



**Phase One Environmental
Site Assessment
925 Ralph Hennessy Avenue,
Ottawa, Ontario**

Client:

Centre des écoles catholiques du Centre-Est
4000 Rue Labelle
Ottawa, Ontario K1J 1A1

Project Number:

OTT-00245869-A0

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Type of Document:

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Date Submitted:

September 18, 2018

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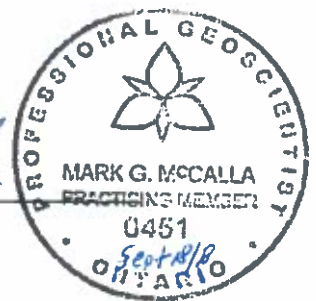
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Date Submitted:
September 18, 2018

Legal Notification

This report was prepared by EXP Services Inc. for the account of the **Centre des écoles catholiques du Centre-Est**.

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

Executive Summary

EXP Services Inc. (EXP) was retained by Centre des écoles catholiques du Centre-Est (CECCE) to complete a Phase One Environmental Site Assessment (ESA) of the proposed new riverside south catholic elementary school in Riverside South located at 925 Ralph Hennessy Avenue in Ottawa, Ontario. The purpose of this Phase One ESA was to determine if past or present site activities have resulted in actual or potential contamination at the site. EXP understands that the CECCE plans to re-develop the land as an elementary school. Consequently, this Phase One ESA will be used in support of the City of Ottawa Site Plan Approval permitting requirements and a Record of Site Condition (RSC) is not required.

A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended by Ontario Regulation 511/09 (O.Reg. 153/04), and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third party beneficiaries are intended. Limitation of liability, scope of report and third party reliance are outlined in Section 8 of this report.

Please note that general environmental management and housekeeping practices were reviewed as part of this assessment insofar as they could impact the environmental condition of the property, however, a detailed review of regulatory compliance issues was beyond the scope of our investigation. This Phase One ESA does not constitute an audit of environmental management practices, indicate geotechnical conditions or identify geologic hazards.

A written response from some regulatory agencies typically requires several months to receive. If upon receipt of the response from the regulatory agencies, significant environmental issues are identified, EXP will forward their response to the client as an addendum to this report.

The Phase One Property is located on the east side of Ralph Hennessey Avenue and south side of Mount Nebo Way in Ottawa. The Phase One Property has an area of approximately 2.0 hectares and is vacant land. The Phase One property is in a minor institutional zoned area. The Phase One Property is legally described as Part of Lot 22, Block 322, Concession 1 (Rideau Front), Geographic Township of Gloucester, City of Ottawa and the City of Ottawa PIN is part of 043302163.

The surrounding area of the Phase One Property was observed to be vacant undeveloped land with some of the surrounding area developed with residential houses. No environmentally sensitive activities or infrastructures that could present any environmental concerns to the Phase One Property were observed on the adjacent properties based on observations made from the boundaries of the Phase One Property.

Topographically, the Phase One Property is relatively flat. The local groundwater flow direction is unknown, although based on regional topography, the groundwater flow is anticipated to be to the northwest.

Based on the results of the Phase One ESA completed at the Phase One Property, EXP has identified the following areas of potential environmental concern:

Table EX- 1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
APEC 1	Central part	#28: Gasoline and Associated Products Storage in Fixed Tanks	On-site	Petroleum hydrocarbons (PHC), benzene, toluene, ethylbenzene, xylenes (BTEX)	Soil and groundwater
APEC 2	All of Site	#30: Importation of Fill Material of Unknown Quality	On-site	PHCs, BTEX and metals	Soil

Based on the findings of the Phase One ESA, a Phase Two ESA is required to assess the soil and groundwater conditions at the Phase One Property.

This executive summary is a brief synopsis of the report and should not be read in lieu of reading the report in its entirety.

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1. Introduction

EXP Services Inc. (EXP) was retained by Centre des écoles catholiques du Centre-Est (CECCE) to complete a Phase One Environmental Site Assessment (ESA) of the proposed new riverside south catholic elementary school located at 925 Ralph Hennessy Avenue in Ottawa, Ontario. A site location plan is presented on Figure 1 in Appendix B. At the time of the investigation, the Phase One Property was owned by the CECCE.

Owner Contact: Ms. Annick Prud'homme, Project Manager
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A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended by Ontario Regulation 511/09 (O.Reg. 153/04), and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third party beneficiaries are intended. The scope of report and third party reliance are outlined in Appendix A.

1.1 Objective

The purpose of this Phase One ESA was to determine if past or present site activities have resulted in actual or potential contamination at the Phase One Property. EXP understands that the CECCE plans to re-develop the land as an elementary school. Consequently, this Phase One ESA will be used in support of the City of Ottawa Site Plan Approval permitting requirements and a Record of Site Condition (RSC) is not required.

1.2 Phase I Property Information

The Phase One Property is located on the east side of Ralph Hennessey Avenue and south side of Mount Nebo Way at 925 Ralph Hennessy Avenue in Ottawa as shown on Figure 1 in Appendix B. The Phase One Property has an area of approximately 2.0 hectares and is vacant land. The Phase One Property is in a minor institutional zoned area. The Phase One Property is legally described as Part of Lot 22, Block 322, Concession 1 (Rideau Front), Geographic Township of Gloucester, City of Ottawa and the City of Ottawa PIN is part of 043302163.

The surrounding area of the Phase One Property was observed to be vacant undeveloped land with some of the surrounding area developed with residential houses. No environmentally sensitive activities or infrastructures that could present any environmental concerns to the Phase One Property were observed on the adjacent properties based on observations made from the boundaries of the Phase One Property.

Topographically, the Phase One Property is relatively flat. The local groundwater flow direction is unknown, although based on regional topography, the groundwater flow is anticipated to be to the northwest.

The approximate Universal Transverse Mercator (UTM) coordinates for the Phase One Property centroid is NAD83, Zone 18, 446752.1 m E, 5013287.5 m N. The UTM coordinates were based on an estimate derived using Google Earth™. The accuracy of the centroid is estimated to range from 5 to 50 m.

2. Scope of Investigation

The scope of work for the Phase One ESA consisted of the following activities:

- Reviewing the historical occupancy of the Phase One Property through the use of available archived and relevant municipal and business directories, fire insurance plans (FIPs), topographical maps, and aerial photographs;
- Contacting municipal and provincial agencies to determine the existence of records of environmental regulatory non-compliance, if any, and reviewing such records where available;
- Obtaining an EcoLog Environmental Risk Information Services Ltd. (ERIS) report for the Phase One Property and surrounding properties within a 250 metre radius of the Phase One Property;
- Reviewing available geological maps, well records and utility maps for the vicinity of the Phase One Property;
- Obtaining a search of land title and assessment rolls for the Phase One Property;
- Conducting at least one site reconnaissance of the Phase One Property and building facilities in order to identify the presence of actual and/or potential environmental contaminants or concerns of significance;
- Conducting interviews with designated site representative(s) as a resource for current and historical Phase One Property information, as well as to provide EXP staff with unrestricted access to all areas of the Phase One Property and Phase One Property buildings (as required by O.Reg 153/04);
- Reviewing the current use of the Phase One Property and any land use practices that may have impacted its environmental condition;
- Reviewing the current use of the surrounding properties and any land use practices that may have impacted the environmental condition of the Phase One Property; and,
- Preparing a report to document the findings.

In completing the scope of work, EXP did not conduct any intrusive investigations, including sampling, analyses, or monitoring.

EXP has confirmed neither the completeness nor the accuracy of any of the records that were obtained or of any of the statements made by others.

EXP personnel who conducted assessment work for this project included Daniel Clarke, P. Eng. and Mark McCalla, P. Geo. An outline of their qualifications is provided in Appendix A.

3. Records Review

3.1 Phase I ESA Study Area Determination

The Phase One ESA study area consisted of the neighbourhood and extending a distance of 250 metres from the Phase One Property. Surrounding properties consist of vacant to the north, east and south with residential properties to the northwest. A site plan is presented as Figure 2 in Appendix B.

3.2 First Developed Use Determination

Based on a review of historical aerial photographs, chain of title for the property, historical maps, and other records review, it appears that the Phase One Property was developed with a small building and four radio transmission towers for a radio station from 1968 to 2009. The Phase One Property has been vacant since that time.

3.3 Fire Insurance Plans

A search of The Catalogue of Canadian Fire Insurance Plans 1875 – 1975 (Catalogue) was conducted to determine if fire insurance plans for the Phase One Property existed. No fire insurance plans exist for the Phase One Property or surrounding area.

3.4 Chain of Title

A chain of title was requested from Read Abstracts Inc. for the Phase One Property. Based on the information gathered from the title search, the following was found:

The title search shows that the property was owned by individuals and estates from 1852 to 1971. Mutual Broadcasting Limited and Astral Media Inc. owned the Phase One Property from 1971 to 2010. Riverside South Developments has owned the Phase One Property since 2010. No notable environmental concerns were identified based on the title search.

Refer to Appendix C for the title search.

3.5 Previous Reports

No previous environmental reports were provided to EXP for review, however EXP found at a Phase I ESA that was prepared for the Phase One Property by Paterson Group in 2014 and updated in 2015 on the City of Ottawa website. The Phase I ESA identified that the Phase One Property was agricultural and undeveloped until 1968, when radio transmission towers were installed. The towers were removed in approximately 2009 and the Phase One Property has remained vacant since that time. No areas of potential environmental concern (APEC) were identified.

EXP completed a Geotechnical Investigation for the Phase One Property in June 2018, that consisted of the drilling of thirteen (13) boreholes (Borehole Nos. 1 to 13). Surficial fill consisting of a mixture of silty sand and silty clay with gravel, roots was encountered in Borehole Nos. 1 to 3, 5 and 6 extending to depths 0.4 m to 0.7 m. The surficial and buried topsoil in Borehole Nos. 1, 2 and 4 are underlain by a 500 mm to 1.3 m thick silty sand which extends to a 1.4 m depth. Sandy clay to silty clay was observed to a maximum depth of 4.4 m. The clay was underlain by glacial till to the limestone bedrock surface found between 7.7 m and 11.3 m. Groundwater was found between 0.3 m and 2.2 m below ground surface.

Based the review of previous reports, the quality of the fill on the Phase One Property is PCA-2 (PCA#30 – Importation of Fill Material of Unknown Quality).

3.6 Regulatory Environmental Source Information

The appropriate regulatory agencies at the provincial and municipal levels were contacted to obtain information regarding environmental permits, past or pending environmental control orders or complaints, outstanding environmental regulatory non-compliance issues and Sewer Use By-Law infractions. EXP did not identify the need to contact any federal agencies.

The following agencies were contacted:

- The Ontario Ministry of the Environment and Climate Change (MOECC) Freedom of Information, Protection of Privacy Office; and,
- The City of Ottawa.

Written responses from the regulatory agencies and copies of the requests are included in Appendix C.

3.6.1 Ontario Ministry of the Environment and Climate Change Records

Records pertaining to the Phase One Property were requested from the MOECC through the *Freedom of Information and Protection of Privacy Act* (FOI). A response has not yet been received. A copy of the request is provided in Appendix C.

- On August 29 1, 2018, the MOECC Environmental Bill of Rights (EBR) registry website was searched by ERIS for postings in the vicinity of the Phase One Property using 250 m radius. No areas of potential environmental concern were identified.
- On August 29 1, 2018, the MOECC Hazardous Waste Information Network (HWIN) database was searched by ERIS for registered waste generators in the vicinity of the Phase One Property. No postings were listed.
- On August 29 1, 2018, the MOECC Brownfields Registry website was searched by ERIS for postings of Records of Site Condition (RSC). No postings for the Phase One Property or for the surrounding properties were listed.

3.6.2 Municipal Records

EXP reviewed city directories dating from 1960-2011 from an ERIS search of Vernon's Ottawa in order to identify the occupancy history of the Phase One Property and neighbouring properties for potential environmental concerns. A copy of the directory search is included in Appendix D. The following table summarizes the directory search.

Table 3.1: City Directory Search

Address	Approximate Distance and Direction from Site	Year	Occupant	Concern (yes/no)
4661 Spratt Road	250 m southwest	1995 - 2011	Residential	No
		1960 - 1990	Not Listed	
4725 Spratt Road	200 m southwest	1995 - 2011	Residential	No
		1960 - 1990	Not Listed	

Address	Approximate Distance and Direction from Site	Year	Occupant	Concern (yes/no)
4776 Limebank Road	200 m southeast	2011	Not Listed	No
		1996 – 2005/06	Residential	
		1960 - 1990	Not Listed	

The Phase One Property was not listed in the city directories. Based on the information reviewed, the inferred groundwater flow direction, and the intervening distances, no APECs were identified.

3.6.3 Land Use Documents

A review of the following publications was carried out as part of this Phase One ESA:

- Old Landfill Management Strategy Phase 1 – Identification of Sites, City of Ottawa, Ontario (Golder Associates, October 2004);
- Inventory of Coal Gasification Plant Waste Sites in Ontario (Intera, April 1987);
- Mapping and Assessment of Former Industrial Sites – City of Ottawa (Intera, July 1988); and,
- Ontario Inventory of PCB Storage Sites (Ontario Ministry of the Environment; 1993).

3.6.4 Old Landfill Management Strategy Phase 1 – Identification of Sites - Golder (2004)

No former landfills were identified within 250 m of the Phase One Property. In addition, there is no visual evidence of a landfill in the area.

3.6.5 Inventory of Coal Gasification Plant Waste Sites in Ontario - Ontario MOE (1987)

There were no coal gasification plants identified within 250 m of the Phase One Property.

3.6.6 Mapping and Assess Former Industrial Sites – Intera (1988)

The Intera report study area does not encompass the Phase One Property or any surrounding properties.

3.6.7 Ontario Inventory of PCB Storage Sites - Ontario MOE (1993)

No records pertaining to PCB storage sites were identified within 250 m of the Phase One Property in this document.

3.7 EcoLog ERIS Database Search

A search of provincial and federal databases for records pertaining to the Phase One Property and properties within 250 metres of the Phase One Property was conducted by EcoLog Environmental Risk Information Services (or EcoLog ERIS). EcoLog ERIS is an environmental database and information service provider. EXP has confirmed neither the completeness nor the accuracy of the records that were provided. A summary of the more significant findings is provided below. A copy of the EcoLog ERIS report is provided in Appendix D.

Based on the EcoLog search, the following was identified:

- The Phase One Property was listed with a water well drilled in 1968. This is not considered to be an APEC.
- The property to the east, approximately 230 m from the Phase One Property, was registered a permit to take water for dewatering during construction by Riverside South Development Corp, Urbandale Corporation, Richcraft and Homes Ltd. This is not considered to be an APEC.
- The property to the east, approximately 230 m from the Phase One Property, was listed with a historical ERIS search in 2016. This is not considered to be an APEC.
- Based on the information reviewed, inferred groundwater flow direction, and intervening distances, no APECs were identified.

3.8 Physical Setting Review

3.8.1 Aerial Photographs

The following table summarizes the development and land use history of the Phase One Property and adjacent properties as depicted on the reviewed aerial photographs.

Table 3.2: Development and Land Use History Summary

Aerial Photograph (year)	Details
1945	The Phase One Property and surrounding area appears to be vacant undeveloped land.
1962	The Phase One Property and surrounding area appears to be vacant undeveloped land.
1976	The Phase One Property and surrounding areas appear similar to the 1962 photograph. The Phase One Property has a small building, associated with four radio transmission towers located adjacently to the east of the Phase One Property. The Phase One Property building appears to have a potential aboveground storage tank (AST) located on the south side of the building.
1991	the Phase One Property and surrounding areas appear similar to the 1976 photograph
1999	the Phase One Property and surrounding areas appear similar to the 1991 photograph.
2005	the Phase One Property and surrounding areas appear similar to the 1999 photograph.
2009	the Phase One Property and surrounding areas appear similar to the 2005 photograph.
2011	The Phase One Property and surrounding areas appear similar to the 2009 photograph. The Phase One Property no longer has a small building located on the Phase One Property and the associated four radio transmission towers are no longer present.
2017	The Phase One Property and surrounding areas appear similar to the 2011 photograph. Some trees appear to be cut down and piled on the Phase One Property, and there is residential development north of the Phase One Property.

Based on the review of the aerial photography, PCA1 – A former above ground fuel storage for the radio tower building. (#28: Gasoline and Associated Products Storage in Fixed Tanks) was identified at the Phase One Property.

3.8.2 Geology, Hydrogeology and Topography

The following information sources were reviewed to determine the nature of the subsurface materials at the Phase One Property:

1. *Bedrock Geology of Southern Ontario* – Ontario Geological Survey. Scale 1:50,000. Electronic resource Issued 2003.
2. *Surficial Geology of Southern Ontario* – Ontario Geological Survey. Scale 1:50,000. Electronic resource Issued 2003.
3. Ontario Geotechnical Boreholes – Electronic Resource.
4. MOE Water Well Records – Electronic Resource.
5. Department of Natural Resources, Topographic Mapping. Electronic Resource.

Based on local mapping, beneath any fill, the surficial geology of the Phase One Property is characterised by fine textured glaciomarine deposits, silt and clay, minor sands and gravel. The bedrock geology underlying the Phase One Property consists of Oxford Formation dolostone, and limestone.

The local MOECC water well records indicate local soil is clay. The depth to bedrock in the area is approximately 8.8 to 12 m below grade. The MOECC water record indicated the water well on the Phase One Property was drilled for Radio C.J.R.C. in 1968, indicating the radio transmission towers and the associated building was built in 1968 for use as a radio broadcasting transmitter station.

The local groundwater flow direction is unknown, although based on regional topography, the groundwater flow is anticipated to be northwest.

3.8.3 Fill Materials

The Paterson Group geotechnical report did not indicate a significant amount of fill materials on the Phase One Property. Some silty sand fill was found in one of the Paterson Group boreholes to a depth of 1.1 m. The quality of this fill is unknown (PCA#30 – Importation of Fill Material of Unknown Quality).

3.8.4 Water Bodies and Areas of Natural Significance (ANSI)

There were no water bodies on the Phase One Property. The Phase One Property is not located in close proximity to an ANSI, according to the Ministry of Natural Resources Natural Heritage website. The closest body of water is a Rideau River, located approximately 1.7 km west of the Phase One Property.

3.8.5 Well Records

The local MOECC water well records indicate local soil is clay. The depth to bedrock in the area is approximately 8.8 to 12 m below grade. The MOECC water record indicated the water well on the Phase One Property was drilled for Radio C.J.R.C. in 1968, indicating the radio towers and the associated building was built in 1968 for use as a radio broadcasting transmitter station.

3.9 Site Operating Records

No Phase One Property operating records were available for review.

3.10 Summary of Records Review

Based on a review of the available records, the following PCAs were identified in the vicinity of the Phase One Property:

- PCA1 – Former on-site heating oil AST located on the south side of the former Radio C.J.R.C building from 1968 to 2009, (PCA#28 – Gasoline and Associated Products Stored in Fixed Tanks).
- PCA2 - The quality of the fill on the Phase One Property (PCA#30 – Importation of Fill Material of Unknown Quality)

The PCAs identified at the Phase One Property are shown on Figure 3.

4. Interviews

Interviews were attempted by EXP with any individuals identified to be the most knowledgeable about both the current and historical Phase One Property uses. The purpose of interviews is to obtain information to assist in identifying areas of potential environmental concern and identify details of potentially contaminating activities or potential contaminant pathways, in, on or below the Phase One Property.

No knowledgeable person of the historical uses of the Phase One Property were available for interview, based on the historical information available, this was not considered to be a concern.

5. Site Reconnaissance

5.1 General Requirements

On April 2, 2018, Daniel Clarke, P.Eng., of EXP conducted the site visit for the property. The site visit was conducted in accordance with EXP's internal health and safety protocols and with the Ministry of Labour health and safety regulations. The purpose of the site visit was to assess the current conditions of the Phase One Property.

The general environmental management and housekeeping practices at the Phase One Property were reviewed as part of this assessment insofar as they could impact the environmental condition of the property; however, a detailed review of regulatory compliance issues was beyond the scope of EXP's investigation.

Exterior and interior observations of the Phase One Property and surrounding properties were conducted. The exterior observations were recorded by walking over the grounds of the Phase One Property. Adjoining properties were observed from within the grounds of the Phase One Property. Photographs are included in Appendix E.

5.2 Specific Observations at Phase One ESA Property

5.2.1 Site Description and Buildings

The Phase One Property is located on the east side of Ralph Hennessey Avenue and south side of Mount Nebo Way at 925 Ralph Hennessy Avenue in Ottawa as shown on Figure 1 in Appendix B. The Phase One Property has an area of approximately 2.0 hectares and is vacant land.

5.2.2 Heating and Cooling Systems

The Phase One Property was vacant. No heating or cooling systems were observed.

5.2.3 Site Utilities and Services

There are no utilities or services on the Phase One Property.

5.2.4 Site Use

The Phase One Property was vacant and unoccupied (Photograph 1 to 6, Appendix E)..

5.2.5 Drains, Pits and Sumps

No sumps, or pits were observed at the Phase One Property.

5.2.6 Storage Tanks

5.2.6.1 Underground Storage Tanks

EXP did not observe any underground storage tanks (USTs) during the Phase One Property reconnaissance. Furthermore, the historical review did not identify any former USTs at the Phase One Property.

5.2.6.2 Aboveground Storage Tanks

EXP did not observe any aboveground storage tanks (ASTs) or fill/ vent pipes during the site reconnaissance. Furthermore, the historical review identified a potential AST located with the former Radio C.J.R.C building located on the Phase One Property from the late 1968 to 2009. This is considered to be PCA-1.

5.2.7 Chemical Storage and Handling and Floor Condition

No chemicals were observed at the Phase One Property.

5.2.8 Areas of Stained Soil, Pavement or Stressed Vegetation

No areas of stained soil, pavement or vegetation were observed during the Phase One Property visit.

5.2.9 Fill, Debris and Methane

The Phase One Property has a lower elevation than the surrounding properties, therefore there is a significant amount of fill that has to be imported to the Phase One Property. Fill was being imported to the Phase One Property to raise the grade of the Phase One Property and therefore, there was fill of unknown quality present at the Phase One Property (APEC 2). Much more fill material has to be imported to the Phase One Property.

There was some construction debris located in the central west portion of the Phase One Property (Photograph 7, Appendix E). This is a minor amount of this material and it is not considered an APEC.

Methane or radon gas-producing materials were not observed on the Phase One Property.

5.2.10 Air Emissions

Regulatory control of air emissions in Ontario is the responsibility of the MOECC. According to the Environmental Protection Act (EPA), a Certificate of Approval (CofA) (Air) is required for the ongoing operation of any equipment that may discharge a contaminant into the natural environment if the equipment was installed, modified or altered after June 29th, 1988. Retroactive approval should be sought for equipment installed and unchanged between 1972 and June 29th, 1988 when the requirement for a CofA was added to the EPA. Unless explicitly exempted, most industrial processes or modifications to industrial processes and equipment require a CofA. The EPA provides a list of specific equipment and conditions, which are exempt from CofA (Air) requirements (i.e. fuel burning equipment for comfort heating in a building using natural gas or number 2 fuel oil at a rate of less than 1.5 million British Thermal Units per hour [BTU/hour]).

No air emissions concerns were identified at the time of the Phase One Property visit.

5.2.11 Odours

No strong odours were detected during the Phase One Property visit.

5.2.12 Noise

No excessive noise was detected during the Phase One Property visit.

5.2.13 Special Attention Items, Hazardous Building Materials and Designated Substances

5.2.13.1 Asbestos

Asbestos-containing materials (ACMs) are fibrous hydrated silicates, and can be found in building materials as either "unbound" or "bound" asbestos. Friable asbestos refers to materials where the asbestos fibres can be separated from the material with which it is associated. Non-Friable asbestos refers to asbestos, which is associated with a binding agent (such as tar or cement). Friable asbestos is commonly found in boiler and pipe insulation. Non-Friable asbestos is typically found in roofing tars, floor and ceiling tiles, and asbestos-containing cement.

ACMs in the workplace are defined as a Designated Substance under the Ontario Occupational Health and Safety Act (OHSA). Under OHSA, persons in the workplace are required to be notified of the presence of ACMs once they are suspected to be present, and if there is a potential for workers to be exposed. The use of ACMs was discontinued in Canada in the late 1970s/early 1980s, although non-friable asbestos can still be found in recently constructed buildings.

There are no structures at the Phase One Property and no potential ACMs were observed during the Phase One Property visit.

5.2.13.2 Lead

Lead has frequently been used in oil-based paints, roofing materials, cornices, tank linings, electrical conduits and soft solders for tinsplate and plumbing. The use of lead based paints (LBPs) was phased out circa 1976. Paint that was produced or used between 1976 and 1980 may contain small amounts of lead. Paint that was produced or used prior to 1950 may contain high levels of lead. The main concern regarding lead paint is its potential to become lead dust or chips either through deterioration and/or mechanical means (i.e., sanding, abrasion, etc.). Exposure to lead dust or chips occurs by ingestion or inhalation.

There are no structures at the Phase One Property and no potential sources of lead were observed during the Phase One Property visit.

5.2.13.3 Mercury

Mercury could be found in some batteries, light bulbs, old paints, thermostats, old mirrors, etc. Based on an investigation by Consumer and Corporate Affairs Canada, and an assessment of potential health risks by Health and Welfare Canada, in 1991 the decision was made to eliminate the use of mercury compounds in indoor latex paints. The Canadian Paint and Coatings Association (CPCA) supported the withdrawal and all Canadian manufacturers and formulators of the preservative voluntarily agreed to remove "interior uses" from their product labels.

There are no structures at the Phase One Property and no potential sources of mercury were observed during the Phase One Property visit.

5.2.13.4 Polychlorinated Biphenyls (PCBs)

The manufacture of PCBs in North America was prohibited under the Toxic Substances Control Act (1977). Their use as a constituent of new products manufactured in or imported into Canada was prohibited by regulations in 1977 and 1980. As such, sites developed or significantly renovated after 1980 are unlikely to have PCBs-containing equipment on the Phase One Property. Potential equipment, which could contain PCBs include fluorescent mercury and sodium vapour light ballasts, oil filled capacitors and transformers. Any electrical equipment containing PCBs must be disposed in accordance with Ontario Regulation 362 when it is removed from service. Ongoing operation of equipment containing PCBs is permissible.

A review of the Phase One Property was conducted to evaluate the potential presence of PCBs-containing equipment in use or stored at the Phase One Property.

There are no structures at the Phase One Property and no potential sources of PCBs were observed during the Phase One Property visit.

5.2.13.5 Urea Formaldehyde Foam Insulation

Formaldehyde is a pungent, colourless gas commonly used in water solution as a preservative and disinfectant. It is also a basis for major plastics, including durable adhesives. It occurs naturally in the human body and in the outdoor environment. Formaldehyde is used to bond plywood, particleboard, carpets and fabrics, and it contributes to "that new house smell."

Formaldehyde is also a by-product of combustion; it is found in tobacco smoke, vehicle exhaust and the fumes from furnaces, fireplaces and wood stoves. While small amounts of formaldehyde are harmless, it is an irritating and toxic gas in significant concentrations. Symptoms of overexposure to formaldehyde include irritation to eyes, nose and throat; persistent cough and respiratory distress; skin irritation; nausea; headache; and dizziness.

Urea-formaldehyde foam insulation (UFFI) was developed in Europe in the 1950s as an improved means of insulating difficult-to-reach cavities in the walls. It is typically made at a construction site from a mixture of urea-formaldehyde resin, a foaming agent and compressed air. When the mixture is injected into the wall, urea and formaldehyde unite and "cure" into an insulating foam plastic.

During the 1970s, when concerns about energy efficiency led to efforts to improve building insulation in Canada, UFFI became an important insulation product for existing buildings. Most installations occurred between 1977 and the further use of UFFI was banned in Canada in 1980.

There are no structures at the Phase One Property and no potential UFFI was observed during the Phase One Property visit.

5.2.13.6 Radon

Radon is a colourless, odourless, radioactive gas that occurs naturally in the environment. It comes from the natural breakdown of uranium in soils and rocks. Exposure to high levels of radon increases the risk of developing lung cancer. This relationship has prompted concern that radon levels in some Canadian buildings may pose a health risk. Radon gas can move through small spaces in the soil and rock and seep into a building through cracks in concrete, sumps, joints and basement drains. Concrete-block walls are particularly porous to radon and radon trapped in water from wells can be released into the air when the water is used.

Due to the potential health concerns associated with radon, Health Canada released a guideline in June 2007 for a maximum acceptable level of radon gas of 200 Becquerel's per cubic metre (Bq/m³). Where radon gas is present and the annual radon concentration exceeds 200 Bq/m³ in the normal occupancy area, Health Canada recommends taking the necessary actions to reduce radon levels.

Based on local well records, the bedrock underlying the Phase One Property is limestone. Based on the rock type and significant depth to bedrock and overlying silty clay soil, radon gas is not considered a concern.

5.2.13.7 Mould

Mould is found in the natural environment and is required for the breakdown of plant debris such as leaves and wood. Mould spores are found in the air in both the indoor and outdoor environments. In order for mould to grow it requires a food source (i.e. gypsum wallboard, wallpaper, wood, etc.) combined with moist conditions. Mould can have an impact on human health depending on the species and concentration of the airborne mould spores. Health effects can include allergies and mucous membrane irritation.

Currently there are no regulations governing mould; however, there are several guidelines addressing mould assessments and abatement. At the moment, the industry standards include the Canadian Construction Association (CCA) document 82-2004 titled "mould guidelines for the Canadian construction industry" and the Environmental Abatement Council of Ontario (EACO) guidelines titled "EACO Mould Abatement Guidelines, Edition 2 (2010)."

It is important to note that the Ministry of Labour (MOL) has governed protecting workers under the Occupational Health and Safety Act, which states that employers are required to take every precaution reasonable to protect their workers. This includes protecting workers from mould within workplace buildings.

No suspect mould was observed during the Phase One Property visit.

5.2.13.8 Other Substances

No other special attention substances (such as acrylonitrile or isocyanates) were suspected to be present at the Phase One Property at the time of this Phase One ESA.

5.2.14 Processing and Manufacturing Operations

No processing or manufacturing operations are conducted at the Phase One Property as it is residential in nature.

5.2.15 Hazardous Materials Use and Storage

No hazardous materials are used or stored at the Phase One Property.

5.2.16 Vehicle and Equipment Maintenance Areas

No vehicle and equipment maintenance is conducted on the Phase One Property.

5.2.17 Oil/Water Separators

No oil water separators are present and/or anticipated at the Phase One Property.

5.2.18 Sewage and Wastewater Disposal

No sewage or wastewater is generated at the Phase One Property.

5.2.19 Solid Waste Generation, Storage & Disposal

No solid waste is generated on the Phase One Property.

5.2.20 Liquid Waste Generation, Storage & Disposal

No liquid wastes are generated or stored on the Phase One Property.

5.2.21 Unidentified Substances

No unidentified substances were observed on the Phase One Property at the time of the Phase One Property visit. No dumping or any other deleterious materials were identified.

5.2.22 Hydraulic Lift Equipment

No hydraulic equipment was observed the Phase One Property.

5.2.23 Mechanical Equipment

No mechanical equipment of concern was present on the Phase One Property.

5.2.24 Abandoned and Existing Wells

No abandoned or existing wells were observed at the Phase One Property.

5.2.25 Roads, Parking Facilities and Right of Ways

The Phase One Property has road access from Ralph Hennessey Avenue and Mount Nebo Way.

5.3 Adjacent and Surrounding Properties

A visual inspection of the adjacent properties and properties within 250 m of the Phase One Property was conducted from publicly accessible areas to identify the occupants and document the uses and sources of potential environmental concerns that may impact the Phase One Property. Refer to Figure 2 in Appendix B for the adjacent land uses.

The following land uses border the Phase One Property:

Mount Nebo Way, followed by residential/ some vacant land

South: Residential, being developed

East: Residential, being developed

West: Ralph Hennessey Avenue followed by vacant land and residential

Based on the inferred groundwater flow direction, and the intervening distances, no PCAs were identified on the neighbouring properties.

5.4 Summary of Site Reconnaissance

Based on the Phase One Property reconnaissance of the Phase One ESA, no additional PCA were identified.

6. Phase One ESA Conceptual Site Model

6.1 Current and Past Uses

At the time of the Phase Two ESA investigation, the Phase One Property was vacant and previously the Phase One Property was developed with a small building and four radio transmission towers for a radio station from 1968 to 2009. The future land use will be institutional and occupied by an elementary school with parking.

6.2 Summary of Potentially Contaminating Activities

As per Ontario Regulation (O.Reg.) 153/04, a Potential Contaminating Activity (PCA) is defined as one of fifty-nine (59) industrial operations set out in Table 2 of Schedule D that occurs or has occurred in a Phase One study area. The following PCAs were identified:

- PCA1 – Former on-site heating oil AST located on the south side of the former Radio C.J.R.C building from 1968 to 2009, (PCA#28 – Gasoline and Associated Products Stored in Fixed Tanks).
- PCA2 – The quality of the fill on the Phase One Property (PCA#30 – Importation of Fill Material of Unknown Quality).

No PCAs took place within the vicinity of the Phase One Property (approximately 250 m radius).

6.3 Areas of Potential Environmental Concern

As a result of the PCAs, the report identified the following APECs at the Phase One Property:

- APEC 1 – (central part of Phase One Property) Contaminated soil and groundwater. This APEC is associated with PCA1. The PCOCs include BTEX and PHC.
- APEC 2 – (entire Phase One Property) Contaminated soil. This APEC is associated with PCA2. The PCOCs include BTEX, PHC, and metals.

It is noted that any significant uncertainty or absence of information has the ability to affect the Phase One Conceptual Site Model. However, based on the information and findings presented within the Phase One ESA, it is EXP's opinion that any uncertainty would be minimal, and it would not alter the validity of the model presented above.

6.4 Site Characteristics

In order to develop a conceptual model for the Phase One Property and surrounding study area, the following physical characteristics and pathways were considered. A conceptual site model showing the inferred groundwater flow direction and general Phase One Property is shown in Figure 3 in Appendix B. A legal survey is also found in Appendix B.

6.4.1 Subsurface Stratigraphy

Beneath any fill, the surficial geology of the Phase One Property is characterised by fine textured glaciomarine deposits, silt and clay, minor sands and gravel. Some silty sand fill was found in one of the Paterson Group boreholes to a depth of 1.1 m. The depth to bedrock in the area is approximately 8.8 to 12 m below grade.

6.4.2 Estimated Groundwater Flow Direction

Topographically, the Phase One Property is relatively flat. The local groundwater flow direction is unknown, although based on regional topography, the groundwater flow is anticipated to be to the northwest. The depth to groundwater in 2018 was between 0.3 m and 2.2 m below ground surface.

6.4.3 Underground Utilities

Currently, there are no buried utilities on the Phase One Property.

7. Findings and Recommendations

Based on the results of the Phase One ESA completed at the Phase One Property, EXP has identified the following areas of potential environmental concern:

Table 7.1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
APEC 1	Central part	#28: Gasoline and Associated Products Storage in Fixed Tanks	On-site	Petroleum hydrocarbons (PHC), benzene, toluene, ethylbenzene, xylenes (BTEX)	Soil and groundwater
APEC 2	All of Site	#30: Importation of Fill Material of Unknown Quality	On-site	PHCs, BTEX and metals	Soil

Based on the findings of the Phase One ESA, a Phase Two ESA is required to assess the soil and groundwater conditions at the Phase One Property.

8. References

1. Canadian Standards Association; November 2001; *Z768-0 Phase I Environmental Site Assessment*.
2. Dubreuil, L. and C. Woods; 2002; *Catalogue of Canadian Fire Insurance Plans, 1875 – 1975*.
3. Department of Energy Mines and Resources, Surveys and Mapping Branch; 1976; *Ottawa Map 31 G/5, Scale 1:50,000*.
4. EXP Services Inc. June 27, 2018; *Geotechnical Investigation, Proposed New Riverside South Catholic Elementary School, 925 Ralph Hennessy Avenue, Ottawa, Ontario*.
5. Geological Survey of Canada; 1982; *Generalized Bedrock Geology – Ottawa-Hull, Ontario-Quebec: Map 1508A. Scale 1:50,000*.
6. Geological Survey of Canada; 1976; *Surficial Geology – Ottawa, Ontario: Map 1507A. Scale 1:50,000*.
7. Golder Associates Inc.; October 2004; *Old Landfill Management Strategy, City of Ottawa*.
8. Intera Technologies Ltd.; July 1998; *Mapping and Assessment of Former Industrial Sites, City of Ottawa*.
9. Ministry of Labour (MOL); *Occupational Health and Safety Act*.
10. Ontario Ministry of the Environment, *Environmental Registry website* (www.ene.gov.on.ca/envision/env_reg/ebr/english/index.htm)
11. Ontario Ministry of the Environment; 1993- 2003-2004; *Ontario Inventory of PCB Storage Sites*.
12. Ontario Ministry of the Environment; *Brownfields Registry website* (www.ene.gov.on.ca/environet/BESR/index.htm)
13. Ontario Ministry of the Environment; *Hazardous Waste Information Network website* (www.hwin.ca).
14. Ontario Ministry of the Environment; November 1988; *Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario*.
15. Ontario Ministry of the Environment, Waste Management Branch; June 1991; *Waste Disposal Site Inventory*.
16. Ontario Ministry of the Environment and Intera Technologies Ltd.; June 1991; *Inventory of Coal Gasification Plant Waste Sites in Ontario*;
17. Ontario Ministry of Natural Resources, Natural Heritage website (www.mnr.gov.on.ca/MNR/nhic/areas.cfm).
18. Paterson Group; December 11, 2015; *Phase I Environmental Site Assessment Update, Vacant Property, 4619 Spratt Road, Ottawa, Ontario*.
19. Technical Standards and Safety Authority; May 2007; *Environmental Management Protocol for Fuel Handling Sites in Ontario*.

9. Scope of Report, and Third Party Reliance

Basis of Report

This report ("Report") is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the Phase One Property the recommendations of EXP may require re-evaluation.

Reliance on Information Provided

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by Centre des écoles catholiques du Centre-Est. The Report has been prepared for the specific Phase One Property, development, building, design or building assessment objectives and purpose as communicated by Centre des écoles catholiques du Centre-Est has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to exp. If new information about the environmental conditions at the Phase One Property is found, the information should be provided to EXP so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

Standard of Care

The Report has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale and in accordance with the MOE Reg. 511 standard. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

Complete Report

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by Centre des écoles catholiques du Centre-Est, communications between EXP and Centre des écoles catholiques du Centre-Est, other reports, proposals or documents prepared by EXP for Centre des écoles catholiques du Centre-Est in connection with the Phase One Property described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.

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The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of Centre des écoles catholiques du Centre-Est. No other party may use or rely upon the Report in whole or in part without the written consent of EXP. Any use of the Report, or any portion of the Report, by a third party are the sole responsibility of such third party. EXP is not responsible for damages suffered by any third party resulting from unauthorised use of the Report.

Report Format

Where EXP has submitted both electronic file and a hard copy of the Report, or any document forming part of the Report, only the signed and sealed hard copy shall be the original documents for record and working purposes. In the event of a dispute or discrepancy, the hard copy shall govern. Electronic files transmitted by EXP utilize specific software and hardware systems. EXP makes no representation about the compatibility of these files with Centre des écoles catholiques du Centre-Est current or future software and hardware systems. Regardless of format, the documents described herein are EXP's instruments of professional service and shall not be altered without the written consent of EXP.

We trust this report satisfies your immediate requirements. If you have any questions regarding the information in this report, please do not hesitate to contact this office.

Appendices

Appendix A: Qualifications of Assessors

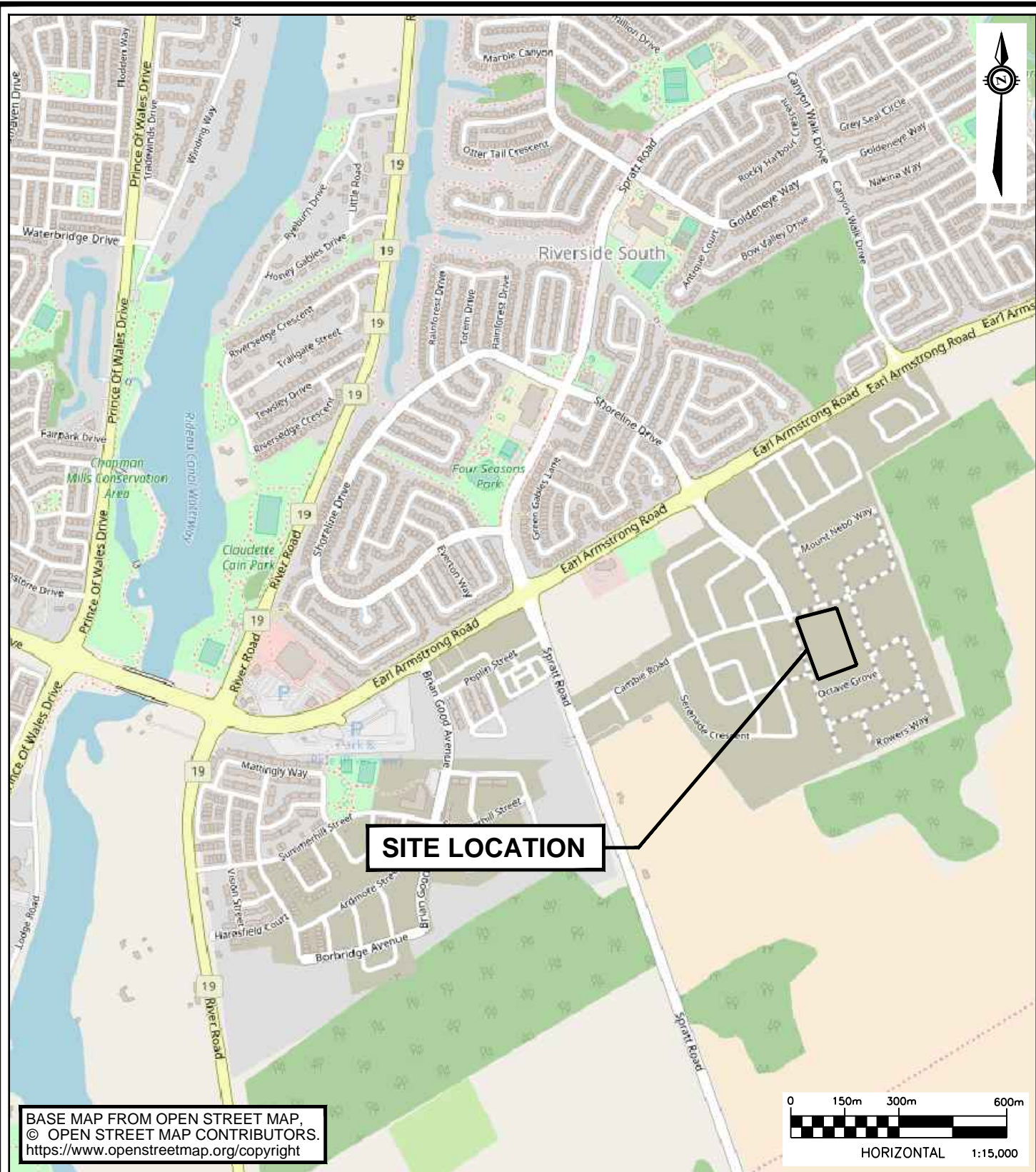
Qualifications of Assessors

EXP provides a full range of environmental services through a full-time Environmental Services Group. EXP's Earth and Environment Group has developed a strong working relationship with clients in both the private and public sectors and has developed a positive relationship with Ontario Ministry of the Environment. Personnel in the numerous branch offices form part of a large network of full-time dedicated environmental professionals in the EXP organization.

Daniel Clarke, P.Eng, has 8 years of experience in the environmental consulting field. Technical undertakings have included: project coordination; Phase I, II and III Environmental Site Assessments; contaminated Phase One Property investigations including drilling supervision, environmental sampling and data evaluation; and technical report preparation.

Mark McCalla, P.Geo., is a senior Environmental Scientist with EXP who has 29 years of experience in the environmental consulting field. His technical undertakings have including work in the following fields: Phase I and II Environmental Site Assessments; Site Specific Risk Assessments; Petroleum and chlorinated hydrocarbon contaminated sites; Soil and groundwater remediation technologies; Hydrogeological, Terrain Analysis and Aggregate Assessments; Preparation of Ontario Ministry of Environment Certificate of Approvals and Records of Site Condition. Mr. McCall is a Qualified Person for completing Phase I and II Environmental Site Assessments as per O.Reg 153/04.

Appendix B: Figures



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date APRIL 2018		design	checked
drawn by J.R.	TITLE: SITE LOCATION PLAN	FIG 1	

Filename: n:\240000\245000\245869-a0\245869-en-p1.dwg
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LAND USE

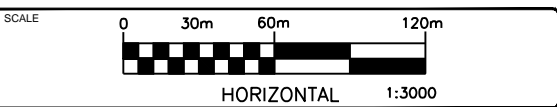
EXISTING/ PROPOSED RESIDENTIAL

PIESA STUDY AREA BOUNDARY

APEC

APEC 1 - POTENTIAL FORMER AST

APEC 2 - FILL OF UNKNOWN QUALITY



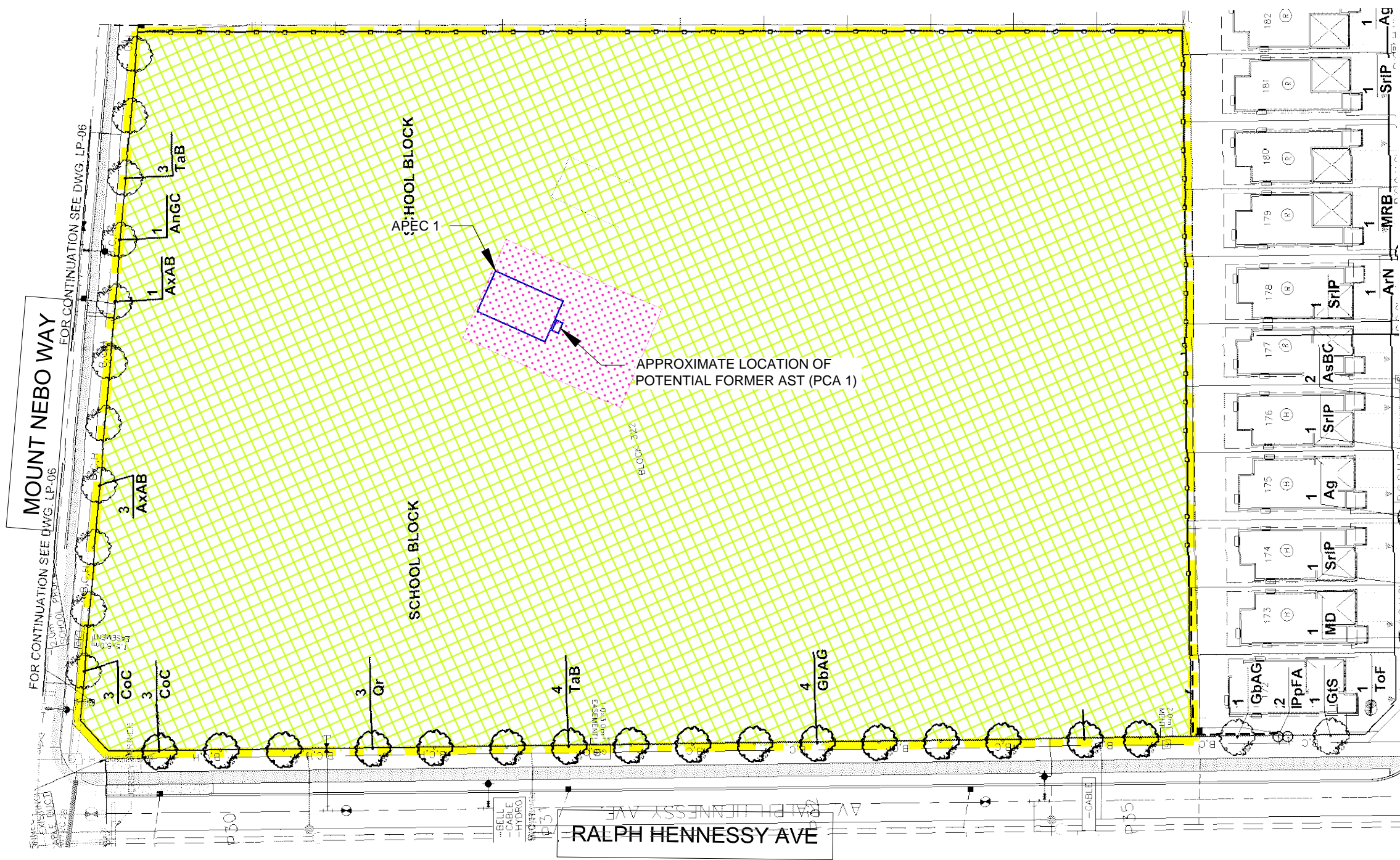
CLIENT

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ÉCOLES CATHOLIQUES
DU CENTRE-EST**

PROJECT

**NEW CATHOLIC ELEMENTARY SCHOOL
925 RALPH HENNESSEY AVE,
OTTAWA, ON**

TITLE	
PIESA STUDY AREA	
date	SEPTEMBER 2018
design by	D.C.
prepared by	J.R.
reviewed by	M.M.
project no.	OTT-00245869-A0
drawing no.	FIG 2



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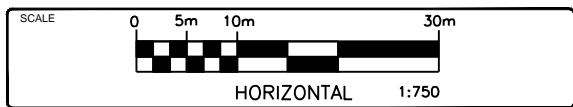
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APEC 1 - POTENTIAL FORMER AST
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925 RALPH HENNESSY AVE,
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TITLE	
SITE PLAN & APECs	
date	SEPTEMBER 2018
design by	D.C.
prepared by	J.R.
reviewed by	M.M.
project no.	OTT-00245869-A0
drawing no.	FIG 3

TOPOGRAPHICAL PLAN OF SURVEY

BLOCK 322
REGISTERED PLAN 4M-XXXX
CITY OF OTTAWA

Prepared by Annis, O'Sullivan, Vollebakk Ltd.
Field Work Completed on April 11th, 2018
(Subdivision not Registered)

Scale 1 : 500
20 15 10 5 0 10 20 Metres

Metric
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND
CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

Date Andre Roy O.L.S.

Notes & Legend

Denotes	
○ FH	Fire Hydrant
⊗ WV	Water Valve
○ MH-ST	Maintenance Hole (Storm Sewer)
○ MH-S	Maintenance Hole (Sanitary)
○ MH	Maintenance Hole (Unidentified)
⊗ VC	Valve Chamber (Watermain)
□ CB	Catch Basin
□ DI	Ditch Inlet
○ LS	Light Standard
BCH	Bell, Cable, Hydro
BC	Bell, Cable
+ 65.00	Location of Elevations
+ 66.00	Top of Concrete Curb Elevation
— ST —	Underground Storm Sewer
— S —	Underground Sanitary Sewer
— W —	Underground Water

AREA = 4.956 ac
2.006 ha

Bearings are grid, referenced to MTM Zone 9 (76°30' West
Longitude) NAD-83 (original).

ELEVATION NOTES

- Elevations shown are geodetic and are referred to the CGVD28 geodetic datum.
- It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that its relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

- This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
- Only visible surface utilities were located.
- A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.
- The location and types of underground services are based on drawing ACAD-160401260-CUP-Model.dwg provide by Stantec.

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No. 10720-18, 10720-19, 10720-20, 10720-21, 10720-22, 10720-23, 10720-24, 10720-25, 10720-26, 10720-27, 10720-28, 10720-29, 10720-30, 10720-31, 10720-32, 10720-33, 10720-34, 10720-35, 10720-36, 10720-37, 10720-38, 10720-39, 10720-40, 10720-41, 10720-42, 10720-43, 10720-44, 10720-45, 10720-46, 10720-47, 10720-48, 10720-49, 10720-50, 10720-51, 10720-52, 10720-53, 10720-54, 10720-55, 10720-56, 10720-57, 10720-58, 10720-59, 10720-60, 10720-61, 10720-62, 10720-63, 10720-64, 10720-65, 10720-66, 10720-67, 10720-68, 10720-69, 10720-70, 10720-71, 10720-72, 10720-73, 10720-74, 10720-75, 10720-76, 10720-77, 10720-78, 10720-79, 10720-80, 10720-81, 10720-82, 10720-83, 10720-84, 10720-85, 10720-86, 10720-87, 10720-88, 10720-89, 10720-90, 10720-91, 10720-92, 10720-93, 10720-94, 10720-95, 10720-96, 10720-97, 10720-98, 10720-99, 10720-100, 10720-101, 10720-102, 10720-103, 10720-104, 10720-105, 10720-106, 10720-107, 10720-108, 10720-109, 10720-110, 10720-111, 10720-112, 10720-113, 10720-114, 10720-115, 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Appendix C: Title Search, Municipal & Provincial Records



READ Abstracts Limited

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4

Email: search@readsearch.com

Tel.: 613-236-0664

Fax: 613-236-3677

ENVIRONMENTAL SEARCH

EXP

Attn: Kathy

BRIEF DESCRIPTION OF LAND:

4721 Spratt Rd., Ottawa

Part of Lot 22, Concession 1 RF Gloucester (Now Block 322, Plan 4M1601)

PIN: 04330-2163 (part)

LAST REGISTERED OWNER: RIVERSIDE SOUTH DEVELOPMENT CORP.

CHAIN OF TITLE:

Deed registered Sep 26, 1852

From John Dawson to Edmund O'Connell

Deed GL464 registered June 27, 1870

From Edmund O'Connell to Thomas O'Connell

Deed GL12477 registered Feb 24, 1892

From estate of Thomas O'Connell to William Kennedy

Will GL24097 registered October 18, 1911

From Edmund O'Connell to John O'Connell

Deed GL29865 registered June 17, 1919

From estate of William Kennedy to John T. Brownrigg

Deed GL48799 registered July 11, 1951

From estate of John O'Connell to Daniel O'Connell

Deed GL53064 registered March 11, 1955

From estate of Daniel O'Connell to Wilfred E. Carron

Deed GL53450 registered May 30, 1955
From John T. Brownrigg to Joseph Brownrigg

Deed GL82288 registered December 30, 1967
From Joseph Brownrigg to Raymond Crepault

Deed GL82305 registered December 21, 1967
From Wilfred Carron to Raymond Crepault

Deed CT142822 registered October 20, 1971
From Raymond Crepault to Mutual Broadcasting Limited Radiodiffusion Mutuelle Limitee

Deed CT202345 registered November 12, 1974
From Stephen Brownrigg (estate of Joseph Brownrigg) to J. Marc Patenaude

Deed CT219821 registered November 3, 1975
From J. Marc Patenaude to Campeau Corporation

Deed N551232 registered September 27, 1990
From Campeau Corporation to Richcraft Grilli Corp.

Deed N717480 registered April 5, 1995
From Richcraft Grilli Corp. to 172479 Canada Inc.

Deed OC62247 registered April 19, 2002
From 172479 Canada Inc. to Riverside South Development Corp.

Name Change OC438462 registered March 1, 2005
From Mutual Broadcasting Limited Radiodiffusion Mutuelle Limitee to Astral Media Radio Inc.

Deed OC469544 registered June 2, 2005
From Astral Media Radio Inc. to 591991 B.C. Ltd.

Deed OC1153202 registered August 27, 2010
From 591991 B.C. Ltd. to Riverside South Development Corp.

Plan 4M1601 registered May 9, 2018
By Riverside South Development Corp.



March 26, 2018

VIA FACSIMILE:
416-314-4285

FOI Manager
Freedom of Information & Protection of Privacy Office
Ontario Ministry of the Environment
12th Floor, 40 St. Clair Avenue West
Toronto, Ontario M4V 1M2

Re: OTT-00245869-A0 **File Review Request**
 Spratt Road & Ralph Hennessey Avenue, Ottawa, Ontario

Dear Ms. Ritscher:

I am sending a Freedom of Information Request to you for Part of Lots 21, 22 and 23, Concession 1 (Rideau Front), Geographic Township of Gloucester, Block 322, AND Lot 40 and Blocks 178 to 200 (Inclusive), 202, 203, 204 and 206, Ottawa, Ontario. We are conducting an environmental site assessment and require any environmental concerns.

If possible, we would appreciate receiving the documentation by email (kathy.radisch@exp.com) and by mail. If you have any questions, or require any further information, please do not hesitate to contact the undersigned at 613-688-1891, ext. 3296.

Yours truly,
exp Services Inc.

A handwritten signature in blue ink that reads "Kathy Radisch". The signature is fluid and cursive, with the first name "Kathy" and last name "Radisch" clearly distinguishable.

Kathy Radisch
Administrative Assistant
Earth & Environment

Enclosures: FOI Form
 Credit Card Payment Form

Appendix D: EcoLog Reports



City Directory Information Source	
Vernon's Ottawa and Area, ON City Directory	
PROJECT NUMBER: 20180322057	
Site Address:	Spratt Road, Ottawa, Ontario
Year: 2011	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed
4661 Spratt Road	-Res (1 tenant)
4725 Spratt Road	-Res (1 tenant)
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 2005-2006	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed

4661 Spratt Road	-Res (1 tenant)
4725 Spratt Road	-Res (1 tenant)
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Res (1 tenant)
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1999-2000	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed
4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Res (2 tenants)
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1995-1996	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed

4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Res (1 tenant)
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Res (1 tenant)
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1990	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed
4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1984	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed

4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1979	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed
4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1974	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed

4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1970	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed
4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1965	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed

4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed
Year: 1960	
Site Listing:	-No Site Specified
Adjacent Properties:	
4623 Spratt Road	-Address Not Listed
4635 Spratt Road	-Address Not Listed
4661 Spratt Road	-Address Not Listed
4725 Spratt Road	-Address Not Listed
4775 Spratt Road	-Address Not Listed
801 Ralph Hennessy Avenue	-Address Not Listed
4776 Limebank Road	-Address Not Listed
702 Earl Armstrong Road	-Address Not Listed
910 Earl Armstrong Road	-Address Not Listed
980 Earl Armstrong Road	-Address Not Listed

-All listings for businesses were listed as they are in the city directory.

-Listings that are residential are listed as “residential” with the number of tenants. The name of the residential tenant is not listed in the above city directory



DATABASE REPORT

Project Property: *Phase I ESA
Spratt Road
Ottawa ON
Riverside South School*

Project No: *20180322057*

Report Type: *Standard Report*

Order No: *20180322057*

Requested by: *exp Services Inc.*

Date Completed: *March 27, 2018*

**Environmental Risk
Information Services**
A division of Glacier Media Inc.
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Executive Summary

Property Information:

Project Property: *Phase I ESA
Spratt Road Ottawa ON*

Project No: *Riverside South School*

Coordinates:

Latitude: *45.271535*
Longitude: *-75.678749*
UTM Northing: *5,013,339.25*
UTM Easting: *446,757.47*
UTM Zone: *UTM Zone 18T*

Elevation: *311 FT
94.88 M*

Order Information:

Order No: *20180322057*
Date Requested: *March 22, 2018*
Requested by: *exp Services Inc.*
Report Type: *Standard Report*

Historical/Products:

Aerial Photographs *National Collection - Digital (PDF)*
City Directory Search *Subject Site plus 10 Adjacent Properties*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	Total
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 & Supplies</i>	Y	0	0	0
BORE	<i>Borehole</i>	Y	0	0	0
CA	<i>Certificates of Approval</i>	Y	0	0	0
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	1	1
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	1	1
EIIS	<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 & 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 & 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

Database	Name	Searched	Project Property	Within 0.25 km	Total
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBW	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGW	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	TSSA Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	0	0
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	TSSA Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	1	1
Total:			0	3	3

Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
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No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>1</u>	WWIS		lot 22 con 1 ON	NE/32.6	0.00	<u>12</u>
<u>2</u>	EASR	Riverside South Development Corp, Urbandale Corporation, Richcraft & Homes Ltd.	ON	E/229.3	-3.00	<u>14</u>
<u>3</u>	EHS		Rideau Rd & Spratt Rd Ottawa ON	ESE/235.1	-2.04	<u>14</u>

Executive Summary: Summary By Data Source

EASR - Environmental Activity and Sector Registry

A search of the EASR database, dated Oct 2011-Jan 31, 2018 has found that there are 1 EASR site(s) within approximately 0.25 kilometers of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Riverside South Development Corp, Urbandale Corporation, Richcraft & Homes Ltd.	ON	E	229.31	<u>2</u>

EHS - ERIS Historical Searches

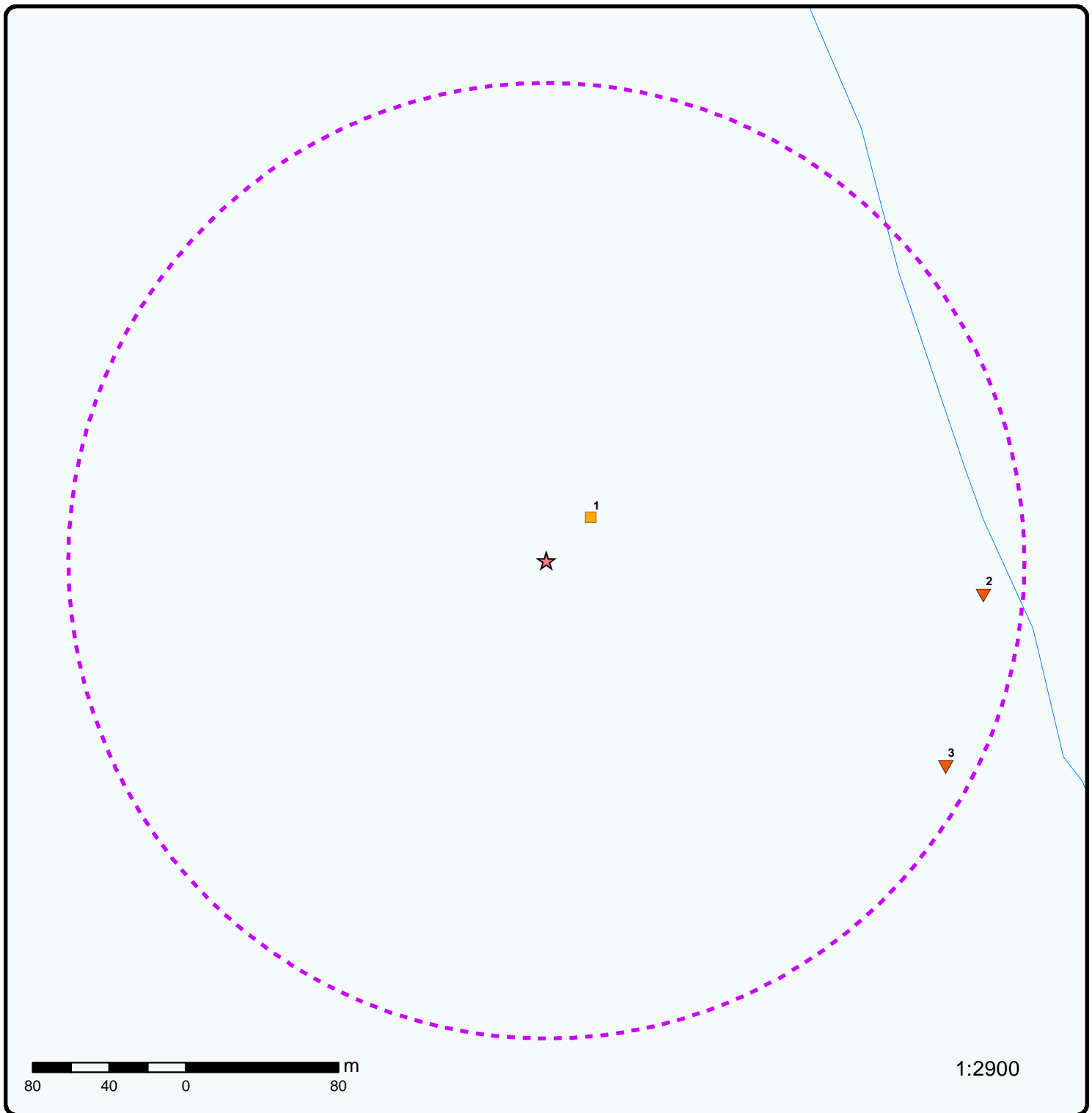
A search of the EHS database, dated 1999-Feb 28, 2018 has found that there are 1 EHS site(s) within approximately 0.25 kilometers of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	Rideau Rd & Spratt Rd Ottawa ON	ESE	235.07	<u>3</u>

WWIS - Water Well Information System

A search of the WWIS database, dated Mar 31, 2017 has found that there are 1 WWIS site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 22 con 1 ON	NE	32.57	<u>1</u>



Map : 0.25 Kilometer Radius

Order No: 20180322057

Address: Spratt Road, Ottawa, ON

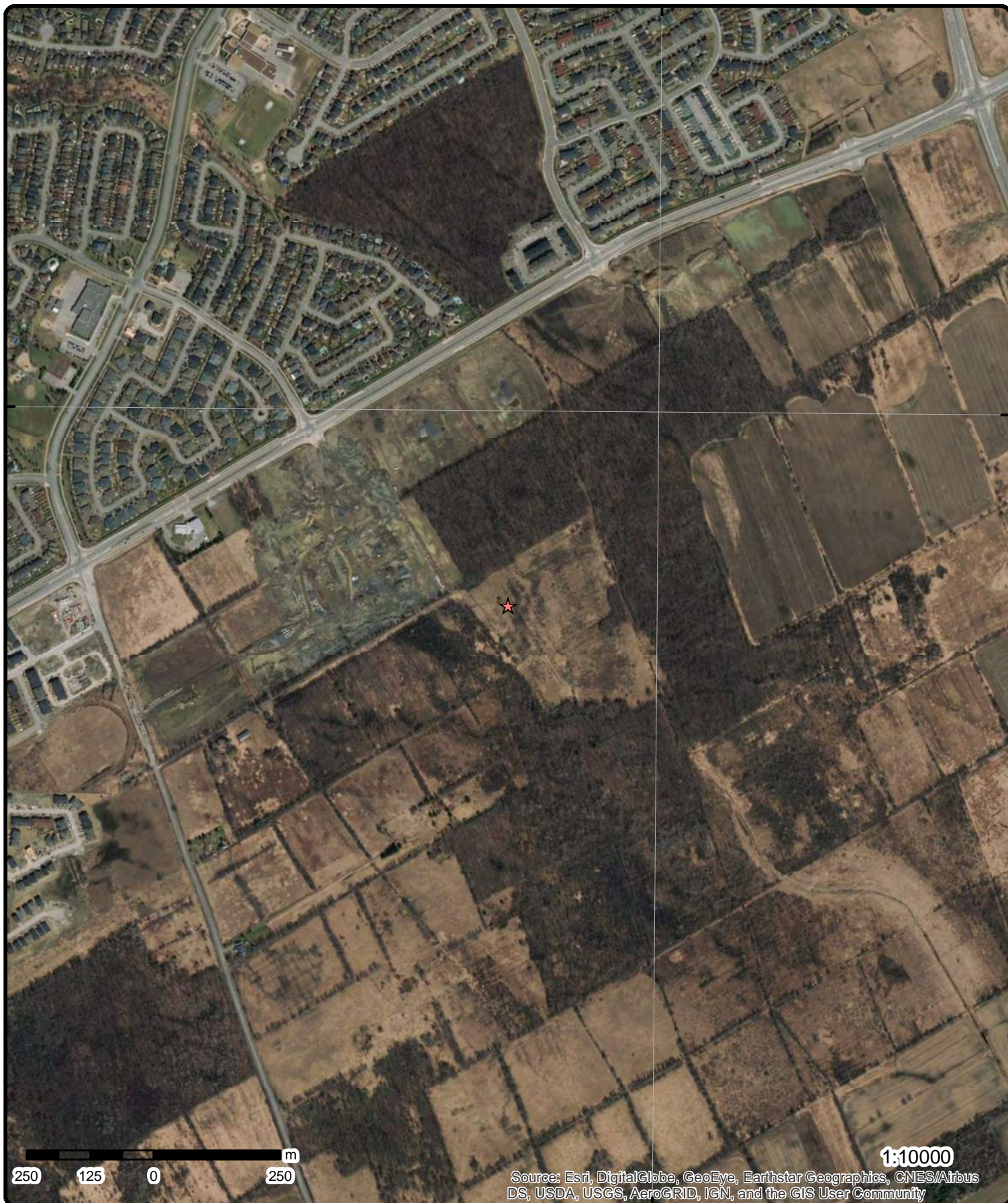


Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range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

75°40'30"W

45°16'30"N

45°16'30"N



Aerial (2016)

Address: Spratt Road, Ottawa, ON

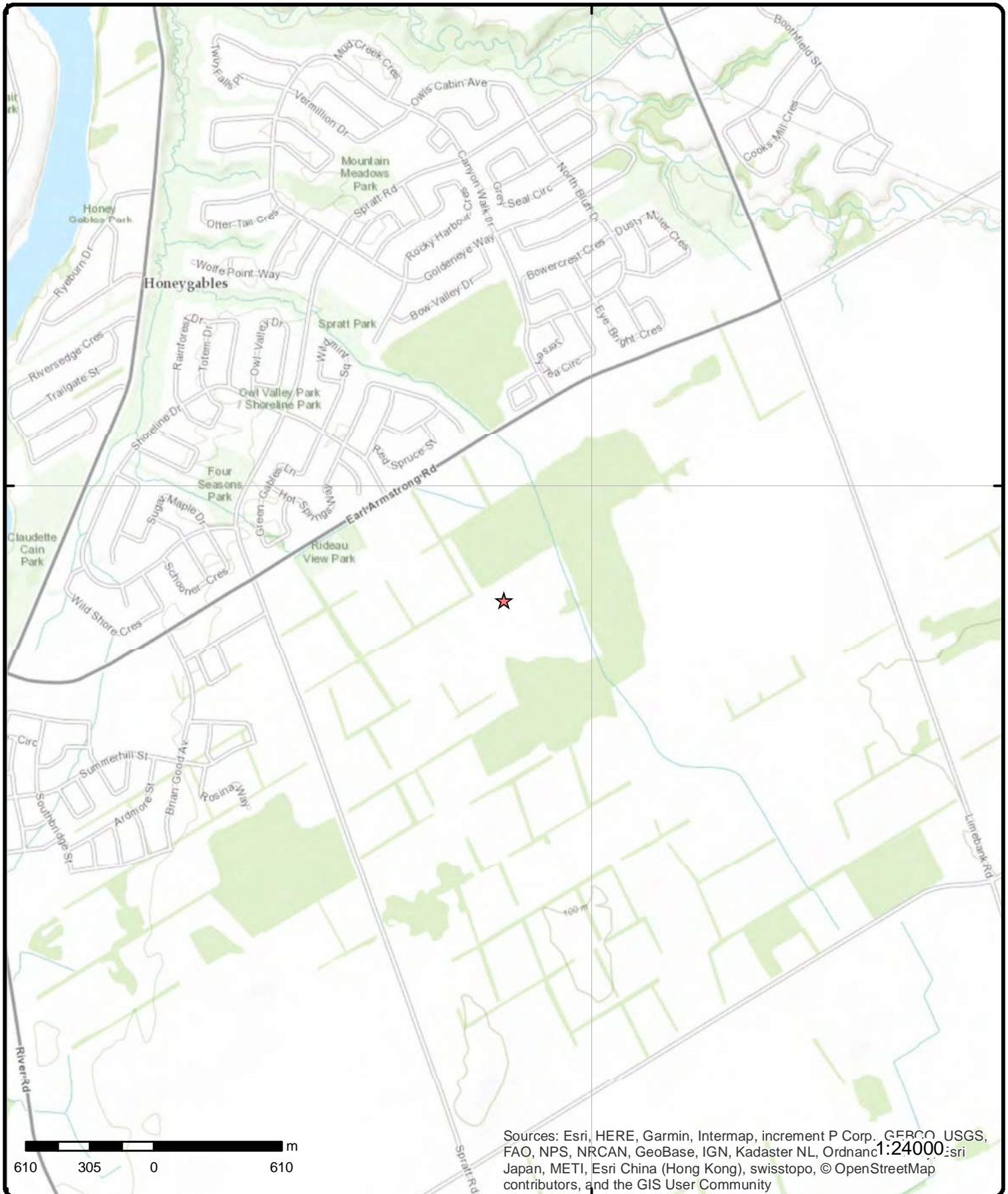
Source: ESRI World Imagery

Order No: 20180322057

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



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Topographic Map

Address: Spratt Road, Ottawa, ON

Source: ESRI World Topographic Map

Order No: 20180322057



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Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>1</u>	1 of 1	NE/32.6	94.9 / 0.00	lot 22 con 1 ON	WWIS
<div> <div> Well ID: 1509612 Construction Date: Primary Water Use: Domestic Sec. Water Use: 0 Final Well Status: Water Supply Water Type: Casing Material: Audit No: Tag: Construction Method: Elevation (m): Elevation Reliability: Depth to Bedrock: Well Depth: Overburden/Bedrock: Pump Rate: Static Water Level: Flowing (Y/N): Flow Rate: Clear/Cloudy: </div> <div> Data Entry Status: Data Src: 1 Date Received: 5/27/1968 Selected Flag: 1 Abandonment Rec: Contractor: 1504 Form Version: 1 Owner: Street Name: County: OTTAWA-CARLETON Municipality: GLOUCESTER TOWNSHIP Site Info: Lot: 022 Concession: 01 Concession Name: RF Easting NAD83: Northing NAD83: Zone: UTM Reliability: </div> </div>					
<u>Bore Hole Information</u>					
<div> <div> Bore Hole ID: 10031644 DP2BR: 29 Code OB: r Code OB Desc: Bedrock Open Hole: Elevation: 92.897941 Elevrc: Remarks: Elevrc Desc: Location Source Date: Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment: </div> <div> Spatial Status: Cluster Kind: UTMRC: 9 UTMRC Desc: unknown UTM Location Method: p9 Org CS: Date Completed: 5/15/1968 </div> </div>					
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
<div> <div> Formation ID: 931012568 Layer: 1 Color: 3 General Color: BLUE Mat1: 05 Most Common Material: CLAY Mat2: Other Materials: Mat3: Other Materials: </div> </div>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Formation Top Depth:		0.00			
Formation End Depth:		29.00			
Formation End Depth UOM:		ft			
Formation ID:		931012569			
Layer:		2			
Color:		2			
General Color:		GREY			
Mat1:		15			
Most Common Material:		LIMESTONE			
Mat2:					
Other Materials:					
Mat3:					
Other Materials:					
Formation Top Depth:		29.00			
Formation End Depth:		33.00			
Formation End Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		961509612			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		10580214			
Casing No:		1			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		930055932			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		32.00			
Casing Diameter:		5.00			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
Casing ID:		930055933			
Layer:		2			
Material:		4			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		33.00			
Casing Diameter:		5.00			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Results of Well Yield Testing</u>					
Pump Test ID:		991509612			
Pump Set At:					
Static Level:		3.00			
Final Level After Pumping:		20.00			
Recommended Pump Depth:		20.00			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pumping Rate: 18.00 Flowing Rate: Recommended Pump Rate: 6.00 Levels UOM: ft Rate UOM: GPM Water State After Test Code: 1 Water State After Test: CLEAR Pumping Test Method: 1 Pumping Duration HR: 2 Pumping Duration MIN: 0 Flowing: N					
<u>Water Details</u>					
Water ID: 933464488 Layer: 1 Kind Code: 1 Kind: FRESH Water Found Depth: 33.00 Water Found Depth UOM: ft					
<u>2</u>	1 of 1	E/229.3	91.9 / -3.00	Riverside South Development Corp, Urbandale Corporation, Richcraft & Homes Ltd. ON	EASR
Approval No: R-009-1110170558 Status: REGISTERED Date: 2017-06-29 Record Type: EASR Link Source: MOFA Full Address: Project Type: Water Taking - Construction Dewatering Approval Type: EASR-Water Taking - Construction Dewatering Full PDF Link: http://www.accessenvironment.ene.gov.on.ca/AEWeb/ae/ViewDocument.action?documentRefID=2038744					
SWP Area Name: Rideau Valley MOE District: Ottawa City: Latitude: 45.27138889 Longitude: -75.67583333					
<u>3</u>	1 of 1	ESE/235.1	92.8 / -2.04	Rideau Rd & Spratt Rd Ottawa ON	EHS
Order ID: 475433 Order No: 20160829056 Customer ID: 146890 Company ID: 50 Status: C Report Code: 4CAN Report Type: Custom Report Report Date: 02-SEP-16 Report Requested by: Golder Associates Ltd. Nearest Intersection: Previous Site Name: Additional Info Ordered:					
Date Received: 29-AUG-16 Lot/Building Size: Municipality: Client Prov/State: ON Search Radius (km): .25 Large Radius: .5 X: -75.676075 Y: 45.27058					

Unplottable Summary

Total: 3 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
WWIS		lot 21 con 1	ON	
WWIS		lot 22	ON	
WWIS		lot 22	ON	

Unplottable Report

Site: lot 21 con 1 ON **Database:** [WWIS](#)

Well ID:	1531407	Data Entry Status:	
Construction Date:		Data Src:	1
Primary Water Use:	Domestic	Date Received:	10/18/2000
Sec. Water Use:		Selected Flag:	1
Final Well Status:	Water Supply	Abandonment Rec:	
Water Type:		Contractor:	1558
Casing Material:		Form Version:	1
Audit No:	220943	Owner:	
Tag:		Street Name:	
Construction Method:		County:	OTTAWA-CARLETON
Elevation (m):		Municipality:	GLOUCESTER TOWNSHIP
Elevation Reliability:		Site Info:	
Depth to Bedrock:		Lot:	021
Well Depth:		Concession:	01
Overburden/Bedrock:		Concession Name:	CON
Pump Rate:		Easting NAD83:	
Static Water Level:		Northing NAD83:	
Flowing (Y/N):		Zone:	
Flow Rate:		UTM Reliability:	
Clear/Cloudy:			

Bore Hole Information

Bore Hole ID:	10052941	Spatial Status:	
DP2BR:	0	Cluster Kind:	
Code OB:	v	UTMRC:	9
Code OB Desc:	Overburden below Bedrock	UTMRC Desc:	unknown UTM
Open Hole:		Location Method:	na
Elevation:		Org CS:	
Elevrc:		Date Completed:	9/27/2000
Remarks:			
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock

Materials Interval

Formation ID:	931078401
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0.00
Formation End Depth:	12.00
Formation End Depth UOM:	ft

Formation ID: 931078402

Layer: 2
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 81
Other Materials: SANDY
Mat3:
Other Materials:
Formation Top Depth: 12.00
Formation End Depth: 32.00
Formation End Depth UOM: ft

Formation ID: 931078403
Layer: 3
Color: 2
General Color: GREY
Mat1: 28
Most Common Material: SAND
Mat2: 12
Other Materials: STONES
Mat3:
Other Materials:
Formation Top Depth: 32.00
Formation End Depth: 58.00
Formation End Depth UOM: ft

Formation ID: 931078404
Layer: 4
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 58.00
Formation End Depth: 150.00
Formation End Depth UOM: ft

**Annular Space/Abandonment
Sealing Record**

Plug ID: 933116576
Layer: 1
Plug From: 40.00
Plug To: 0.00
Plug Depth UOM: ft

**Method of Construction & Well
Use**

Method Construction ID: 961531407
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 10601511
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930092628
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To:
Casing Diameter: 6.00
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930092629
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To:
Casing Diameter: 6.00
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991531407
Pump Set At:
Static Level: 32.00
Final Level After Pumping: 75.00
Recommended Pump Depth: 125.00
Pumping Rate: 6.00
Flowing Rate:
Recommended Pump Rate: 5.00
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN:
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934113555
Test Type: Draw Down
Test Duration: 15
Test Level: 75.00
Test Level UOM: ft

Pump Test Detail ID: 934396059
Test Type: Draw Down
Test Duration: 30
Test Level: 100.00
Test Level UOM: ft

Pump Test Detail ID: 934657550
Test Type: Draw Down
Test Duration: 45
Test Level: 125.00
Test Level UOM: ft

Pump Test Detail ID: 934914441
Test Type: Draw Down
Test Duration: 60
Test Level: 145.00
Test Level UOM: ft

Water Details

Water ID: 933491848
Layer: 1
Kind Code: 5
Kind: Not stated
Water Found Depth: 69.00
Water Found Depth UOM: ft

Water ID: 933491849
Layer: 2
Kind Code: 5
Kind: Not stated
Water Found Depth: 142.00
Water Found Depth UOM: ft

Site:
lot 22 ON

Database:
WWIS

Well ID: 1521468
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 04608
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:
Clear/Cloudy:

Data Entry Status:
Data Src: 1
Date Received: 7/6/1987
Selected Flag: 1
Abandonment Rec:
Contractor: 1558
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: GLOUCESTER TOWNSHIP
Site Info:
Lot: 022
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10043290
DP2BR: 56
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Elevation:
Elevrc:
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Spatial Status:
Cluster Kind:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na
Org CS:
Date Completed: 4/30/1987

Overburden and Bedrock
Materials Interval

Formation ID: 931048154
Layer: 1
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 79
Other Materials: PACKED
Mat3:

Other Materials:
Formation Top Depth: 0.00
Formation End Depth: 17.00
Formation End Depth UOM: ft

Formation ID: 931048155
Layer: 2
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 79
Other Materials: PACKED
Mat3:
Other Materials:
Formation Top Depth: 17.00
Formation End Depth: 35.00
Formation End Depth UOM: ft

Formation ID: 931048156
Layer: 3
Color: 2
General Color: GREY
Mat1: 14
Most Common Material: HARDPAN
Mat2: 13
Other Materials: BOULDERS
Mat3: 79
Other Materials: PACKED
Formation Top Depth: 35.00
Formation End Depth: 50.00
Formation End Depth UOM: ft

Formation ID: 931048157
Layer: 4
Color: 2
General Color: GREY
Mat1: 28
Most Common Material: SAND
Mat2: 11
Other Materials: GRAVEL
Mat3:
Other Materials:
Formation Top Depth: 50.00
Formation End Depth: 56.00
Formation End Depth UOM: ft

Formation ID: 931048158
Layer: 5
Color: 2
General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 56.00
Formation End Depth: 125.00
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961521468
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10591860
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930075597
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 59.00
Casing Diameter: 6.00
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930075598
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 125.00
Casing Diameter: 6.00
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991521468
Pump Set At:
Static Level: 15.00
Final Level After Pumping: 35.00
Recommended Pump Depth: 60.00
Pumping Rate: 10.00
Flowing Rate:
Recommended Pump Rate: 5.00
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934106534
Test Type: Draw Down
Test Duration: 15
Test Level: 35.00
Test Level UOM: ft

Pump Test Detail ID: 934390634
Test Type: Draw Down
Test Duration: 30
Test Level: 35.00
Test Level UOM: ft

Pump Test Detail ID: 934651778
Test Type: Draw Down
Test Duration: 45
Test Level: 35.00

Test Level UOM: ft
Pump Test Detail ID: 934908869
Test Type: Draw Down
Test Duration: 60
Test Level: 35.00
Test Level UOM: ft

Water Details

Water ID: 933479044
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 122.00
Water Found Depth UOM: ft

Site:
lot 22 ON

Database:
WWIS

Well ID: 1527659
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 116662
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:
Clear/Cloudy:

Data Entry Status:
Data Src: 1
Date Received: 2/25/1994
Selected Flag: 1
Abandonment Rec:
Contractor: 1517
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: GLOUCESTER TOWNSHIP
Site Info:
Lot: 022
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10049286
DP2BR: 24
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Elevation:
Elevrc:
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Spatial Status:
Cluster Kind:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na
Org CS:
Date Completed: 11/27/1993

Overburden and Bedrock
Materials Interval

Formation ID: 931067346
Layer: 1
Color: 6
General Color: BROWN
Mat1: 28
Most Common Material: SAND

Mat2: 11
Other Materials: GRAVEL
Mat3: 12
Other Materials: STONES
Formation Top Depth: 0.00
Formation End Depth: 24.00
Formation End Depth UOM: ft

Formation ID: 931067347
Layer: 2
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2: 26
Other Materials: ROCK
Mat3: 73
Other Materials: HARD
Formation Top Depth: 24.00
Formation End Depth: 75.00
Formation End Depth UOM: ft

**Annular Space/Abandonment
Sealing Record**

Plug ID: 933112609
Layer: 1
Plug From: 0.00
Plug To: 23.00
Plug Depth UOM: ft

**Method of Construction & Well
Use**

Method Construction ID: 961527659
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10597856
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930086095
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 27.00
Casing Diameter: 6.00
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991527659
Pump Set At:
Static Level: 22.00
Final Level After Pumping: 30.00
Recommended Pump Depth: 50.00
Pumping Rate: 30.00

Flowing Rate:
Recommended Pump Rate: 10.00
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method: 2
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934111297
Test Type: Draw Down
Test Duration: 15
Test Level: 25.00
Test Level UOM: ft

Pump Test Detail ID: 934386113
Test Type: Draw Down
Test Duration: 30
Test Level: 28.00
Test Level UOM: ft

Pump Test Detail ID: 934655860
Test Type: Draw Down
Test Duration: 45
Test Level: 30.00
Test Level UOM: ft

Pump Test Detail ID: 934904231
Test Type: Draw Down
Test Duration: 60
Test Level: 30.00
Test Level UOM: ft

Water Details

Water ID: 933487180
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 60.00
Water Found Depth UOM: ft

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

AGR

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 2017

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-Nov 2016

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: 1999-Jan 31, 2018

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: Feb 28, 2017

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: 1999-Jan 31, 2018

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 2017

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-Oct 2017

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-Nov 30, 2017

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-Jan 31, 2018

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-Oct 2017

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-Jan 31, 2018

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-Feb 28, 2018

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

List of locations of historical occurrences of emergency events, including 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. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Dec 31, 2016

List of TSSA Expired Facilities:

Provincial

EXP

List of facilities with removed tanks which were once registered with the Fuels Safety Program of the Technical Standards and Safety Authority (TSSA). Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. Tanks which have been removed automatically fall under the expired facilities inventory held by TSSA.

Government Publication Date: Feb 28, 2017

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: Jun 2000-Dec 2017

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-Sep 2017

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: Feb 28, 2017

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-December 31, 2017

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 2015

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: Feb 28, 2017

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 2017

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, 2016

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 Pipeline Incidents:

Federal

NEBI

Locations of pipeline incidents from 2008 to present, made available by the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Dec 31, 2017

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-May 2017**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.

Government Publication Date: 1988-December 31, 2017**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 2017**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-Oct 2017**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-Aug 2017

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: Feb 28, 2017

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-Oct 2017

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: 1986-2016

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-Nov 2017

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: 1999-Jan 31, 2018

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-Sep 2017

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-Dec 31, 2016

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-Aug 2017

TSSA Variances for Abandonment of Underground Storage Tanks:

Provincial

VAR

List of variances granted for abandoned tanks. Under the Technical Standards and Safety Authority (TSSA) Liquid Fuels Handling Code and Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, an application may be sought for a variance from this code requirement.

Government Publication Date: Feb 28, 2017

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: Oct 2011-Jan 31, 2018

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: Mar 31, 2017

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.

Appendix E: Site Photographs



Photograph No. 1

View of the Phase One Property from the northwest corner facing east



Photograph No. 2

View of the Phase One Property from the central part of the Phase One Property facing southeast



Photograph No. 3

View of the Phase One Property from the central part of the Phase One Property facing west



Photograph No. 4

View of the Phase One Property from the northwest corner of the Phase One Property facing southeast



Photograph No. 5

View of the Phase One Property from the northeast corner of the Phase One Property facing northwest



Photograph No. 6

View of the approximate location of the former Phase One Property building



Photograph No. 7

View of some debris located along the property line in the central west side of the Phase One Property