tenth Line Development Inc.  
**Client Address::** 210 Gladstone Avenue, Suite 2001  
**Client City::** Ottawa  
**Client Postal Code::** K2P 0Y6  
**Project Description::** Storm sewer construction.  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** **IPCF PROPERTIES INC.**  
**PT.LOT 15/CON.3, BARRHAVEN NEPEAN CITY ON**

**Certificate #:** 8-4065-94-  
**Application Year:** 94  
**Issue Date:** 8/30/1994  
**Approval Type:** Industrial air  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::** SPACE & WATER HEATERS, ON-SITE BAKERY  
**Contaminants::** Nitrogen Oxides, Odour/Fumes  
**Emission Control::** No Controls

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**Database:** CA **Site:** **South Ottawa Collector**  
**Lot 15, 16, 17, 18, 19, 20, 21, 22, Conc. 1, 2, 3 Ottawa ON**

**Certificate #:** 5781-5D7RDZ  
**Application Year:** 02  
**Issue Date:** 9/13/02  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** Amended CofA  
**Client Name::** City of Ottawa  
**Client Address::** 110 Laurier Avenue West  
**Client City::** City of Ottawa  
**Client Postal Code::** K1P 1J1  
**Project Description::** Enhanced flow control and flooding protection for the Green Creek Collector and provide further reduction in the potential to divert sediments to the South Ottawa Tunnel (SOT) by reducing the accumulation of grit within the upstream Green Creek Collector and Walkley Chamber.  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** **Bank Street & Conroy Road**  
**Lot 15 to 18, Concession 4&5 Ottawa ON**

**Certificate #:** 1151-52XLM4  
**Application Year:** 01  
**Issue Date:** 9/27/01  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** The Corporation of the City of Ottawa  
**Client Address::** 110 Laurier Avenue West  
**Client City::** Ottawa  
**Client Postal Code::** K1P 1J1

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**Project Description::** Construction of Sanitary Gravity Sewers  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** City of Ottawa  
Part of Lot 15, Gore Junction Ottawa ON

**Certificate #:** 5759-6BUQTB  
**Application Year:** 2005  
**Issue Date:** 5/16/2005  
**Approval Type:** Air  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** NEPEAN CITY  
CEDARVIEW RD/BARRHAVEN MID.SCH NEPEAN CITY ON

**Certificate #:** 3-0147-94-  
**Application Year:** 94  
**Issue Date:** 2/24/1994  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** MINTO CONSTRUCTION LTD. FOSTER DRAIN  
W. OF CEDARVIEW RD. NEPEAN CITY ON

**Certificate #:** 3-0519-87-  
**Application Year:** 87  
**Issue Date:** 7/18/1987  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** NEPEAN CITY-LOTS 15 & 16, CONC. 2 & 3  
STRANDHERD DR/STORMWATER MANAG NEPEAN CITY ON

**Certificate #:** 3-1089-90-

**Application Year:** 90  
**Issue Date:** 10/1/1990  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** DCR/PHOENIX DEVELOPMENMT CORP.  
STRANDHERD DRIVE NEPEAN CITY ON

**Certificate #:** 3-1122-90-  
**Application Year:** 90  
**Issue Date:** 6/26/1990  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** Gerry Clarke  
Strandherd Dr Lots 14/15, Concession 3 Ottawa ON

**Certificate #:** 1248-7GRPKA  
**Application Year:** 2008  
**Issue Date:** 9/11/2008  
**Approval Type:** Municipal and Private Sewage Works  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Database:** CA **Site:** City of Ottawa  
Strandherd Drive Ottawa ON

**Certificate #:** 5791-77LJ85  
**Application Year:** 2007  
**Issue Date:** 10/2/2007  
**Approval Type:** Municipal and Private Sewage Works  
**Status:** Revoked and/or Replaced  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**

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**Proponent Address:**  
**Notice Date:**

Shell Canada Products Ltd.Don Mills Division,75 Wynford Drive,Don Mills, Ontario, M3C 2Z4

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**Database:** [SPL](#)

**Site:** **Geo. W. Drummond Excavating Inc<UNOFFICIAL>**  
**Strandherd Dr and Temporary Ottawa ON**

**Ref NO:** 6067-6EASVT  
**Contaminant Code:**  
**Contaminant Name:** DIESEL FUEL  
**Contaminant Quantity:** unknown L  
**Incident Cause::** Overturn - Truck Or Trailer  
**Incident Dt:** 7/14/2005  
**Incident Reason::**  
**Incident Summary::** Ottawa: MVA 300 L diesel to road, cleaning  
**MOE Reported Dt:** 7/14/2005  
**Environmental Impact::** Not Anticipated  
**Nature of Impact::** Soil Contamination  
**Receiving Medium::** Land  
**SAC Action Class:** Spills to Highways (usually highway accidents)  
**Sector Source Type:** Other Motor Vehicle  
**Site Municipality:** Ottawa

## Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. **Note:** Databases denoted with " \* " indicates that the database will no longer be updated. See the individual database description for more information.

### **Abandoned Aggregate Inventory:**

Provincial [AAGR](#)

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.\*

**Government Publication Date: Sept 2002\***

### **Aggregate Inventory:**

Provincial [AGR](#)

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

**Government Publication Date: Up to Sep 2016**

### **Abandoned Mine Information System:**

Provincial [AMIS](#)

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

**Government Publication Date: 1800-Oct 2014**

### **Anderson's Waste Disposal Sites:**

Private [ANDR](#)

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

**Government Publication Date: 1860s-Present**

### **Automobile Wrecking & Supplies:**

Private [AUWR](#)

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

**Government Publication Date: Oct 31, 2016**

### **Borehole:**

Provincial [BORE](#)

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

**Government Publication Date: 1875-Jul 2014**

### **Certificates of Approval:**

Provincial [CA](#)

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

**Government Publication Date: 1985-Oct 30, 2011\***

**Commercial Fuel Oil Tanks:**

Provincial [CFOT](#)

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

**Government Publication Date: Oct 31, 2016**

**Chemical Register:**

Private [CHEM](#)

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

**Government Publication Date: Oct 31, 2016**

**Compressed Natural Gas Stations:**

Private [CNG](#)

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

**Government Publication Date: Dec 31, 2012**

**Inventory of Coal Gasification Plants and Coal Tar Sites:**

Provincial [COAL](#)

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.\*

**Government Publication Date: Apr 1987 and Nov 1988\***

**Compliance and Convictions:**

Provincial [CONV](#)

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

**Government Publication Date: 1989-Nov 2016**

**Certificates of Property Use:**

Provincial [CPU](#)

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

**Government Publication Date: 1994-Dec 2016**

**Drill Hole Database:**

Provincial [DRL](#)

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

**Government Publication Date: 1886-Aug 2015**

**Environmental Activity and Sector Registry:**

Provincial [EASR](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

**Government Publication Date: Oct 2011-Nov 2016**

**Environmental Registry:**

Provincial [EBR](#)

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

**Government Publication Date: 1994-Dec 2016**

**Environmental Compliance Approval:**

Provincial **ECA**

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

**Government Publication Date: Oct 2011-Nov 2016**

**Environmental Effects Monitoring:**

Federal **EEM**

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

**Government Publication Date: 1992-2007\***

**ERIS Historical Searches:**

Private **EHS**

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

**Government Publication Date: 1999-Aug 2016**

**Environmental Issues Inventory System:**

Federal **EIIS**

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

**Government Publication Date: 1992-2001\***

**Emergency Management Historical Event:**

Provincial **EMHE**

The Emergency Management Historical Event data class will store the locations of historical occurrences of emergency events. Events captured will include those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance.

**Government Publication Date: May 31, 2014**

**List of TSSA Expired Facilities:**

Provincial **EXP**

This is a list of all expired facilities that fall under the TSSA (TSSA Act & Safety Regulations), including the six regulations that exist under the Fuels Safety Division. It will include facilities such as private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. These tanks have been removed and automatically fall under the expired facilities inventory held by TSSA.

**Government Publication Date: Oct 31, 2016**

**Federal Convictions:**

Federal **FCON**

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

**Government Publication Date: 1988-Jun 2007\***

**Contaminated Sites on Federal Land:**

Federal **FCS**

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

**Government Publication Date: June 2000-Oct 2015**

**Fisheries & Oceans Fuel Tanks:**

Federal **FOFT**

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

**Government Publication Date: 1964-Sept 2003**

**Fuel Storage Tank:**

Provincial **FST**

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

**Government Publication Date: Oct 31, 2016**

**Fuel Storage Tank - Historic:**

Provincial **FSTH**

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

**Government Publication Date: Pre-Jan 2010\***

**Ontario Regulation 347 Waste Generators Summary:**

Provincial **GEN**

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

**Government Publication Date: 1986-Sep 2016**

**Greenhouse Gas Emissions from Large Facilities:**

Federal **GHG**

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

**Government Publication Date: 2013 - Dec 2014**

**TSSA Historic Incidents:**

Provincial **HINC**

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

**Government Publication Date: 2006-June 2009\***

**Indian & Northern Affairs Fuel Tanks:**

Federal **IAFT**

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

**Government Publication Date: 1950-Aug 2003\***

**TSSA Incidents:**

Provincial **INC**

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

**Government Publication Date: Oct 31, 2016**

**Landfill Inventory Management Ontario:**

Provincial **LIMO**

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

**Government Publication Date: Dec 31, 2013**

**Canadian Mine Locations:**

Private

MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

**Government Publication Date: 1998-2009\***

**Mineral Occurrences:**

Provincial

MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

**Government Publication Date: 1846-Feb 2016**

**National Analysis of Trends in Emergencies System (NATES):**

Federal

NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

**Government Publication Date: 1974-1994\***

**Non-Compliance Reports:**

Provincial

NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

**Government Publication Date: Dec 31, 2014**

**National Defense & Canadian Forces Fuel Tanks:**

Federal

NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

**Government Publication Date: Up to May 2001\***

**National Defense & Canadian Forces Spills:**

Federal

NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

**Government Publication Date: Mar 1999-Aug 2010**

**National Defence & Canadian Forces Waste Disposal Sites:**

Federal

NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

**Government Publication Date: 2001-Apr 2007\***

**National Energy Board Wells:**

Federal

NEBW

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

**Government Publication Date: 1920-Feb 2003\***

**National Environmental Emergencies System (NEES):**

Federal

NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

**Government Publication Date: 1974-2003\***

**National PCB Inventory:**

Federal

NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

**Government Publication Date: 1988-2008\***

**National Pollutant Release Inventory:**

Federal

NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

**Government Publication Date: 1993-2014**

**Oil and Gas Wells:**

Private

OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at [www.nickles.com](http://www.nickles.com).

**Government Publication Date: 1988-Jun 2016**

**Ontario Oil and Gas Wells:**

Provincial

OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

**Government Publication Date: 1800-Oct 2016**

**Inventory of PCB Storage Sites:**

Provincial

OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

**Government Publication Date: 1987-Oct 2004; 2012-Dec 2013**

**Orders:**

Provincial

ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

**Government Publication Date: 1994-Dec 2016**

**Canadian Pulp and Paper:**

Private

PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

**Government Publication Date: 1999, 2002, 2004, 2005, 2009**

**Parks Canada Fuel Storage Tanks:**

Federal

PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

**Government Publication Date: 1920-Jan 2005\***

**Pesticide Register:**

Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

**Government Publication Date: 1988-Oct 2016**

**TSSA Pipeline Incidents:**

Provincial PINC

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

**Government Publication Date: Oct 31, 2016**

**Private and Retail Fuel Storage Tanks:**

Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

**Government Publication Date: 1989-1996\***

**Permit to Take Water:**

Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

**Government Publication Date: 1994-Dec 2016**

**Ontario Regulation 347 Waste Receivers Summary:**

Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

**Government Publication Date: 1986-2013**

**Record of Site Condition:**

Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.

RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

**Government Publication Date: 1997-Sept 2001, Oct 2004-Dec 2016**

**Retail Fuel Storage Tanks:**

Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

**Government Publication Date: Oct 31, 2016**

**Scott's Manufacturing Directory:**

Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

**Government Publication Date: 1992-Mar 2011\***

**Ontario Spills:**

Provincial SPL

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

**Government Publication Date: 1988-Jan 2016**

**Wastewater Discharger Registration Database:**

Provincial **SRDS**

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

**Government Publication Date: 1990-2014**

**Anderson's Storage Tanks:**

Private **TANK**

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

**Government Publication Date: 1915-1953\***

**Transport Canada Fuel Storage Tanks:**

Federal **TCFT**

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

**Government Publication Date: 1970-Jan 2015**

**TSSA Variances for Abandonment of Underground Storage Tanks:**

Provincial **VAR**

The TSSA, under the Liquid Fuels Handling Code and the Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, you may apply to seek a variance from this code requirement. This is a list of all variances granted for abandoned tanks.

**Government Publication Date: Oct 31, 2016**

**Waste Disposal Sites - MOE CA Inventory:**

Provincial **WDS**

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

**Government Publication Date: 1970-Nov 2016**

**Waste Disposal Sites - MOE 1991 Historical Approval Inventory:**

Provincial **WDSH**

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

**Government Publication Date: Up to Oct 1990\***

**Water Well Information System:**

Provincial **WWIS**

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

**Government Publication Date: Jun 30, 2016**

# Definitions

**Database Descriptions:** This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

**Detail Report:** This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

**Distance:** The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

**Direction:** The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

**Elevation:** The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

**Executive Summary:** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

**Map Key:** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

**Unplottables:** These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.



**PHASE ONE ESA – 4305 MCKENNA CASEY DRIVE  
3285, 3288 AND 3300 BORRISOKANE ROAD, OTTAWA ON**

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# **APPENDIX C**

## **Site Photographs**



**APPENDIX C**  
**Site Photographs**



*Photo 1: Looking northwest at the cell towers and communications building located northwest of the Site.*



*Photo 2: Looking east the McKenna Casey Drive and a railway located north of the Site.*



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## APPENDIX C

### Site Photographs

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*Photo 3: Photo of snow covered agricultural fields located on the Site at 4305 McKenna Casey Drive.*



*Photo 4: Snow covered agricultural fields located west of the Site looking west.*



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## APPENDIX C

### Site Photographs

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*Photo 5: Looking east at the fill material was located between the 4305 McKenna Casey Drive and McKenna Case Drive.*



*Photo 6: Looking west at snow covered agricultural fields located on the Site at 3300 Borrisokane Road.*



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## APPENDIX C

### Site Photographs

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*Photo 7: Photo of snow covered agricultural fields and a few trees located on the eastern portion of the Site at 3285 Borrisokane Road, looking east.*



*Photo 8: Looking northwest at the farm property located on the Site at 3288 Borrisokane Road.*



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## APPENDIX C

### Site Photographs

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*Photo 9: Photo of the northern portion of 3285 Borrisokane Road and the adjacent farm property north of the Site.*



*Photo 10: Looking east and the fields and the Jock River located south of the eastern portion of the Site.*



## APPENDIX C

### Site Photographs



*Photo 11: View of the farm property located on the Site at 3288 Borrisokane Road, looking west. The west side of the farm house is visible.*



*Photo 12: Photo of the west side of the on-Site farm house.*



**APPENDIX C**  
**Site Photographs**



*Photo 13: Looking north at the storage shed located on the farm property on the Site.*



*Photo 14: Photo of the water well located on the on-Site farm property.*



## APPENDIX C

### Site Photographs



*Photo 15: Looking west at the barn, silo and a small storage shed located on the farm property, west of the farm house.*



*Photo 16: Fire pit and picnic table located on the south side of the barn.*



## APPENDIX C

### Site Photographs



*Photo 17: Looking west at the agricultural fields located on the Site at 3285 Borrissokane Road, west of the farm buildings.*



*Photo 18: View of the south side of the barn located on the on-Site farm property.*



**APPENDIX C**  
**Site Photographs**



*Photo 19: Metal and wood debris located on the west side of the barn.*



*Photo 20: Abandoned vehicles located on the north side of the barn.*



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**APPENDIX C**  
**Site Photographs**

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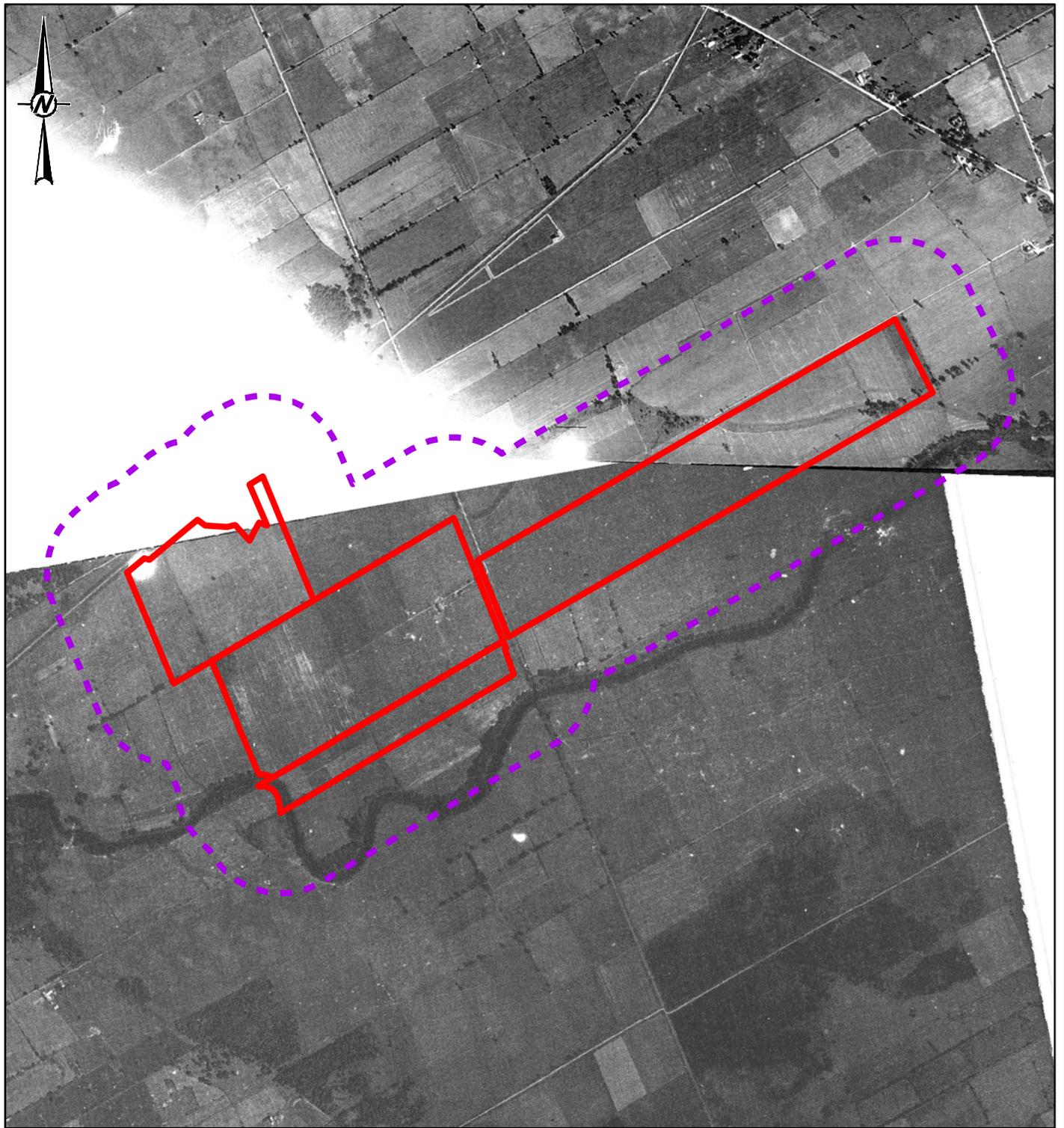


*Photo 21: Looking southeast at the north side of the farm house located on the Site.*



# **APPENDIX D**

## **Aerial Photographs**



**LEGEND**

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA



**NOTE(S)**  
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**  
 1. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT  
**BARRHAVEN CONSERVANCY INC.**

PROJECT  
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
 4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
 BORRISOKANE ROAD, OTTAWA, ONTARIO**

TITLE  
**1946 AIR PHOTO**

CONSULTANT



YYYY-MM-DD 2017-02-09

DESIGNED ----

PREPARED JEM

REVIEWED AT

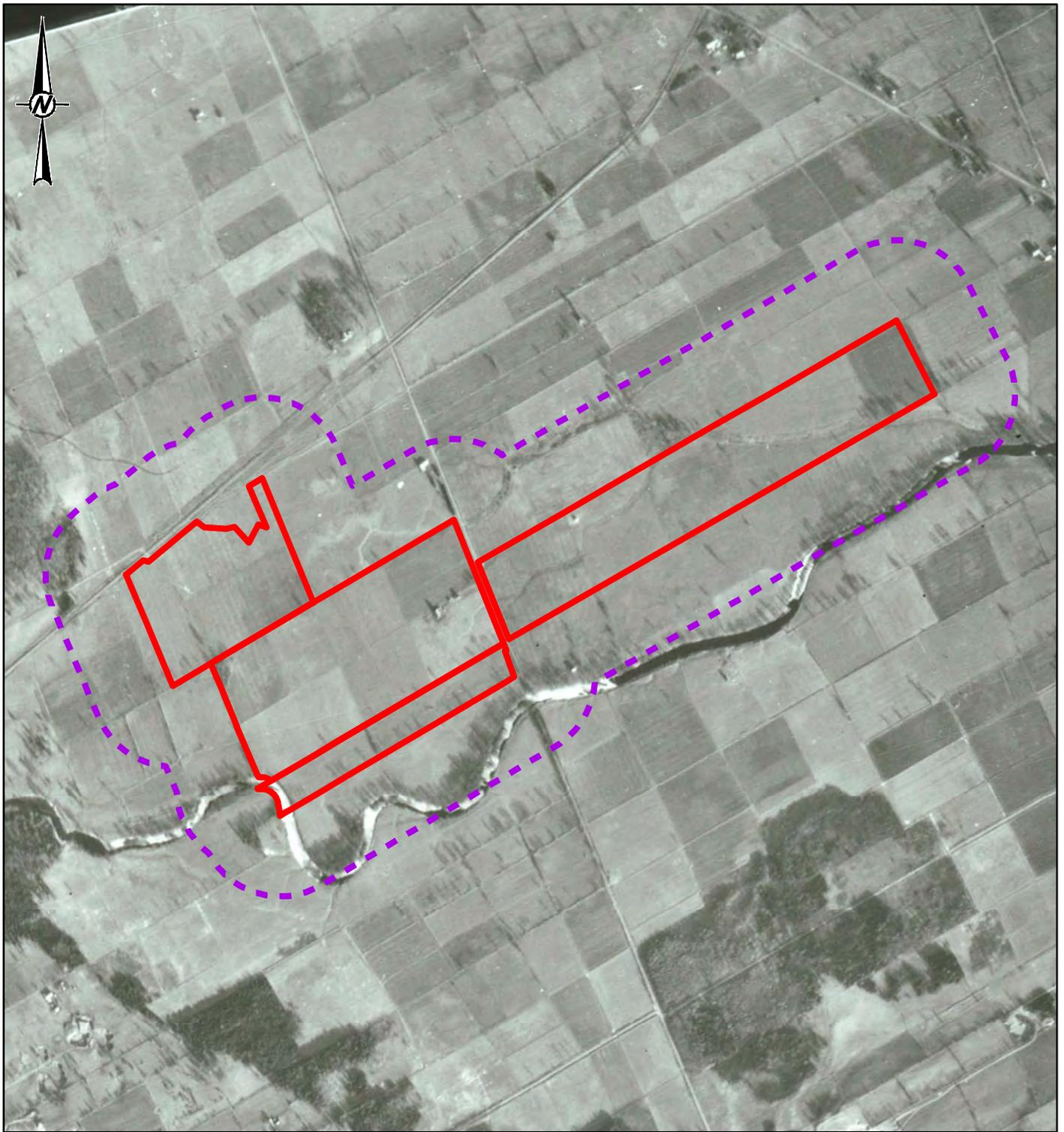
APPROVED KPH

PROJECT NO.  
 1771847

CONTROL  
 0002

REV.  
 0

APPENDIX  
**D1**



**LEGEND**

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA



**NOTE(S)**

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**

1. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT  
**BARRHAVEN CONSERVANCY INC.**

PROJECT  
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
BORRISOKANE ROAD, OTTAWA, ONTARIO**

TITLE  
**1956 AIR PHOTO**

CONSULTANT



YYYY-MM-DD 2017-02-09

DESIGNED ----

PREPARED JEM

REVIEWED AT

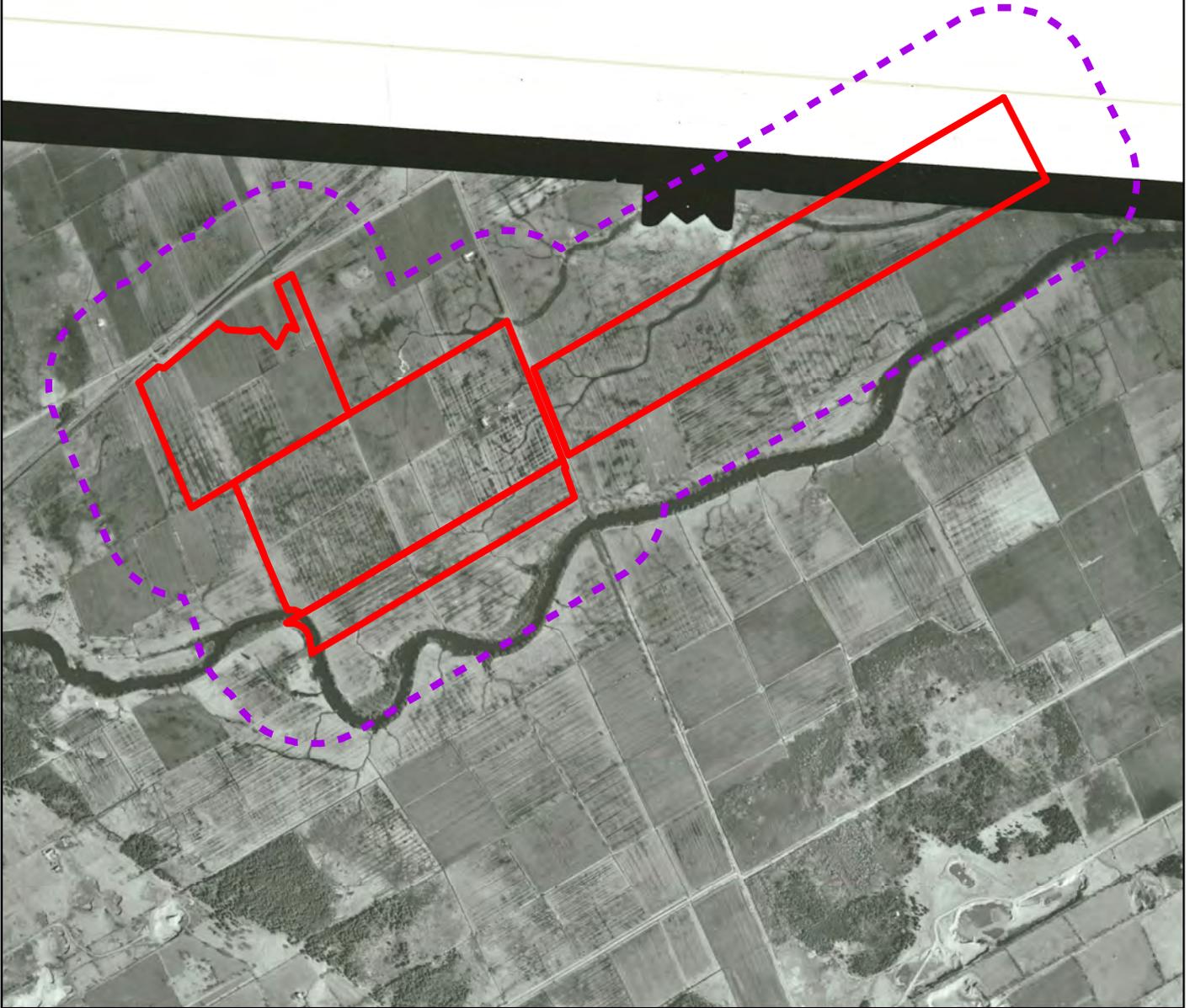
APPROVED KPH

PROJECT NO.  
1771847

CONTROL  
0002

REV.  
0

APPENDIX  
**D2**



**LEGEND**

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA



**NOTE(S)**

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**

1. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT  
**BARRHAVEN CONSERVANCY INC.**

PROJECT  
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
BORRISOKANE ROAD, OTTAWA, ONTARIO**

TITLE  
**1964 AIR PHOTO**

CONSULTANT



YYYY-MM-DD 2017-02-09

DESIGNED ----

PREPARED JEM

REVIEWED AT

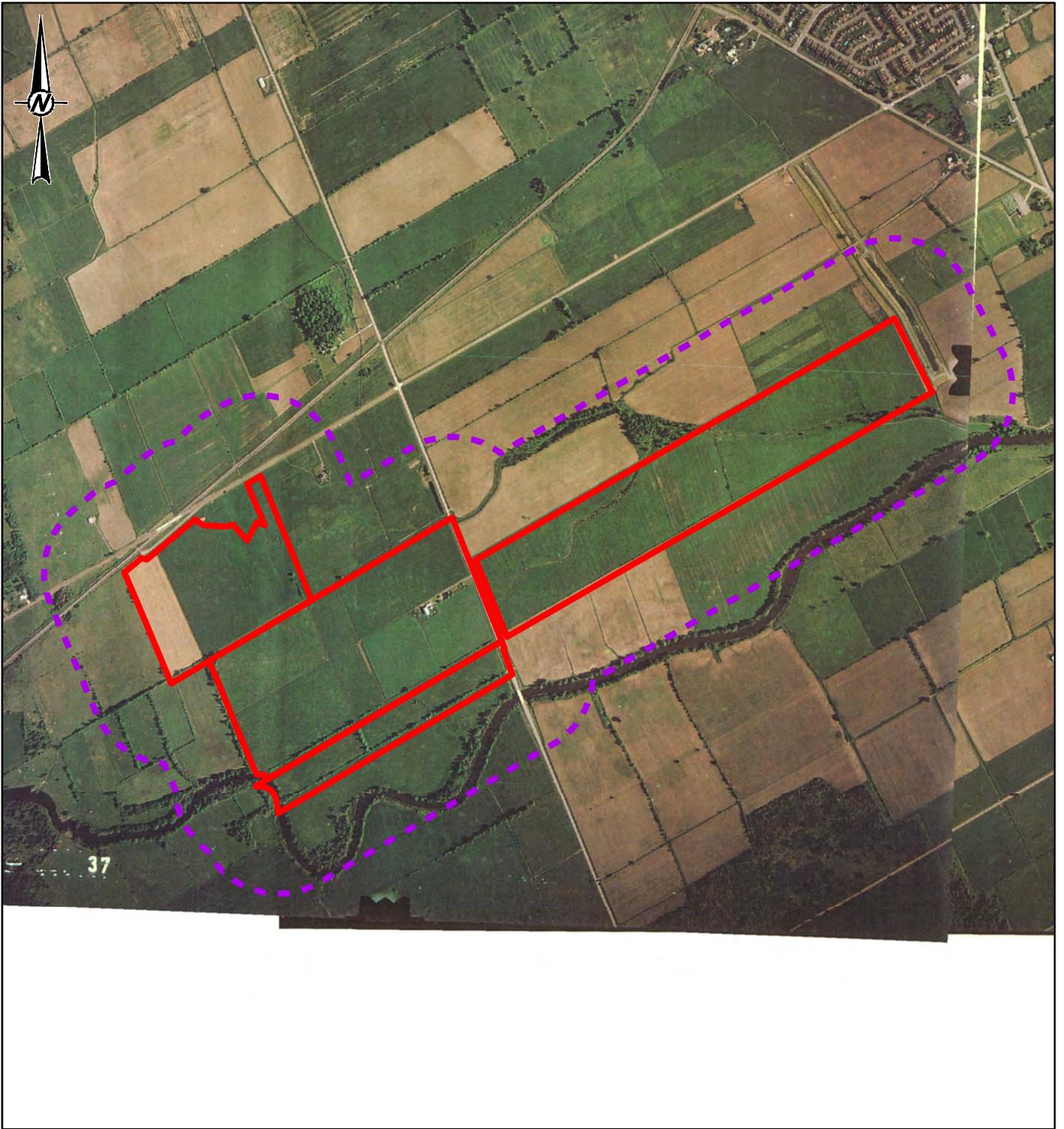
APPROVED KPH

PROJECT NO.  
1771847

CONTROL  
0002

REV.  
0

APPENDIX  
**D3**



**LEGEND**

- PHASE ONE SITE
- PHASE ONE STUDY AREA



**NOTE(S)**

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1771847-1000.

**REFERENCE(S)**

1. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT  
**BARRHAVEN CONSERVANCY INC.**

PROJECT  
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
 4305 MCKENNA CASEY DRIVE AND 3285, 3288, AND 3300  
 BORRISOKANE ROAD, OTTAWA, ONTARIO**

TITLE  
**1985 AIR PHOTO**

CONSULTANT



YYYY-MM-DD 2017-02-09

DESIGNED ----

PREPARED JEM

REVIEWED AT

APPROVED KPH

PROJECT NO.  
 1771847

CONTROL  
 0002

REV.  
 0

APPENDIX  
**D4**

As a global, employee-owned organisation with over 50 years of experience, Golder Associates is driven by our purpose to engineer earth's development while preserving earth's integrity. We deliver solutions that help our clients achieve their sustainable development goals by providing a wide range of independent consulting, design and construction services in our specialist areas of earth, environment and energy.

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