



September 2017



REPORT ON

Phase One Environmental Site Assessment 5100 Kanata Avenue and 130 Goulbourn Forced Road Ottawa, Ontario

Submitted to:
Urbandale Corporation
2193 Arch Street
Ottawa, Ontario
K1G 2H5

REPORT

Report Number: 1783116-1000

Distribution:

4 copies - Urbandale Corporation
1 copy - Golder Associates Ltd.





Executive Summary

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

Golder Associates Ltd. (Golder) was retained by Urbandale Corporation (Urbandale) to conduct a Phase One Environmental Site Assessment (Phase One ESA) of the property located at 5100 Kanata Avenue and 130 Goulbourn Forced Road in Ottawa, Ontario (herein after referred to as the “Site” or “Phase One Property”) as shown on Figures 1 and 2. At the time of the Site visit, which was conducted on July 5, 2017, the Site consisted of an approximately 1.65 hectares of undeveloped land located at the northeastern corner of Goulbourn Forced Road and Kanata Avenue in Kanata (Ottawa) Ontario. It represents the southern half of a piece of land that has remained undeveloped as a subdivision has been built around it in the last 20 years. It has bedrock at the surface over part and a thin veneer of soil over the remainder. There were no buildings on the Site. There was no evidence of potentially contaminating activities on the Site. There is a high school directly south of the Site, which may have a backup generator, and another high school to the northwest of the site, which may also have a backup generator. The risk of contamination from such off-site sources is minimal. It is understood that the Phase One Property is to be redeveloped with a commercial plaza.

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

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

All responses to Golder’s request for information have now been received and summarized in this report. There were no material deviations to the Phase One ESA requirements set out in O.Reg. 153/04 that would cause uncertainty or absence of information that would affect the validity of the Phase One Conceptual Site Model or the findings of this Phase One ESA.



Table of Contents

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
1.1 Phase One Property Information	1
2.0 SCOPE OF INVESTIGATION.....	1
3.0 RECORDS REVIEW	2
3.1 General.....	2
3.1.1 Phase One Study Area Determination	2
3.1.2 First Developed Use Determination	2
3.1.3 Fire Insurance Plans	2
3.1.4 Chain of Title.....	2
3.1.5 City Directories	2
3.1.6 Environmental Reports	2
3.2 Environmental Source Information	3
3.2.1 EcoLog ERIS Report.....	3
3.2.2 Ministry of the Environment and Climate Change	5
3.2.3 City of Ottawa	6
3.2.4 Ministry of Natural Resources and Forestry (MNRF)	6
3.2.5 Technical Standards and Safety Authority, Fuel Safety Division Records	7
3.3 Physical Setting Sources	7
3.3.1 Aerial Photographs	7
3.3.2 Topography, Hydrology and Geology	8
3.3.3 Fill Materials.....	9
3.3.4 Water Bodies and Areas of Natural Significance	10
3.3.5 Well Records	10
3.4 Site Operating Records	11
4.0 INTERVIEWS.....	11
5.0 SITE RECONNAISSANCE	12
5.1 General Requirements.....	12
5.2 Specific Observations at Phase One Property.....	12
5.2.1 Enhanced Investigation Property	14
5.3 Surrounding Land Use.....	14
5.4 Written Description of Investigation	14



6.0 REVIEW AND EVALUATION OF INFORMATION..... 15

6.1 Current and Past Uses of the Site 15

6.2 Potentially Contaminating Activity..... 15

6.3 Areas of Potential Environmental Concern 15

6.4 Conceptual Site Model 15

6.4.1 Uncertainty and Absence of Information 17

7.0 CONCLUSIONS 17

7.1 Record of Site Condition Based on Phase One Environmental Site Assessment Alone 17

8.0 REFERENCES 18

9.0 LIMITATIONS AND USE OF REPORT 19

10.0 STATEMENT OF COMPLETION 19

11.0 CLOSURE 20

FIGURES

- Figure 1: Key Plan
- Figure 2: Site Plan
- Figure 3: Topographic Map and Areas of Natural Significance
- Figure 4: Surficial Geology
- Figure 5: Bedrock Geology
- Figure 6: Drift Thickness
- Figure 7: Soil Survey Complex (Ontario Soils)
- Figure 8: Physiography Map

APPENDICES

APPENDIX A

Regulatory Responses

APPENDIX B

EcoLog ERIS Report

APPENDIX C

Site Photographs

APPENDIX D

Aerial Photographs



1.0 INTRODUCTION

1.1 Phase One Property Information

Golder Associates Ltd. (Golder) was retained by Riverside South Development Corporation (RSDC) to conduct a Phase One Environmental Site Assessment (Phase One ESA) of the following property:

Municipal Address	5100 Kanata Avenue and 130 Goulbourn Forced Road
Property Identification Number	045111690 and 045111689
Legal Description	Block 111, Part of Lot 6, Concession 2, Ottawa, Ontario

The Site location is provided on the Key Plan (Figure 1). A Site plan is provided on Figure 2.

The contact information for the Site is:

Site Owner / Client	Address	Contact Information
Urbandale Corporation	2193 Arch Street Ottawa, Ontario K1G 2H5	Christa Jones Office: 613-731-6331 ext. 1240 Email: cjones@urbandale.com

2.0 SCOPE OF INVESTIGATION

A Phase One ESA is a preliminary qualitative assessment of the environmental condition of a property, based on a review of current activities and publically available historical information for the Site and a review of relevant and readily available environmental information for the surrounding properties located within a 250 metre (m) radius of the boundary of the Site (collectively referred to as the "Phase One Study Area"). The boundary of the Phase One Study Area is presented in Figures 1 and 2.

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

- 1) Develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in, or under the Site;
- 2) Determine the need for a Phase Two Environment Site Assessment (ESA);
- 3) Provide a basis for carrying out a Phase Two ESA;
- 4) Provide adequate preliminary information about environmental conditions in the land or water on, in, or under the Site for the conduct of a risk assessment following completion of a Phase Two ESA;
- 5) Identify and report on evidence of actual and/or potential contamination on the Site from current and historical activities at the Site or from adjacent properties;



3.0 RECORDS REVIEW

3.1 General

3.1.1 Phase One Study Area Determination

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

3.1.2 First Developed Use Determination

The date of first developed use of the Phase One Property was determined based on review of the aerial photographs, the EcoLog Environment Risk Information Service Ltd. (ERIS) report and information provided by the Site Representative. The Site visit determined that the Phase One Property is currently undeveloped vacant land, and shows no development in the aerial photographs from 1945, 1963 and 1983. In addition, the Site Representative reported that the Site has never been developed. Therefore, it was determined that the Phase One Property has never been developed.

3.1.3 Fire Insurance Plans

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

3.1.4 Chain of Title

From Golder's review of aerial photography and information provided by the Site Representative, the Phase One Property has never been developed and has been owned by Urbandale since September 30, 2008, prior to which it was owned by KNL Developments. Chain of Title information was not ordered as it was deemed that the other information from the records review would satisfy the objectives of the records search and that the information to be provided in a Chain of Title would not contribute additional environmental information relevant to the Phase One ESA.

3.1.5 City Directories

A significant amount of information for the Site and surrounding properties was obtained from the aerial photographs discussed in Section 3.3.1 of this report and provided in the City of Ottawa HLUI and the Ecolog ERIS report discussed in Sections 3.3.2 and 3.3.4, respectively. As such, street directories for the Site and surrounding lands were not reviewed as they would not likely provide any further information.

3.1.6 Environmental Reports

A previous Phase One ESA completed by Golder in 1999 for a larger area encompassing the Site and an Archaeology Study of the Phase One Site were available for review.



Phase I ESA, Kanata Lakes Land, Golder Associates Ltd. for Genstar Development Company, December 1999 (report 991-2530)

The subject area of the Golder 1999 Phase I ESA was 348 hectares, and included the Site (Block 111) plus land to the north of the Site on both sides of Goulbourn Forced Road as well as isolated parcels south of the Site. The Golder 1999 Phase I ESA was carried out to facilitate the sale of the property by Genstar (to un-named parties). The Phase I ESA followed the 1994 CSA Standard Z768-94 for Phase I ESAs. The vast majority of the subject area was undeveloped at the time of the site reconnaissance (November 1999). The interview with the representative from Genstar yielded information about a Mica mine potentially existing on the subject lands in the past, but its location could not be pinpointed. There were no environment issues reported by the agencies contacted. The only area of potential environmental concern identified on the subject area was surficial staining around an above-ground oil storage tank on Parcel 3B. The stained area was about 1 kilometre north of the current Site, on the west side of Goulbourn Forced Road. This positions it down-gradient of the Site. The Golder 1999 Phase I ESA contains no issues or concerns for the current Site.

Stage 1 Archaeological Assessment Kanata Lakes Plaza, Part of Lot 6, Concession 2, March Township, Carleton County, City of Ottawa, Ontario

The Stage 1 Archaeological report pertains to exactly the same site as the current Site. It was completed with both documentary research and a site reconnaissance visit. It found archaeological potential include evidence of historical occupation within the immediate vicinity of the property beginning in the mid-19th century by the Nesbit family and Goulbourn Forced Road, which is considered to be a historically significant transportation route.

Although these criteria identifying archaeological potential within the subject property are present, both the 2005 aerial photograph and the documentation from the visual site inspection completed on July 5, 2017, have identified the entire study area to have been significantly disturbed by previous construction activities with no portions of the subject property retaining potential to recover in situ archaeological resources. As a consequence, it was recommended that the Ministry of Tourism, Culture and Sport (MTCS) issue a letter concurring that no additional archaeological investigations are required for the study area.

3.2 Environmental Source Information

3.2.1 EcoLog ERIS Report

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

The databases searched included the following:

Federal	Provincial	Private
<ul style="list-style-type: none"> ▪ Contaminated Sites on Federal Land ▪ Environmental Effects Monitoring ▪ Environmental Issues Information System ▪ Federal Convictions ▪ Fisheries & Oceans Fuel Storage Tanks 	<ul style="list-style-type: none"> ▪ Abandoned Aggregate Inventory ▪ Abandoned Inventory ▪ Aggregate Mine Information System ▪ Borehole ▪ Certificates of Approval ▪ Certificates of Property Use ▪ Commercial Fuel Oil Tanks ▪ Compliance and Convictions 	<ul style="list-style-type: none"> ▪ Anderson's Storage Tanks ▪ Anderson's Waste Disposal Sites ▪ Automobile Wrecking & Supplies ▪ Canadian Mine Locations ▪ Canadian Pulp and Paper ▪ Chemical Register



PHASE ONE ESA
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD

Federal	Provincial	Private
<ul style="list-style-type: none"> ▪ Indian & Northern Affairs Fuel Tanks ▪ National Analysis of Trends in Emergencies System (NATES) ▪ National Defence & Canadian Forces Fuel Storage Tanks ▪ National Defence & Canadian Forces Spills ▪ National Defence & Canadian Forces Waste Disposal Sites ▪ National Environmental Emergencies System (NEES) ▪ National PCB Inventory ▪ National Pollutant Release Inventory ▪ Parks Canada Fuel Storage Tanks ▪ Transport Canada Fuel Storage Tanks 	<ul style="list-style-type: none"> ▪ Drill Hole Database ▪ Environmental Activity and Sector Registry ▪ Environmental Compliance Approval ▪ Environmental Registry ▪ Fuel Storage Tank ▪ Fuel Storage Tank – Historic ▪ Inventory of Coal Gasification Plants and Tar Sites ▪ Inventory of PCB Storage Sites ▪ Landfill Inventory Management Ontario ▪ List of TSSA Expired Facilities ▪ Mineral Occurrences ▪ Non-Compliance Reports ▪ Ontario Oil and Gas Wells ▪ Ontario Regulation 347 Waste Generators Summary ▪ Ontario Regulation 347 Waste Receivers Summary ▪ Ontario Spills ▪ Orders ▪ Permit to Take Water ▪ Pesticide Register ▪ Private and Retail Fuel Storage Tanks ▪ Record of Site Condition ▪ TSSA Historic Incidents ▪ TSSA Incidents ▪ TSSA Pipeline Incidents ▪ TSSA Variances for Abandonment of Underground Storage Tanks ▪ Waste Disposal Sites – MOECC 1991 Historical Approval Inventory ▪ Waste Disposal Sites – MOECC CA Inventory ▪ Wastewater Discharger Registration Database ▪ Water Well Information System 	<ul style="list-style-type: none"> ▪ ERIS Historical Searches ▪ Oil and Gas Wells ▪ Retail Fuel Storage Tanks ▪ Scott's Manufacturing Directory

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

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

On-Site

Noteworthy records for the Phase One Property included the following:



- Abandoned Mine Information System (AMIS) – There is one record of the Site in the AMIS database. The record indicated that the Site was used as a feldspar quarry. The record also indicated that this quarry began operation in 1919 and that it is currently abandoned;
- ERIS Historical Searches (EHS) – The Ecolog ERIS report identified two historical search listings that were completed for the Site; and,
- Water Well Information System (WWIS) – There is one water well listing on the Site. The well was constructed on the central portion of the Site in September 1984 to a depth of 15.24 mbgs for domestic water supply purposes. The static water level was not provided.

Surrounding Properties within 250 metres of the Site

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

- Certificates of Approval (CA) – There are five Certificates of Approval (C of As) listings within the Phase One Study Area. The C of As were issued for municipal water, private sewage and/or municipal sewage;
- ERIS Historical Searches (EHS) – The Ecolog ERIS report identified two historical search listings that were completed within the Phase One Study Area.
- Ontario Regulations 347 Waste Generators Summary (GEN) – A school located approximately 40 m south of the Site was identified as a waste generation site. The records indicate that the school was approved as a waste generator of various wastes between 2003 and 2016 (excluding 2014). The waste classes are included in the ERIS report in Appendix B;
- TSSA Incidents (INC) – There is a record of one TSSA incident within the Phase One Study Area. The record was for a natural gas release that occurred in 2012 at a private residence located at 242 Badgeley Avenue (approximately 200 m southwest of the Site);
- Mineral Occurrences (MNR) – The Ecolog ERIS report identified two mineral occurrences within the Phase One Study Area. One was a molybdenum occurrence approximately 90 m west of the Site in 1993 and the other was a feldspar, molybdenum, thorium, uranium and zinc occurrence approximately 210 m northeast of the Site in 1986; and,
- Water Well Information System (WWIS) – There are three water well listings within the Phase One Study Area. They were constructed between June 1976 and August 2006. One water well was completed to a depth of 73.15 mbgs and one was completed to a depth of 153.92 mbgs. The depth of the other water well was not provided. The static water levels were not provided.

The Ecolog ERIS report indicated that the Site was formerly used as a feldspar mine or quarry. However, given that bedrock was exposed at surface on the Site at the time of the Site visit and no significant pits or shafts were observed, it is unlikely that any mining occurred on the Site. Thus the Ecolog ERIS report has not resulted in any on-Site or off-Site potentially contaminating activities (PCAs).

3.2.2 Ministry of the Environment and Climate Change

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



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

A response was received from the MOECC on July 19, 2017. It was reported that there are no active orders are outstanding for the Site. It was also noted that one Environmental Compliance Approval was issued to Urbandale Corporation for air in June 2017.

3.2.3 City of Ottawa

Golder completed a review of the City of Ottawa Historical Land Use Inventory (HLUI) for the Site and surrounding area. Based on the review of the City of Ottawa HLUI, the only noteworthy record was for a feldspar mine that was reportedly located on a huge portion of land that included the Site, the adjacent lands north and northeast of the Site within the Phase One Study Area as well as the lands located north and northeast of the Site beyond the Phase One Study Area. The record indicated that the feldspar mine was in operation on these lands between 1919 and 1920. However, given that the mine was reportedly located on a much larger portion of land than the Site and that bedrock outcrops were observed at the Site at the time of the Site visit, it is unlikely that any mining occurred on the Site.

3.2.4 Ministry of Natural Resources and Forestry (MNRF)

An information request was sent to the Ministry of Natural Resources and Forestry (MNRF) on June 24, 2017. Records requested included any information relating to areas of natural significance in the vicinity of the Site, as well as any other environmental concerns that may be related to the Site and surrounding area.

The MNRF responded to our request on August 18, 2017. The following Natural Heritage values were identified for the *general subject area*:

- Candidate ANSI, Life Science, South March Highlands (Provincial)
- Evaluated Wetland, Kizel Drain Wetland Complex (Evaluated-Provincial)
- Unevaluated Wetland (Not evaluated per OWES)
- Wintering Area, Deer Yard (Stratum 1) (Non-Sensitive)

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

- Blanding's Turtle (THR)
- Bobolink (THR)
- Butternut (END)
- Loggerhead Shrike (END)
- Whip poor will (THR)
- Eastern Meadowlark (THR)

The MNRF strongly encourages all proponents to contact partner agencies and appropriate municipalities early on in the planning process and the MNRF strongly recommends that an ecological site assessment be carried out to determine the presence of natural heritage features and species at risk and their habitat on site.



3.2.5 Technical Standards and Safety Authority, Fuel Safety Division Records

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

Ms. Roxana Mashtaler of the TSSA replied on June 28, 2017 and indicated that the TSSA did not have any records for the addresses searched for the Phase One Property or in the Phase One Study Area

3.3 Physical Setting Sources

3.3.1 Aerial Photographs

Aerial photographs of the Site and neighbouring properties were obtained from the National Air Photo Library (Natural Resources Canada) for the years 1945, 1963 and 1983. In addition, the aerial photographs from 1991, 2002, 2011 and 2014 from the City of Ottawa geo-map (<http://maps.ottawa.ca/geoOttawa/>) were reviewed on-line. Golder selected aerial photographs based on availability and date intervals to help develop an understanding of the history of the development of the Phase One Property and Phase One Study Area. The information obtained from the aerial photographs was limited by the quality and scale of the available aerial photographs. The earliest aerial photograph available was from 1945. The aerial photographs from 1945, 1963 and 1983 are included in Appendix D.

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

Year	Phase One Site	Surrounding Area
1945	The Site is occupied by scrub vegetation. Narrow track roads are present for Goulbourn Forced Road and Kanata Avenue	<p>North: Sparse forested land. No development. Goulbourn Forced Road continues north.</p> <p>East: Denser forested land. Kanata Ave continues east.</p> <p>South: Cleared land, one farm house near south-west corner of Goulbourn Road and Kanata Ave.</p> <p>West: Cleared land near intersection of Goulbourn Forced Road and Kanata Ave., followed by forested land. Kanata Ave. continues west.</p>
1963	As per 1945.	<p>North and East: As per 1945. Kanata Ave has increased in width.</p> <p>South: As per 1945.</p> <p>West: The northwestern portion of the Phase One Study Area has agricultural activity on it.</p>
1983	As per 1963.	<p>North and East: As per 1963. Goulbourn Forced Road has now increased in width.</p> <p>South: Similar to 1963.</p> <p>West: As per 1963</p>



Year	Phase One Site	Surrounding Area
1991 City of Ottawa geomap	As per 1983.	North: No development observed East: Residential sub-divisions under construction just east of Phase One Study Area. South: Large scale clearing under way south-east of site within Phase One Study Area for a sub-division. West: Some clearing taking place northwest of Phase One Site
2002 City of Ottawa geomap	Site has been cleared of scrub vegetation and soil in places.	North: Clearing has occurred 500 m north of Site. East: Retirement home is now present directly east of Site. Residential sub-divisions now built on east side of Phase One Study Area. South: School is present due south of Site. West: Land is all cleared but not built.
2011 City of Ottawa geomap	Rocky ground exposed at south-west corner of Site.	North: Site directly north of Site still undeveloped. Land north of that developed into townhouses. East: Retirement home and residential sub-divisions now built on east side of Phase One Study Area. South: School present followed by field then more homes. West: Residential subdivision now present.
2014 City of Ottawa geomap	Site has now lightly revegetated.	North: As per 2011 East: As per 2011 South: As per 2011 West: Now houses are present on west side of Goulbourn Forced road, directly west of Site.

Based on the aerial photographs, the Phase One Site has never been developed. It appears to have shallow bedrock which has been exposed in places. The area surrounding the Site has been developed between 1991 and 2011. It is entirely residential except for the school directly south of the Site, and a municipal building north-west of the Site.

The aerial photograph review of the Site and surrounding area (within approximately 250 m) did not identify any PCAs on the Site or within the Phase One Study Area.

3.3.2 Topography, Hydrology and Geology

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



**PHASE ONE ESA
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD**

Topic	Conditions	Comment / Source
Topography of Site and Surrounding Area	The Site has a slight depression in its centre. The general topography of the Site and surrounding area has an downward slope to the south. There are no identified areas of natural and scientific interest within the Phase One Study Area.	Site and surrounding area observations and Figure 3 – Topographic Map and Areas of Natural and Scientific Interest.
Overburden Soils	The geological mapping indicates that there is no native subsurface soil on the Site and that the Site is underlain by intrusive and metamorphic bedrock.	Figure 4 – Surficial Geology. Bélanger, J. R. 2008 Urban Geology of the National Capital Area, Geological Survey of Canada, Open File 5311, 1 DVD.
Type of Bedrock	Precambrian	Figure 5 – Bedrock Geology. Armstrong, D.K. and Dodge, J.E.P. 2007. Paleozoic Geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release – Data 219
Depth to Bedrock	The depth to bedrock is expected to be between 0 and 1 mbgs.	Figure 6 – Drift Thickness. 2010 Bélanger, J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open File D3256, 2001
Inferred Near Surface Groundwater Flow	Groundwater and surface water on the site is anticipated to flow towards the centre which is currently lower than the periphery. Regional groundwater is expected to flow north towards some marshy ground located approximately 750 m north of the Site.	Site and surrounding area observations, Figure 1 – Key Plan and Figure 3 – Topographic Map and Areas of Natural Significance
Site Grade Relative to the Adjoining Properties	The Site appears to follow the topography of the area and is at the grade of the surrounding properties east and west of the Site. It is above the grade of land to the south.	Site and surrounding area observations and Figure 3 – Topographic Map and Areas of Natural Significance
Depth to Groundwater	Not identified.	N/A

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

3.3.3 Fill Materials

Topic	Conditions	Comment / Source
Fill Materials	No fill materials were observed or reported.	Site observations



Topic	Conditions	Comment / Source
	Bedrock had been ripped from part of the site and was being used to fill in the low area in the centre and on the west side of the Site.	

3.3.4 Water Bodies and Areas of Natural Significance

Topic	Conditions	Comment / Source
Nearest Open Water Body	The nearest open water body is Beaver Pond which is located approximately 750 m northeast of the Site.	Site observations and Figure 1 – Key Plan
Areas of Natural Significance	<p>No areas of natural and scientific interest (ANSI) are known to be located on the Site or on the Phase One Study Area.</p> <p>The MNRF responded to our request on August 18, 2017. The following Natural Heritage values were identified for the <i>general subject area</i>:</p> <ul style="list-style-type: none"> ■ Candidate ANSI, Life Science, South March Highlands (Provincial) ■ Evaluated Wetland, Kizel Drain Wetland Complex (Evaluated-Provincial) ■ Unevaluated Wetland (Not evaluated per OWES) ■ Wintering Area, Deer Yard (Stratum 1) (Non-Sensitive) <p>Golder is aware that the South March Highlands are approximately 750 m north of the Site.</p>	Figure 3 (Topographic Map and Areas of Natural Significance)

3.3.5 Well Records

Topic	Conditions	Comment / Source
Water Wells on Site (location, stratigraphy of the overburden, from ground surface to bedrock, depth to bedrock, depth to water table, drilling date, use)	Based on the EcoLog ERIS report, one water well has been located on the Site. This water well was reportedly constructed on the central portion of the Site in September 1984 to a depth of 15.24 mbgs; however, no water wells were observed on the Site at the time of the Site visit.	EcoLog ERIS Report and Site observations
Water Wells on the Neighbouring Properties (location, stratigraphy of the overburden, from ground surface to bedrock, depth to bedrock, depth to water table, drilling rate, use)	Based on the EcoLog ERIS report, There are three water well listings within the Phase One Study Area. They were constructed between June 1976 and August 2006. One water well was completed to a depth of 73.15 mbgs and one was completed to a depth of 153.92 mbgs. The depth of the other water well was not provided. The static water levels were not provided.	EcoLog ERIS Report



3.4 Site Operating Records

At the time of the Site visit, the Phase One Property was undeveloped. No Site operating records were provided to Golder for review.

4.0 INTERVIEWS

At the time of the Site visit, Golder conducted an interview with Christa Jones of Urbandale (hereinafter referred to as the "Site Representative") to discuss information about the historical and current activities carried out on the Site. Pursuant to the requirements O.Reg. 153/04, the Site Representative was interviewed as the "current owner" with knowledge of current Site operations. The following are the questions asked and responses from the Site Representative:

- 1) Has the Site ever been developed?

Not to my knowledge – it is vacant land

- 2) What was the historical and current use of the land?

Currently vacant. Historically it may have been part of a farm (Reference Archaeological Assessment)

- 3) Have any activities (i.e., construction, installation of utilities, etc.) occurred on the Site? There is reference to a Feldspar mine.

To our knowledge no activities have occurred on our portion of Block 111. There is a retirement home that will be commencing work on the north half of block 111. Urbandale has no knowledge of a Feldspar Mine.

- 4) Does Urbandale currently own the Site? If so, when did they acquire the Site and who was the previous owner?

Urbandale Corporation currently owns Block 111. According to the property identifier, KNL Developments transferred Block 111 to Urbandale on September 30th 2008

- 5) Has any been any illegal dumping on the Site?

Not to our knowledge.

- 6) Has any fill material been placed on the Site? If so, where and when was the fill material on the Site and where did it come from? There is a fill pile on the north side. Is the origin of that fill known?

Possibly, because most of the Site was blasted when KNL phase 2 (4M-1170) was developed. I believe we've left rocks and such on the property but I'm not positive if any fill was put on here by accident. The fill pile to the north could be for the retirement home. They bought part 1 from Urbandale on the attached 4R plan.

- 7) Have there ever been any aboveground or underground storage tanks on the Site? If so, can you please provide details (i.e., contents, size, location, etc.)

To Urbandale's knowledge there have not been any above ground or underground storage tanks.

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



5.0 SITE RECONNAISSANCE

5.1 General Requirements

Don Plenderleith of Golder visited the Site on July 5, 2017. The Site visit consisted of a walk-around the Site along the north, west and south limits and a cursory inspection of surrounding properties from the Site and publicly accessible areas. The weather conditions were sunny and the temperature was approximately 20°C. At the time of the Site visit, the Site was undeveloped however equipment was working moving the ripped bedrock into the low-lying part of the Site in the centre and west side.

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

5.2 Specific Observations at Phase One Property

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

Topic	Observations	Source
Structures Number and Age of Buildings on the Site	No buildings or structures were present on the Site.	Site observations and Site Representative
General Descriptions of Each Building (including improvements)	Not applicable.	Site observations and Site Representative
Building Areas	Not applicable.	Site observations
Number of Floors (include all levels, whether above or below ground)	Not applicable.	Site observations
Number, Age, and Depth of Levels Below Ground Level	Not applicable.	Site observations
Number and Details of all Aboveground Storage Tanks (ASTs)	No evidence (fill/vent pipes extending through walls or slabs/ground surface, no staining or any obvious odours) was observed during the Site visit to indicate the current or former presence of fuel or chemical ASTs on the Site.	Site observations and Site Representative
Number and Details of all Underground Storage Tanks (USTs)	No evidence (fill/vent pipes extending through walls or slabs/ground surface, no staining or any obvious odours) was observed during the Site visit to indicate the current or former presence of fuel or chemical USTs on the Site.	Site observations and Site Representative
Underground Utilities Potable and Non-Potable Water Sources	The Site is currently not connected to the municipal water supply. There were no non-potable water sources identified at the Site at the time of the Site visit.	Site observations
Utility Lines Present (i.e., Electrical, Natural Gas, other)	None identified.	Site observations
Sanitary/Process Wastewater Receptor	No sanitary or process wastewater is generated on-Site.	Site observations
Sanitary Sewer Connection	The Site is currently not connected to the municipal sanitary sewer.	Site observations



PHASE ONE ESA
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD

Topic	Observations	Source
Septic Systems	None identified.	Site observations
Storm Water Flow	Storm water run-off is through natural run-off to the south.	Site observations
Storm Sewer Connection	The Site is not connected to the municipal storm sewer.	Site observations
<u>Interior of Structures</u> Entry and Exit Points for Site Buildings	No buildings or structures were present on the Site.	Site observations
Existing and Former Heating System(s) (include fuel type / source)	As no buildings or structures were present on the Site, there were no existing heating systems observed or reported.	Site observations
Existing and Former Cooling System(s) (include fuel type / source)	As no buildings or structures were present on the Site, there were no existing cooling systems observed or reported.	Site observations
Drains, Pits, and Sumps (include current use, if any, and former use)	As no buildings or structures were present on the Site, there were no drains, pits, or sumps observed or reported.	Site observations
Unidentified Substances	None identified.	Site observations
Floor Stains or Corrosion Located near a Potential Discharge Location	None identified.	Site observations
<u>Miscellaneous Exterior</u> Location of any Current and Former Wells	None identified.	Site observations
Ground Cover (i.e., grass, gravel, soil, or pavement, etc.)	The Site had grass and scrub trees in areas that were not exposed bedrock.	Site observations
Current or Former Railway Lines or Spurs	None observed or reported.	Site observations
Presence of Stained Soil, Vegetation, or Pavement	None observed.	Site observations
Presence of Stressed Vegetation	None observed.	Site observations
Areas Where Fill and/or Debris Materials Appear to Have Been Placed	Large ripped bedrock from the Site was being used to level the low central area. A pile of sand fill is present on the adjoining site to the north.	Site observations
Potentially Contaminating Activity	None identified.	Site observations and Site Representative
Unidentified Substances	None identified.	Site observations



5.2.1 Enhanced Investigation Property

The Site has never been developed and is therefore not considered to be an enhanced investigation property as defined by O. Reg. 153/04.

5.3 Surrounding Land Use

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

The surrounding properties include residential and institutional (school) land uses as well as greenspaces/vacant land, as illustrated on Figure 2.

North: Vacant area recently cleared of trees, with a pile of sand fill located approximately 50 m north of the Site (PCA #1) followed by single family dwellings followed by the Beaver Pond. There is a high school located to the northwest of the Site, within the Phase One Study Area. It may have a backup generator, but it would only have a small fuel tank and is not considered a Potentially Contaminating Activity (PCA).

East: Retirement home at south-east corner of Site, single family dwellings to north east and east side, followed by more single family dwellings.

South: Institutional land use (All Saints Catholic High School) to southern limit of Phase One Study Area, followed by a band of undeveloped land, followed by a subdivision. There may be a backup generator at the high school, but it would only have a small fuel tank and is not considered a PCA.

West: Goulbourn Forced Road followed by a grassy strip, followed by multi-unit residences (townhouses), followed by a subdivision.

Only the sand fill off-site constitutes a PCA. There were no on-site PCAs or APECs identified.

5.4 Written Description of Investigation

The Site covers 1.65 hectares and is located at the northeastern corner of Goulbourn Forced Road and Kanata Avenue in Kanata (Ottawa) Ontario. It represents the southern half of a piece of land that has remained undeveloped as a subdivision has been built around it in the last 20 years. It has bedrock at the surface over part and a thin veneer of soil with grass and shrub vegetation over the remainder. At the time of the Site visit, which was conducted on July 5, 2017, there were no buildings on the Site. Earthmoving equipment was moving ripped bedrock into the low-lying area in the centre of the Site and on the west side of the Site. There was no evidence of potentially contaminating activities on the Site. There is a high school directly south of the Site, which may have a backup generator, and another high school to the northwest of the site, which may also have a backup generator. The risk of contamination from such off-site sources is minimal.

It was noted during the Site visit that a stockpile of sand is located approximately 50 m north of the Site. It looked like clean uniform material without debris or evidence of contamination. It is noted as PCA #1.



6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Current and Past Uses of the Site

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

Year(s)	Name of Owner(s)	Description of Property Use	Property Land Use according to Reg.153/04	Other Observations from Aerial Photographs, Fire Insurance Plans, Etc.
Prior to 2008	The Site was owned by KNL Developments until September 2008 when it was transferred to Urbandale.	Undeveloped	Agricultural or other use	The 1945, 1963, 1983, 1991 and 2002 aerial photographs show that the Site is undeveloped vacant land. No aerial photograph coverage was available for prior to 1945.
2008 to Present (2017)	Urbandale	Undeveloped	Agricultural or other use	The 2011 and 2014 aerial photographs show that the Site is still undeveloped vacant land. At the time of the Site visit, the Site was still undeveloped. It had exposed bedrock in places and some grass and shrub vegetation in other places. The Urbandale Site Representative indicated that to their knowledge the Site has never been developed.

6.2 Potentially Contaminating Activity

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

Location	Potentially Contaminating Activity	Information Source	Rationale for Potential Contribution of the PCA to an APEC
Phase One Study Area	#30. Importation of Fill Material of Unknown Quality – A stockpile of sand fill material is currently located approximately 50 m north of the Site.	Site observations	Given the distance between this PCA and the Site and that it appeared to be clean, debris-free uniform material, it is not considered to be a PCA that will result in an APEC on the Site.

6.3 Areas of Potential Environmental Concern

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



6.4 Conceptual Site Model

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

The combined set of figures shows:

- Existing buildings and structures (all off-site)
- Water bodies and Areas of Natural and Scientific Interest (if present) located in the Phase One Study Area
- Drinking water wells on the Phase One Property (none)
- Roads (including names) within the Phase One Study Area
- Uses of properties adjacent to the Phase One Property
- Location of identified PCAs in the Phase One Study Area (including any storage tanks)

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

- At the time of the Site visit, which was conducted on July 5, 2017, the Site consisted of an approximately 1.65 hectares of undeveloped land located at the northeastern corner of Goulbourn Forced Road and Kanata Avenue in Kanata (Ottawa) Ontario. It represents the southern half of a piece of land that has remained undeveloped as a subdivision has been built around it in the last 20 years. It has bedrock at the surface over part and a thin veneer of soil over the remainder. There were no buildings on the Site. There was no evidence of potentially contaminating activities on the Site. There is a high school directly south of the Site, which may have a backup generator, and another high school to the northwest of the site, which may also have a backup generator. The risk of contamination from such off-site sources is minimal.
- It was noted during the Site visit that a stockpile of sand is located approximately 50 m north of the Site. It looked like clean uniform material without debris or evidence of contamination.
- According to the Ecolog ERIs report, one water well has been located on the central portion of the Site. This water well was reportedly constructed in September 1984 to a depth of 15.24 mbgs for domestic water supply purposes; however, no water wells were observed on the Site at the time of the Site visit.
- No piles of fill were observed on the Site at the time of the Site visit.
- The nearest open water body is Beaver Pond which is located approximately 750 m northeast of the Site.
- No areas of natural and scientific interest (ANSI) are known to be located on the Site or on the Phase One Study Area. Based on available information, the Site is not considered to be an environmentally sensitive area. However, there are environmentally sensitive areas to the north of it.
- At the time of the Phase One ESA, the surrounding properties within the Phase One Study Area were comprised of residential and institutional land uses;



- The following roads were located within the Phase One Study Area at the time of the Site visit:
 - Kanata Avenue, Goulbourn Forced Road, Manning Court, Broughton Street, Bryant Street, Leverton Road, Weaver Crescent, Walden Drive, Kennis Crescent, Harrington Court, Remnor Avenue, Badgeley Avenue and Tischart Crescent;
- The geological mapping indicates that there is no native subsurface soil on the Site and that the Site is underlain by intrusive and metamorphic bedrock. The type of bedrock at the Site is Precambrian. The Site reconnaissance revealed that there is some soil cover and scrub vegetation.
- Groundwater on-site is expected to flow towards the center of the Site, and regional groundwater is anticipated to flow northeast towards Beaver Pond located approximately 750 m northeast of the Site; and,
- The only off-site PCA was a pile of sand fill located approximately 50 m north of the Site. However, given the distance between this PCA and the Site and that it appeared to be clean, debris-free uniform material, it is not considered to be a PCA that will result in an APEC on the Site.
- There were no PCAs on-site that may have resulted in an APEC on the Site.

6.4.1 Uncertainty and Absence of Information

There were no areas of the Site that were inaccessible, and all responses to the regulatory requests have been received.

7.0 CONCLUSIONS

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

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

Given that the Phase One Property is currently undeveloped and is to be redeveloped with a commercial plaza, there will be not be a change in the land use from less sensitive to more sensitive. As such, there is no mandatory requirement for a RSC to be filed for the Site.



8.0 REFERENCES

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

Source	Date
Ontario Regulation 153/04 as amended	October 31, 2011
Bélanger, J. R. 2008 Urban Geology of the National Capital Area, Geological Survey of Canada, Open File 5311, 1 DVD.	2008
Armstrong, D.K. and Dodge, J.E.P. 2007. Paleozoic Geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 219	2007
2010 Bélanger, J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open File D3256, 2001	2010
Aerial Photograph Images – geoOttawa (http://maps.ottawa.ca/geoOttawa/)	1945, 1963, 1983, 1991, 2002, 2011 and 2014
EcoLog ERIS report	June 30, 2017
Ontario Ministry of the Environment and Climate Change	July 19, 2017
Ministry of Natural Resources and Forestry	August 18, 2017
Technical Standards and Safety Authority	June 28, 2017



9.0 LIMITATIONS AND USE OF REPORT

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

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

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

10.0 STATEMENT OF COMPLETION

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



11.0 CLOSURE

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

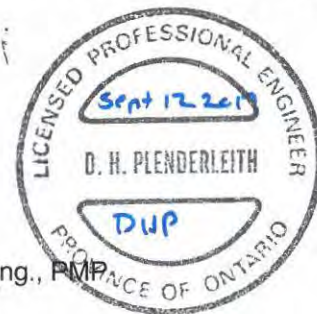
GOLDER ASSOCIATES LTD.

Alyssa Troke

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

Don Plenderleith

Don Plenderleith, M.Sc., P.Eng., PMP
(QP-ESA), Principal



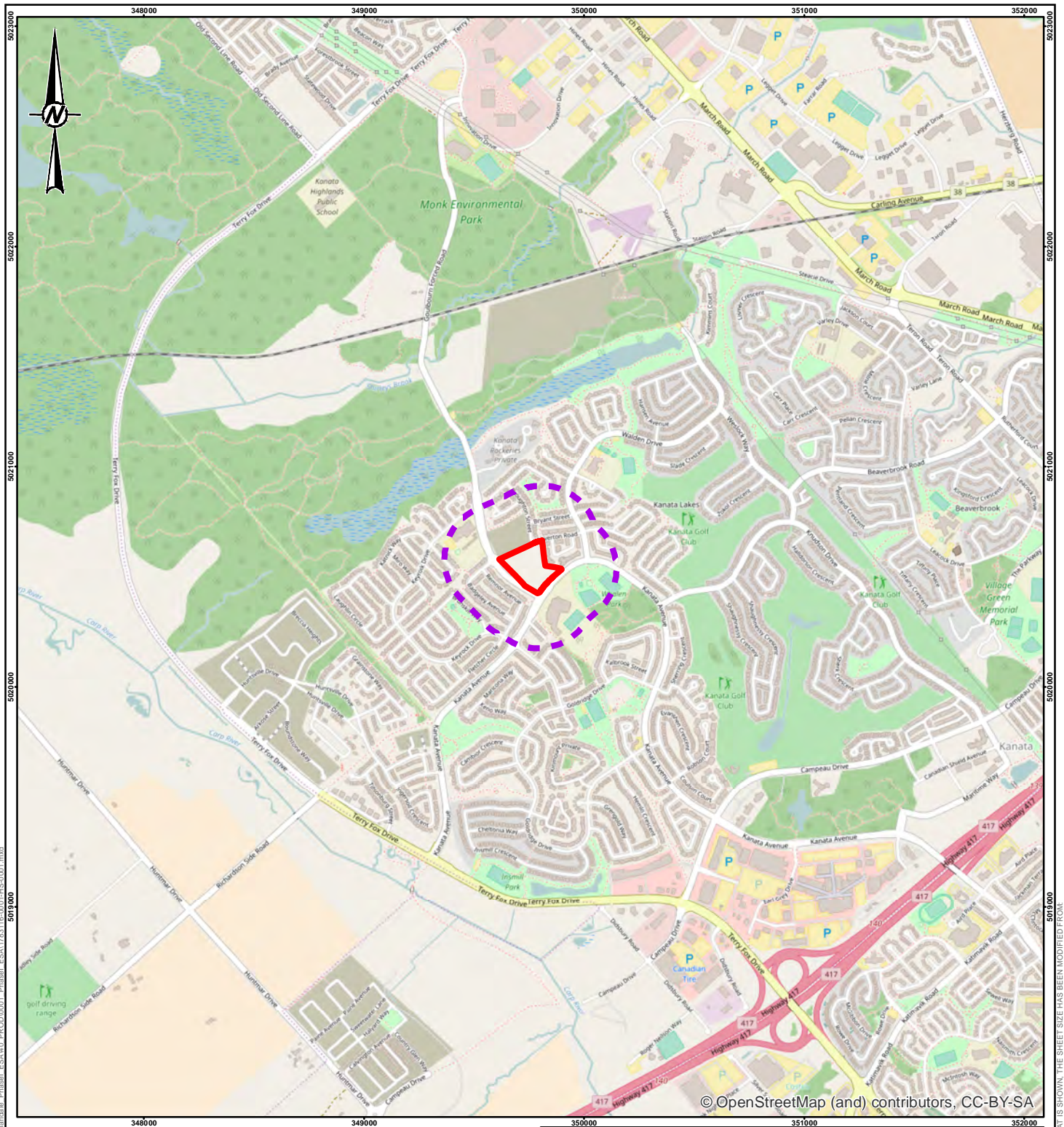
AT/DHP/hw

n:\active\2017\3 proj\1783116 urbandale phase i kanata ave & goulbourn\report\1783116 - kanata ave, goulbourn phase one esa.docx

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.





FIGURES



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

LEGEND

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA




NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

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

CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
OTTAWA, ONTARIO**

TITLE
KEY PLAN

CONSULTANT	YYYY-MM-DD	2017-06-27
	DESIGNED	----
	PREPARED	JEM
	REVIEWED	AT
	APPROVED	DHP

PROJECT NO. 1783116	CONTROL 0001	REV. 0	FIGURE 1
------------------------	-----------------	-----------	--------------------

Path: N:\Active\Spatial_Inf\CityOfOttawa\5100 - Kanata - 130 - Goulbourn\99a - PROJ\1783116 - Urban\16 - Phase1 - ESA\10 - PROC\0001 - Phase1 - ESA\1783116-001-HS-001.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 25mm

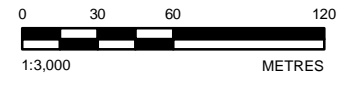


LEGEND

- ① PCA #1: FILL PILE LOCATED ON ADJACENT SITE
- ROADWAY
- PHASE ONE STUDY AREA
- - - PHASE ONE SITE

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

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



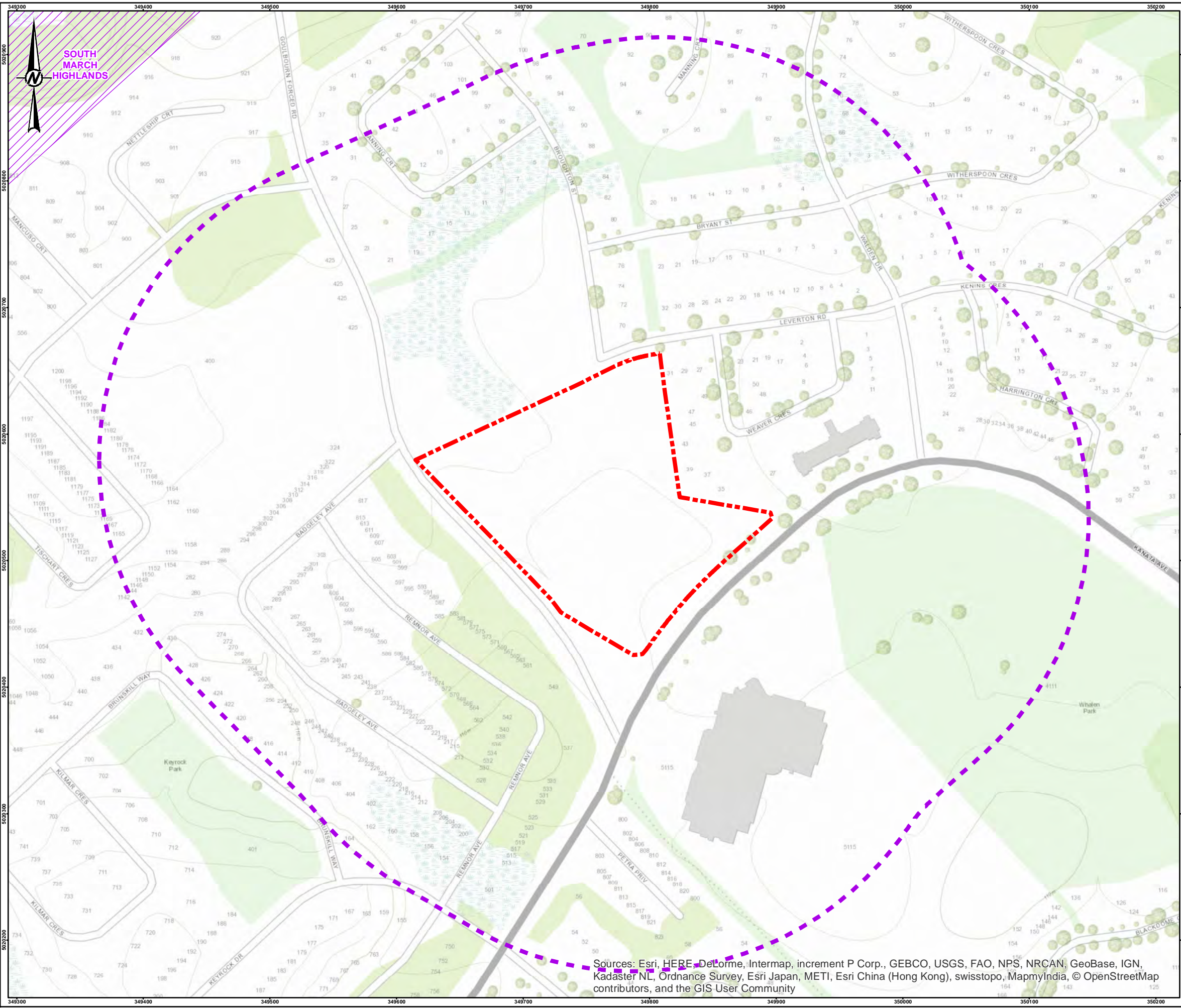
CLIENT		URBANDALE CORPORATION	
PROJECT		PHASE ONE ENVIRONMENTAL SITE ASSESSMENT 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD, OTTAWA, ONTARIO	
TITLE		SITE PLAN	
CONSULTANT	YYYY-MM-DD	2017-07-27	
	DESIGNED	---	
	PREPARED	JEM	
	REVIEWED	AT	
	APPROVED	DHP	
PROJECT NO.	CONTROL	REV.	FIGURE
1783116	0001	0	2



City of Ottawa

Print: N:\Vector\Spatial_Maps\CityOfOttawa\5100_Kanata_130_Goulbourn\09_PCA\1783116_Urbandale_Phase1_ESA\1783116-0001-HS-002.mxd
 Path: N:\Vector\Spatial_Maps\CityOfOttawa\5100_Kanata_130_Goulbourn\09_PCA\1783116_Urbandale_Phase1_ESA\1783116-0001-HS-002.mxd

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

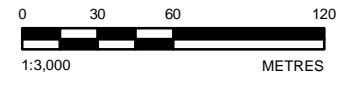


LEGEND

- AREA OF NATURAL AND SCIENTIFIC INTEREST (ANSI)
- PHASE ONE STUDY AREA
- PHASE ONE SITE

NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

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



CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO**

TITLE
TOPOGRAPHIC MAP AND AREAS OF NATURAL SIGNIFICANCE

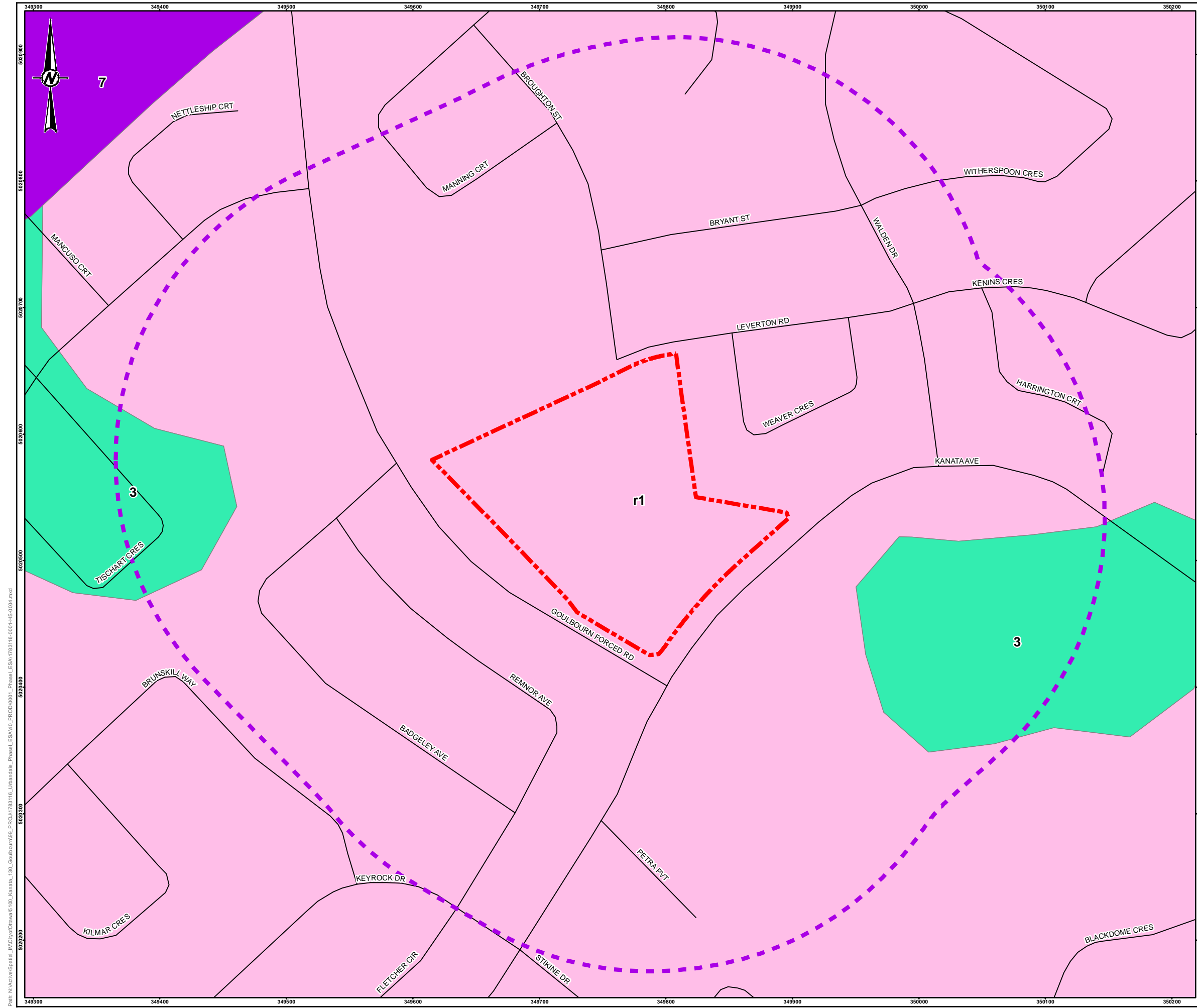
CONSULTANT	DATE
	YYYY-MM-DD 2017-07-27
	DESIGNED ---
	PREPARED JEM
	REVIEWED AT
	APPROVED DHP

PROJECT NO. 1783116	CONTROL 0001	REV. 0	FIGURE 3
------------------------	-----------------	-----------	--------------------

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Path: N:\Active\Spatial_Maps\Urban\Urban\ESAM\PROC\0001_Phase1_ESAM\1783116_Urban\Urban\ESAM\PROC\0001_Phase1_ESAM\1783116-0001-ES-0003.mxd

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

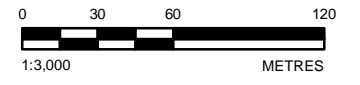


LEGEND

- ROADWAY
- PHASE ONE STUDY AREA
- PHASE ONE SITE
- 7. ORGANIC DEPOSITS: MUCK & PEAT
- 3. OFFSHORE MARINE DEPOSITS: CLAY, SILTY CLAY & SILT
- r1. BEDROCK: INTRUSIVE & METAMORPHIC

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. BELANGER, J. R. 2008 URBAN GEOLOGY OF THE NATIONAL CAPITAL AREA, GEOLOGICAL SURVEY OF CANADA, OPEN FILE 5311, 1 DVD.
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEEN'S PRINTER 2014
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28



CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
OTTAWA, ONTARIO**

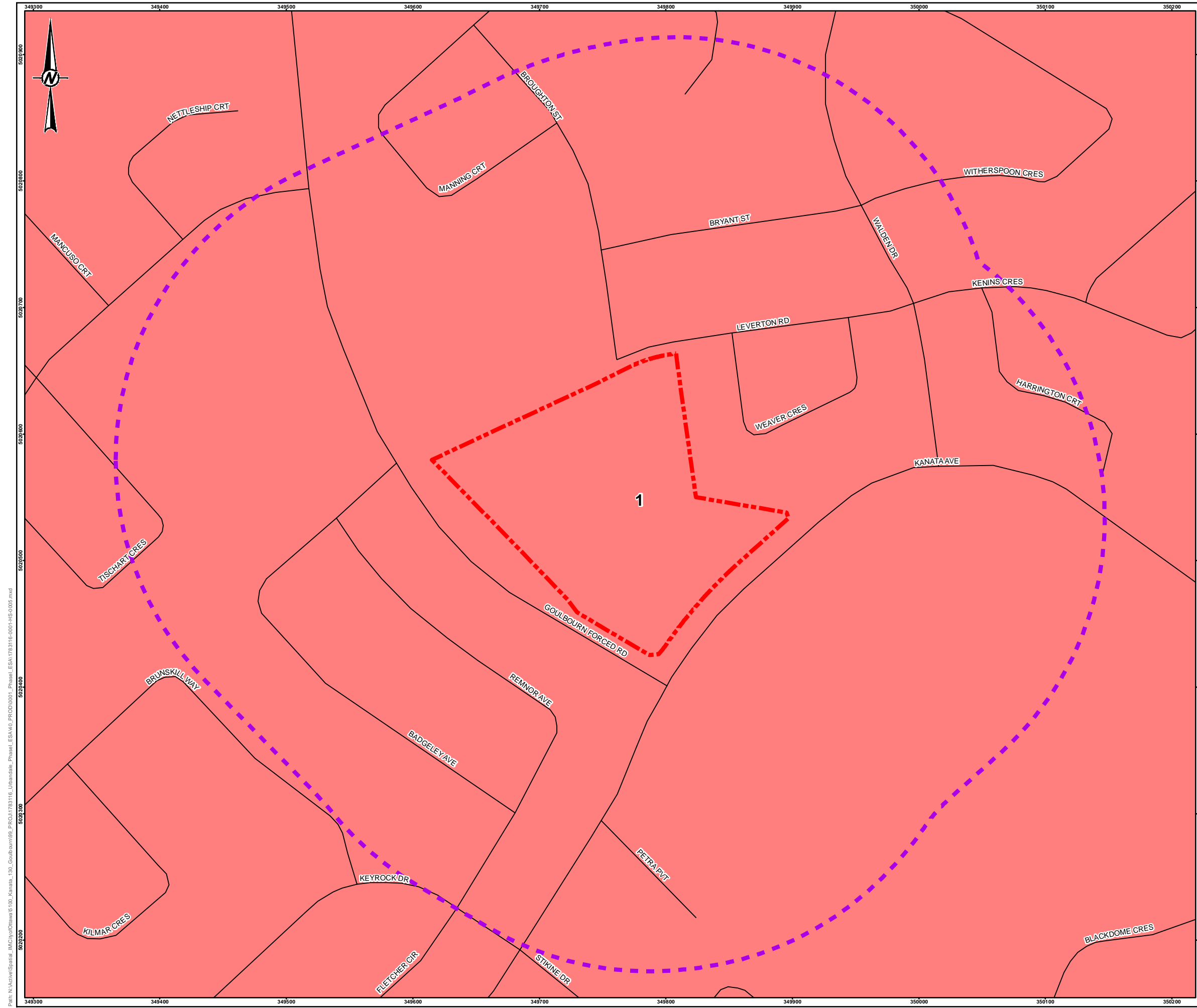
TITLE
SURFICIAL GEOLOGY

CONSULTANT	YYYY-MM-DD	2017-07-27
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	DHP	

PROJECT NO. 1783116 CONTROL 0001 REV. 0 FIGURE **4**

Print: N:\Vector\Spatial_Maps\CityOfOttawa\GIS\100_Kanata_130_Goulbourn\08_PROJ\1783116_Urbandale_Phase1_ESA\1783116-001-HS-004.mxd

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

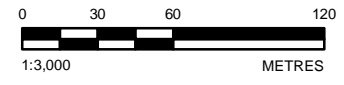


LEGEND

- ROADWAY
- PHASE ONE STUDY AREA
- PHASE ONE SITE
- 1: PRECAMBRIAN

NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

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



CLIENT
 URBANDALE CORPORATION

PROJECT
 PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO

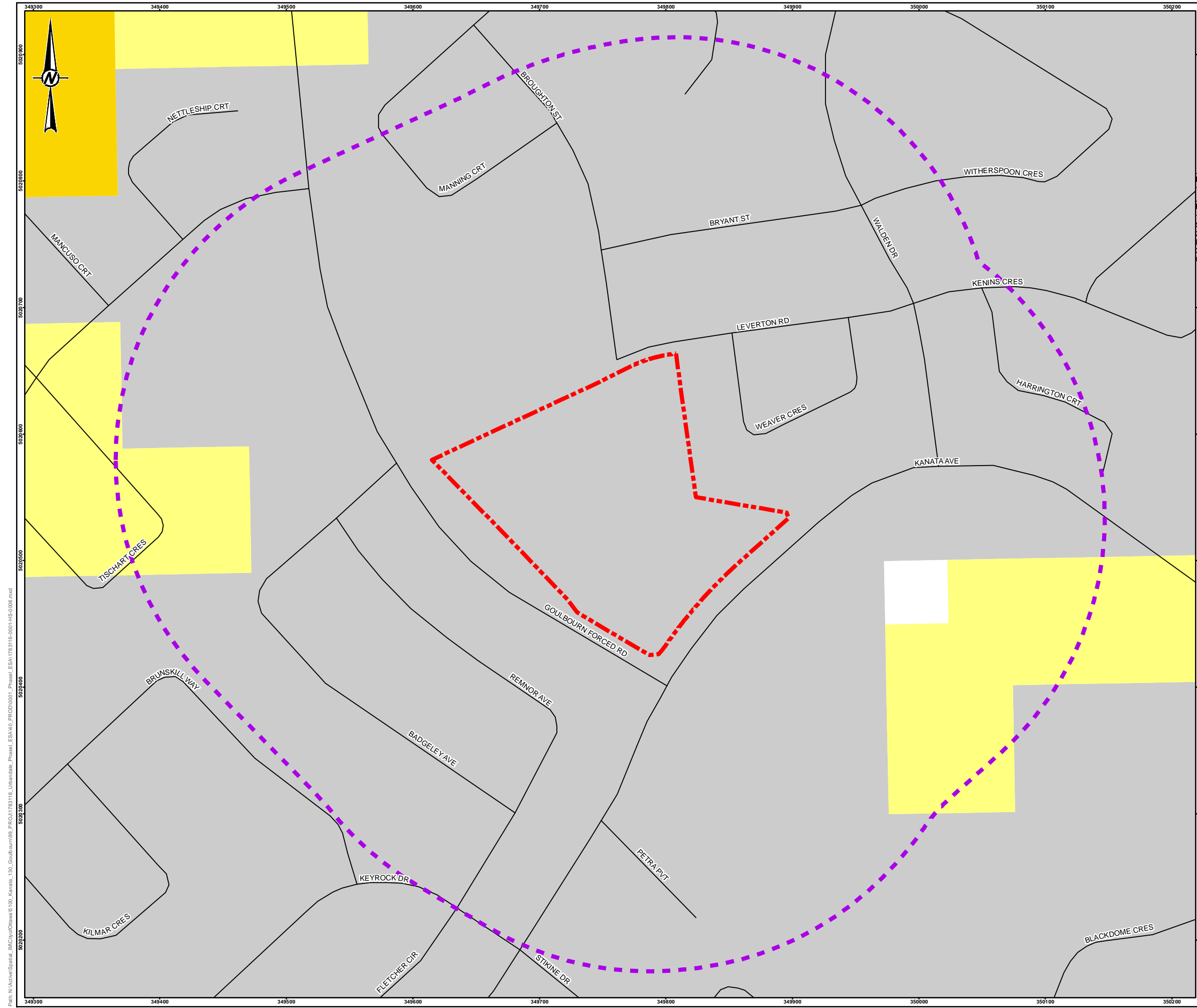
TITLE
BEDROCK GEOLOGY

CONSULTANT	YYYY-MM-DD	2017-07-27
	DESIGNED	---
	PREPARED	JEM
	REVIEWED	AT
	APPROVED	DHP

PROJECT NO. 1783116	CONTROL 0001	REV. 0	FIGURE 5
------------------------	-----------------	-----------	--------------------

Path: N:\Vector\Spatial_Maps\Chimney\5100_Kanata_130_Goulbourn\08_PROJ\1783116_Urbandale_Phase1_ESA\1783116-001-1783116-005.mxd

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



LEGEND

- ROADWAY
- PHASE ONE STUDY AREA
- PHASE ONE SITE

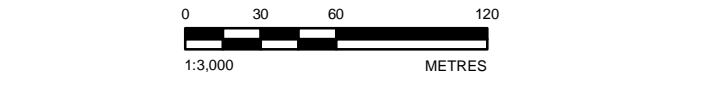
TREND IN DEPTH TO BEDROCK (METRES)

- 0 to 1
- 1 to 2
- 2 to 3
- 3 to 5

NOTE(S)
 ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

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



CLIENT
 URBANDALE CORPORATION

PROJECT
 PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO

TITLE
DRIFT THICKNESS

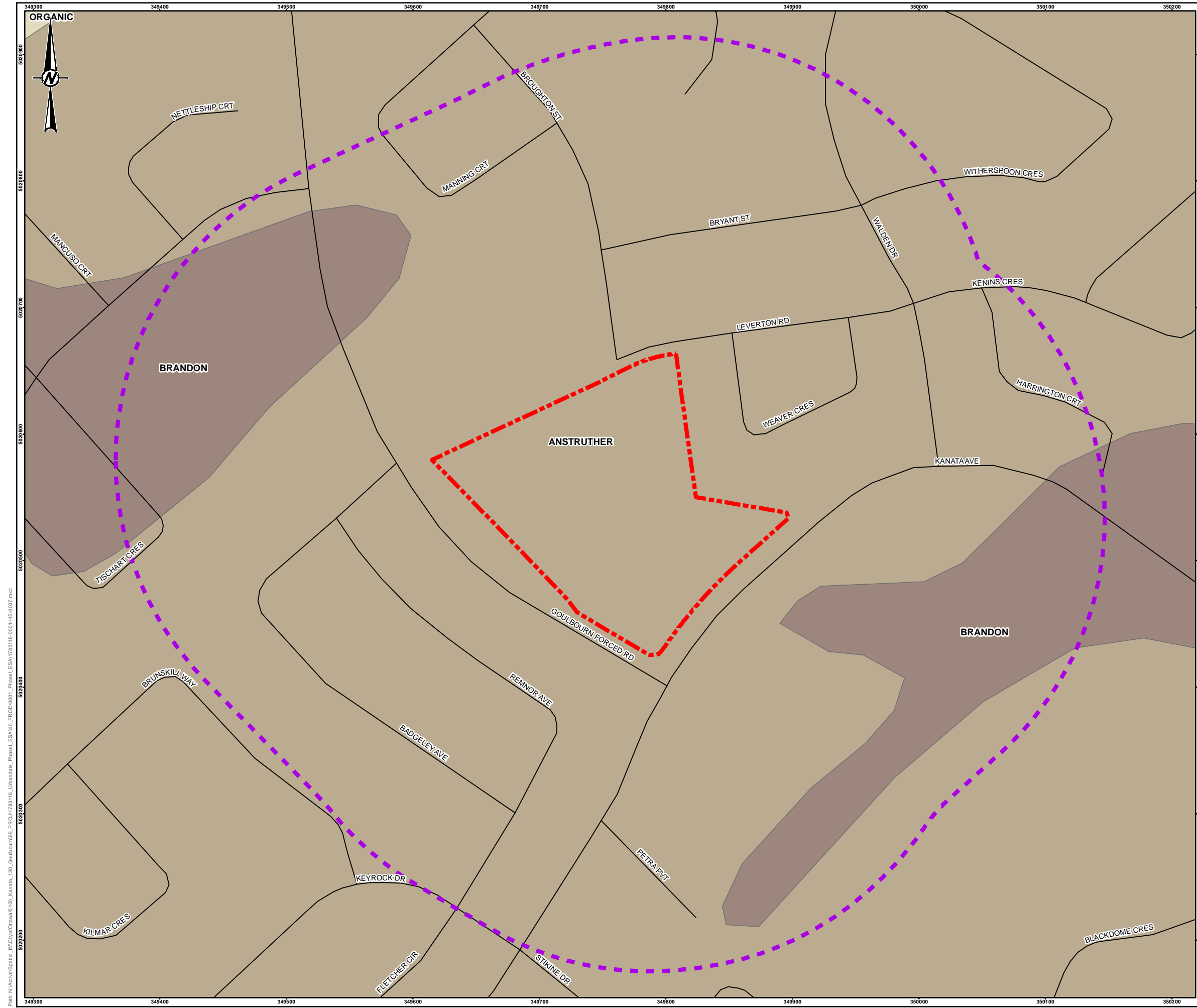
CONSULTANT	YYYY-MM-DD	2017-07-27
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	DHP	



PROJECT NO. 1783116 CONTROL 0001 REV. 0 FIGURE 6

Path: N:\Vector\Spatial_Maps\Chen\5100_Kanata_130_Goulbourn\08_PROJ\1783116_Urbandale_Phase1_ESA\1783116-001\1783116-008.mxd

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

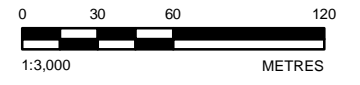


LEGEND

- ROADWAY
- PHASE ONE STUDY AREA
- PHASE ONE SITE
- ANSTRUTHER
- BRANDON
- ORGANIC

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

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



CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
OTTAWA, ONTARIO**

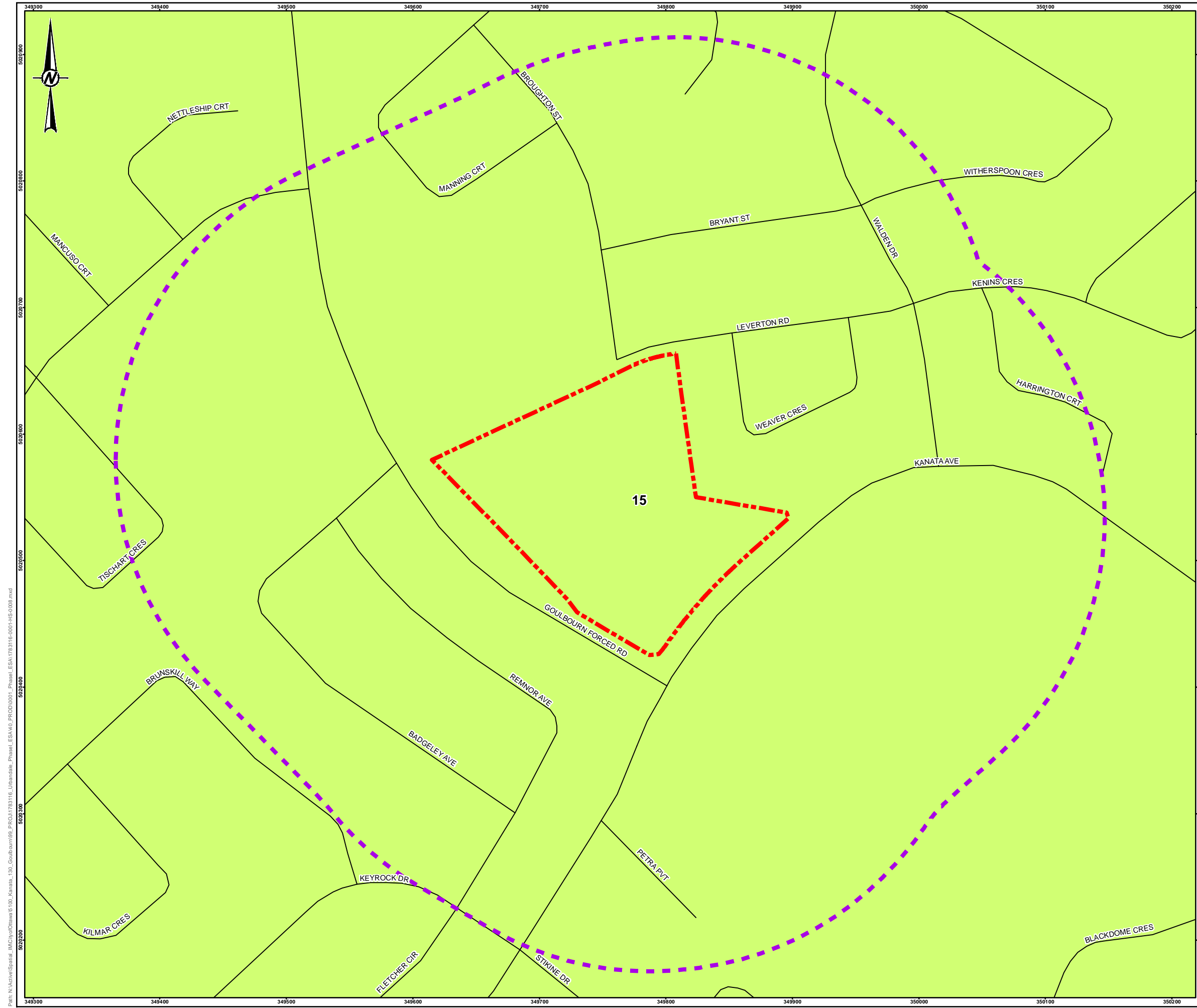
TITLE
SOIL SURVEY COMPLEX (ONTARIO SOILS)

CONSULTANT	YYYY-MM-DD	2017-07-27
	DESIGNED	---
	PREPARED	JEM
	REVIEWED	AT
	APPROVED	DHP

PROJECT NO. 1783116	CONTROL 0001	REV. 0	FIGURE 7
------------------------	-----------------	-----------	--------------------

Path: N:\Vector\Spatial_Maps\Chlorine\5100_Kanata_130_Goulbourn\08_PROJ\1783116_Urbandale_Phase1_ESA\1783116-001\HS-007.mxd

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

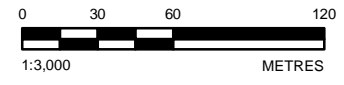


LEGEND

- ROADWAY
- PHASE ONE STUDY AREA
- PHASE ONE SITE
- 15:SHALLOW TILL AND ROCK RIDGES

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

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



CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
OTTAWA, ONTARIO**

TITLE
PHYSIOGRAPHY MAP

CONSULTANT	YYYY-MM-DD	2017-07-27
DESIGNED	---	
PREPARED	JEM	
REVIEWED	AT	
APPROVED	DHP	

PROJECT NO. 1783116	CONTROL 0001	REV. 0	FIGURE 8
------------------------	-----------------	-----------	--------------------

Path: N:\Vector\Spatial_Maps\Chapman\5100_Kanata_130_Goulbourn\08_Phase1_ESA\Map_PROD\0001_Phase1_ESA\1783116_Urbandale_Phase1_ESA\1783116-0001-HS-008.mxd

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



APPENDIX A

Regulatory Responses

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

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



OTT File No: **61**

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

Attention: Alyssa Troke Golder Associates	Your File: Date Received: June 24, 2017
--	--

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

<u>PROPERTY OWNER AND LOCATION</u>		
Location:	Municipality:	Ottawa
	Address:	5100 Kanata Ave and 130 Goulbourn Forced Rd
		Lot Concession Township

<u>INDEX OF NAMES FOR ORDERS</u>
We have searched the <i>Ottawa</i> District Index Record of Active Orders under the Environmental Protection Act (EPA), Ontario Water Resources Act (OWRA) and the Pesticides Act (PA) issued to: and the following information has been found:
<input checked="" type="checkbox"/> No Active Orders are outstanding
Please Note: <i>For information related to any ministry Orders issued to the property in question, please request this information from the property owner. If you would like further information regarding a specific Order issued, please contact the Ottawa District Office.</i>
Date of Search: July 19, 2017

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

INDEX REVIEW REPORT COMMERCIAL/INDUSTRIAL/AGRICULTURAL

INDEX OF NAMES FOR APPROVALS ISSUED SINCE 1999

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

<u>Type</u>	<u>Number</u>	<u>Issued To</u>	<u>Issue Date</u>
Section 9 EPA (Air)	4070-AN9PJ2	Urbandale Corp	June 15, 2017
Section 39 EPA (Waste Management)			
Section 52 OWRA (Water)			
Section 53 OWRA (Municipal/Private/ Industrial Sewage)			
Other			

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

www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action?search=basic&lang=en

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

Please Note:

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

No Approvals have been issued.

Date of Search: July 19, 2017

INDEX REVIEW REPORT COMMERCIAL/INDUSTRIAL/AGRICULTURAL

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

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

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

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

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

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

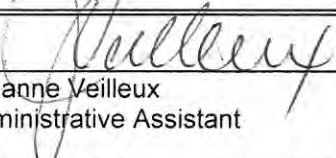
Additional ministry information can be accessed through the **Government of Ontario's Open Data Catalogue**: <http://www.ontario.ca/government/open-data-ontario>

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

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

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

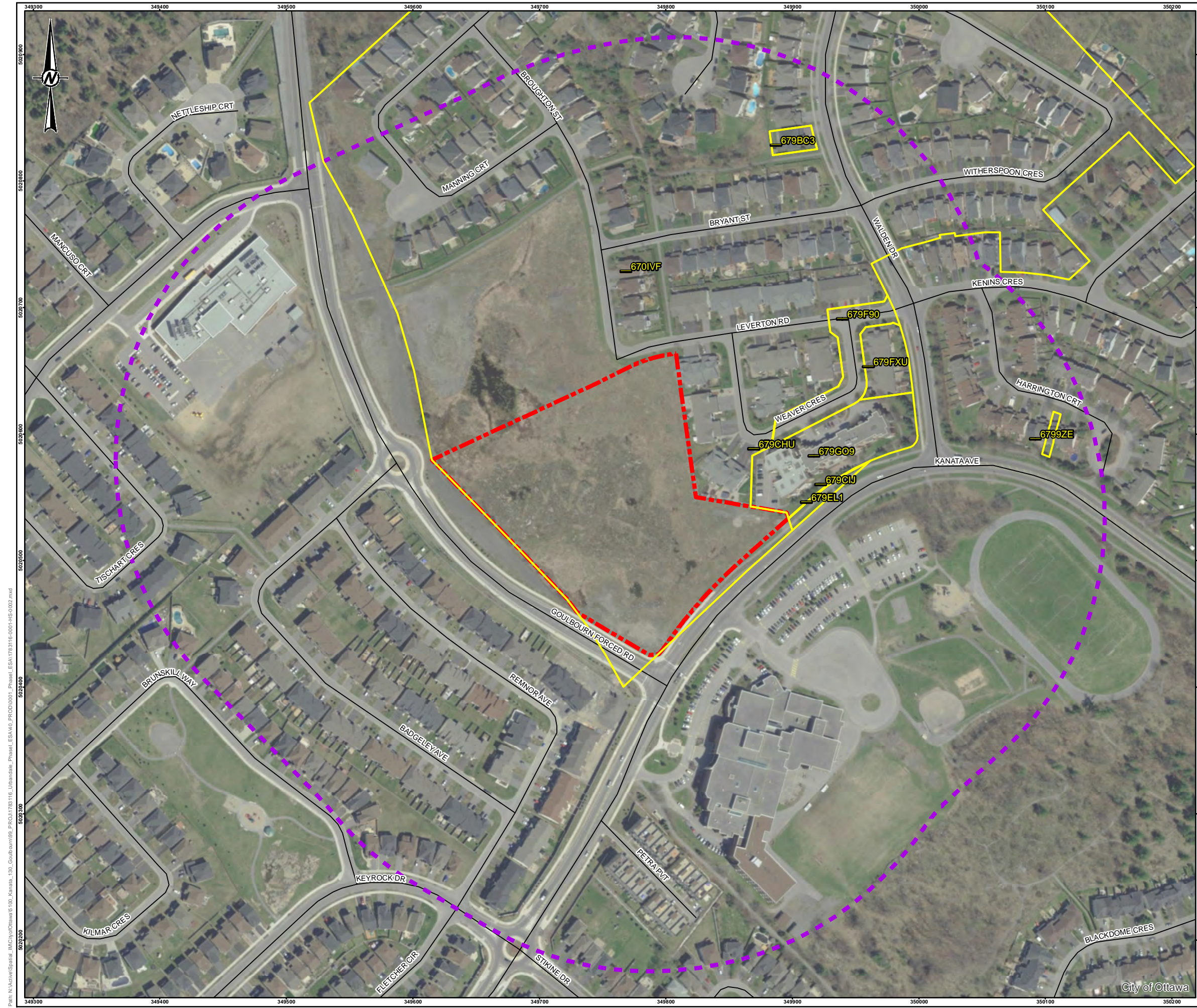
Thank you for your inquiry.

Signature:	
Contact Name:	Johanne Veilleux
Title:	Administrative Assistant
Address:	Ministry of the Environment and Climate Change 2430 Don Reid Drive, Unit 103 Ottawa, ON K1H 1E1
Phone:	(613) 521-3450 Ext 221
Date:	July 19, 2017
	E&OE

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

CITY OF OTTAWA
HISTORIC LAND USE INVENTORY

HLUI2008II PIN1	PIN2 STREET STREET_NAM	NAME	COMPANY_NA	FACILITY_T	STOHL_REFEREN	YEARS_OF_OCCUPATION
__6799ZE	45110875	42 HARRINGTON	COMPETITION COMPUTERS	COMPETITION COMPUTERS	Electrical and Electronic Machinery, Equipment and Supplies, Wholesale	c. 2001
__679F90	45111061	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679GO9	45111057	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679BC3	45111054	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679EL1	45111060	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679FXU	45111056	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679CIJ	45111059	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__670IVF	45111054	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679CHU	45111058	0	GOW FELDSPAR MINE	Gow Feldspar Mine	Non-Metal Mines (Except Coal)	Kanata Industries File LHK Industries
__679BC3	45111420	65 WALDEN	URBANALE CONSTRUCTION LI	URBANALE CONSTRUCTIO	Residential Building and Development	c. 2005

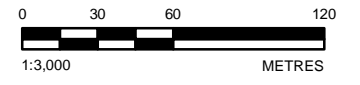


LEGEND

- ROADWAY
- PHASE ONE STUDY AREA
- PHASE ONE SITE

NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

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



CLIENT
 URBANDALE CORPORATION

PROJECT
 PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO

TITLE
 SITE PLAN

CONSULTANT	YYYY-MM-DD	2017-07-27
DESIGNED	----	
PREPARED	JEM	
REVIEWED	----	
APPROVED	----	



PROJECT NO. 1783116 CONTROL 0001 REV. A

FIGURE 2

Path: N:\Vector\Spatial_Maps\CityOfOttawa\5100_Kanata_130_Goulbourn\09_Phase1_ESA\1783116_Urbandale_Phase1_ESA\1783116-001-1783116-002.mxd

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

**Ministry of Natural
Resources and Forestry**

Kemptville District

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

**Ministère des Richesses
naturelles et des Forêts**

District de Kemptville

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



Fri. Aug 18, 2017

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

Attention: Alyssa Troke

Subject: Information Request - Developments
Project Name: Phase I Environmental Site Assessment for 5100 Kanata Avenue
Site Address: 5100 Kanata Avenue
Our File No. 2017_MAR-4172

Natural Heritage Values

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

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

- Candidate ANSI, Life Science, South March Highlands (Provincial)
- Evaluated Wetland, Kizel Drain Wetland Complex (Evaluated-Provincial)
- Unevaluated Wetland (Not evaluated per OWES)
- Wintering Area, Deer Yard (Stratum 1) (Non-Sensitive)

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

The MNRF strongly encourages all proponents to contact partner agencies and appropriate municipalities early on in the planning process. This provides the proponent with early knowledge regarding agency requirements, authorizations and approval timelines; Ministry of the Environment

and Climate Change (MOECC) and the local Conservation Authority may require approvals and permitting where natural values and natural hazards (e.g., floodplains) exist.

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

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

Wildland Fire

MNRF woodland data shows that the site contains woodlands. The lands should be assessed for the risk of wildland fire as per PPS 2014, Section 3.1.8 "*Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire. Development may however be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and mitigation standards*". Further discussion with the local municipality should be carried out to address how the risks associated with wildland fire will be covered for such a development proposal. Please see the Wildland Fire Risk Assessment and Mitigation Guidebook (2016) for more information.

Significant Woodlands

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

Significant Wildlife Habitat

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

- Significant Wildlife Habitat Technical Guide, 2000
- The Natural Heritage Reference Manual, 2010
- Significant Wildlife Habitat Mitigation Support Tool, 2014

- Significant Wildlife Habitat Criteria Schedule for Ecoregion 5E and 6E, 2015

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

Species at Risk

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

- Blanding's Turtle (THR)
- Bobolink (THR)
- Butternut (END)
- Loggerhead Shrike (END)
- Whip poor will (THR)
- Eastern Meadowlark (THR)

All endangered and threatened species receive individual protection under section 9 of the ESA and receive general habitat protection under Section 10 of the ESA, 2007. Thus any potential works should consider disturbance to the individuals as well as their habitat (e.g. nesting sites). General habitat protection applies to all threatened and endangered species. Note some species in Kemptville District receive regulated habitat protection. The habitat of these listed species is protected from damage and destruction and certain activities may require authorization(s) under the ESA. For more on how species at risk and their habitat is protected, please see: <https://www.ontario.ca/page/how-species-risk-are-protected>.

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

The Information Gathering Form may be found here:

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

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

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

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

- Common Nighthawk (SC)
- Snapping Turtle (SC)

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

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

The MNRF continues to strongly encourage ecological site assessments to determine the potential for SAR habitat and occurrences. When a SAR or potential habitat for a SAR does occur on a site, it is recommended that the proponent contact the MNRF for technical advice and to discuss what activities can occur without contravention of the Act. For specific questions regarding the Endangered Species Act (2007) or SAR, please contact MNRF Kemptville District at sar.kemptville@ontario.ca.

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

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

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

This letter is valid until: Sat. Aug 18, 2018

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

Sincerely,
Carolyn Hann
Management Biologist
carolyn.hann@ontario.ca

Encl.\n-ESA Infosheet, NHIC/LIO Infosheet

Natural. Valued. Protected.

Endangered Species Act, 2007 & Species At Risk in Ontario

Background

Endangered Species Act: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes-07e06_e.htm

Species at Risk in Ontario List: www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/246809.html

The Endangered Species Act (ESA) 2007 protects both species and habitat. Section 9 of the ESA “prohibits killing, harming, harassing, capturing, possessing, collecting, buying, selling, trading, leasing or transporting species that are listed as threatened, endangered or extirpated”. Section 10 of the ESA, 2007 prohibits damaging or destroying habitat of endangered or threatened species. Protected habitat is either based on general definition in the Act or prescribed through a regulation. The ESA 2007 defines general habitat as an area on which the species depends, directly or indirectly, to carry on its life processes, including reproduction, rearing, hibernation, migration or feeding.

It is important to be aware that changes may occur in both species and habitat protection. The ESA applies to listed species on the Species at Risk in Ontario List (SARO). The Committee on the Status of Species in Ontario (COSSARO) meets regularly to evaluate species for listing and/or re-evaluate species already listed. As a result, species’ designations may change that could in turn change the level of protection they receive under the ESA 2007. Also, habitat protection provisions for a species may change e.g. if a species-specific habitat regulation comes into effect. The regulation would establish the area that is protected as habitat for the species.

Information with respect to SAR can be found in the online database at the Natural Heritage Information Centre (NHIC) - <http://nhic.mnr.gov.on.ca/nhic.cfm> . The NHIC compiles, maintains and distributes information on species at risk and updates its information on a regular basis. We encourage you to routinely check the NHIC database to obtain the most up to date SAR information for proposed work locations. However, while the NHIC database is the best available source of data, even when there are no known occurrences documented at a site, there is a possibility that SAR may occur at a proposed work location.

All data represents the MNR’s best current available information, it is important to note that a lack of occurrence at a site does not mean that there are no Species at Risk (SAR) at the location. The MNR continues to encourage ecological site assessments to determine the potential for other SAR occurrences. When a SAR does occur on a proposed site, it is recommended that the proponent contact the MNR for technical advice and to discuss what activities can occur without contravention of the Act. If an activity is proposed that will contravene the Act (such as Section 9 or 10), the proponent must contact the MNR to discuss the potential for application of certain permits (Section 17) or agreement (Regulation 242/08). For specific questions regarding the Endangered Species Act (2007) or species at risk, please contact a district Species at Risk Biologist at sar.kemptville@ontario.ca.

Natural. Valued. Protected.

Natural Heritage Information Centre

Land Information Ontario

Natural Heritage Information Centre: <http://nhic.mnr.gov.on.ca/>

Biodiversity Explorer (mapping): <https://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp>

Land Information Ontario: <http://www.mnr.gov.on.ca/en/Business/LIO/index.html>

Ontario Geospatial Data Exchange: http://www.mnr.gov.on.ca/en/Business/LIO/2ColumnSubPage/STEL02_167959.html

LIO Make-a-Map: http://www.mnr.gov.on.ca/en/Business/LIO/2ColumnSubPage/STDPROD_068999.html

Ontario Maps: http://www.mnr.gov.on.ca/en/Business/LIO/2ColumnSubPage/STDPROD_068512.html

The **Natural Heritage Information Centre** (NHIC) compiles, maintains and distributes information on natural species, plant communities and spaces of conservation concern in Ontario. This information is stored in a spatial database used for tracking this information. The Centre also has a library with conservation-related literature, reports, books, and maps, which are accessible for conservation applications, land use planning, and natural resource management. The NHIC website makes much of this information available through the internet.

Natural Heritage Information Centre

300 Water Street, 2nd Floor, North Tower
P.O. Box 7000, Peterborough, ON, K9J 8M5
Tel.:(705) 755-2159 Fax:(705) 755-2168

Land Information Ontario (LIO) manages key provincial datasets. LIO makes these and hundreds of other data sets available to registered users at no charge. LIO also coordinates public and private sector organizations to collect high resolution satellite imagery for Ontario providing significant cost savings for all partners. Technical bulletins, newsletters and more are available online. More details regarding Ontario imagery and data can be searched, ordered and accessed online.

LIO's Ontario Geospatial Data Exchange (OGDE) allows more than 400 public sector organizations to easily share and use digital geographic information under a single legal agreement. Membership is available to eligible public organizations at no costs.

Through the website, Maps & Map Tools are made available, including online mapping software: LIO Make-a-Map.

Land Information Ontario

lio@ontario.ca

LIO Support Team: (705) 755-1878

Or for specifics, see online at:

http://www.mnr.gov.on.ca/en/Business/LIO/2ColumnSubPage/STDPROD_068510.html

Additional Information pertaining to NHIC, LIO and other Natural Heritage and Data and Information tools is available in the **MNR Kemptville Information Request Guide (2012)**.

Plenderleith, Don

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: Wednesday, June 28, 2017 3:43 PM
To: Troke, Alyssa
Subject: RE: TSSA Search - Kanata Avenue and Goulbourn Forced Road, Ottawa, Ontario

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Alyssa,

Thank you for your inquiry.

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

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

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Thank you,

Roxana



Roxana Mashtaler | Public Information Agent

Facilities
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-3472 | Fax: +1-416-231-6183 | E-Mail: rmashtaler@tssa.org
www.tssa.org



From: Troke, Alyssa [mailto:Alyssa_Troke@golder.com]
Sent: Saturday, June 24, 2017 9:34 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: TSSA Search - Kanata Avenue and Goulbourn Forced Road, Ottawa, Ontario

Hello,

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

- 5100 Kanata Avenue, Ottawa, ON
- 130 Goulbourn Forced Road, Ottawa, ON
- 91 Broughton Street, Ottawa, ON

- 400 Keyrock Drive, Ottawa, ON
- 5115 Kanata Avenue, Ottawa, ON
- 27 Weaver Crescent, Ottawa, ON
- 37 Weaver Crescent, Ottawa, ON
- 31 Leverton Road, Ottawa, ON
- 549 Remnor Avenue, Ottawa, ON
- 549 Remnor Avenue, Ottawa, ON

Please let me know if you have any questions.

Kindest Regards,

Alyssa Troke

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

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

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

Alyssa_Troke@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.

This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.



APPENDIX B

EcoLog ERIS Report

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



DATABASE REPORT

Project Property: *1783116 - 5100 Kanata Avenue Phase I
ESA
5100 Kanata Anvue
Ottawa ON*

Project No:

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

Order No: *20170623337*

Requested by: *Golder Associates Ltd.*

Date Completed: *June 30, 2017*

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

www.erisinfo.com

Table of Contents

Table of Contents.....	2
Executive Summary.....	3
Executive Summary: Report Summary.....	4
Executive Summary: Site Report Summary - Project Property.....	6
Executive Summary: Site Report Summary - Surrounding Properties.....	7
Map.....	8
Aerial.....	9
Topographic Map.....	10
Detail Report.....	11
Unplottable Summary.....	31
Unplottable Report.....	33
Appendix: Database Descriptions.....	41
Definitions.....	49

Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Limited Partnership ("ERIS") using various sources of information, including information provided by Federal and Provincial government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report(s) are protected by copyright owned by ERIS Information Limited Partnership. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

Executive Summary

Property Information:

Project Property: 1783116 - 5100 Kanata Avenue Phase I ESA
5100 Kanata Anvue Ottawa ON

Project No:

Order Information:

Order No: 20170623337
Date Requested: June 23, 2017
Requested by: Golder Associates Ltd.
Report Type: Quote - Custom-Build Your Own Report

Additional Products:

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.25km	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	1	0	1
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	5	5
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
COAL	<i>Inventory of Coal Gasification Plants and Coal Tar Sites</i>	Y	0	0	0
CONV	<i>Compliance and Convictions</i>	Y	0	0	0
CPU	<i>Certificates of Property Use</i>	Y	0	0	0
DRL	<i>Drill Hole Database</i>	Y	0	0	0
EASR	<i>Environmental Activity and Sector Registry</i>	Y	0	0	0
EBR	<i>Environmental Registry</i>	Y	0	0	0
ECA	<i>Environmental Compliance Approval</i>	Y	0	0	0
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	2	2	4
EIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
EMHE	<i>Emergency Management Historical Event</i>	Y	0	0	0
EXP	<i>List of TSSA Expired Facilities</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FOFT	<i>Fisheries & 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	9	9
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	1	1
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	2	2
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0

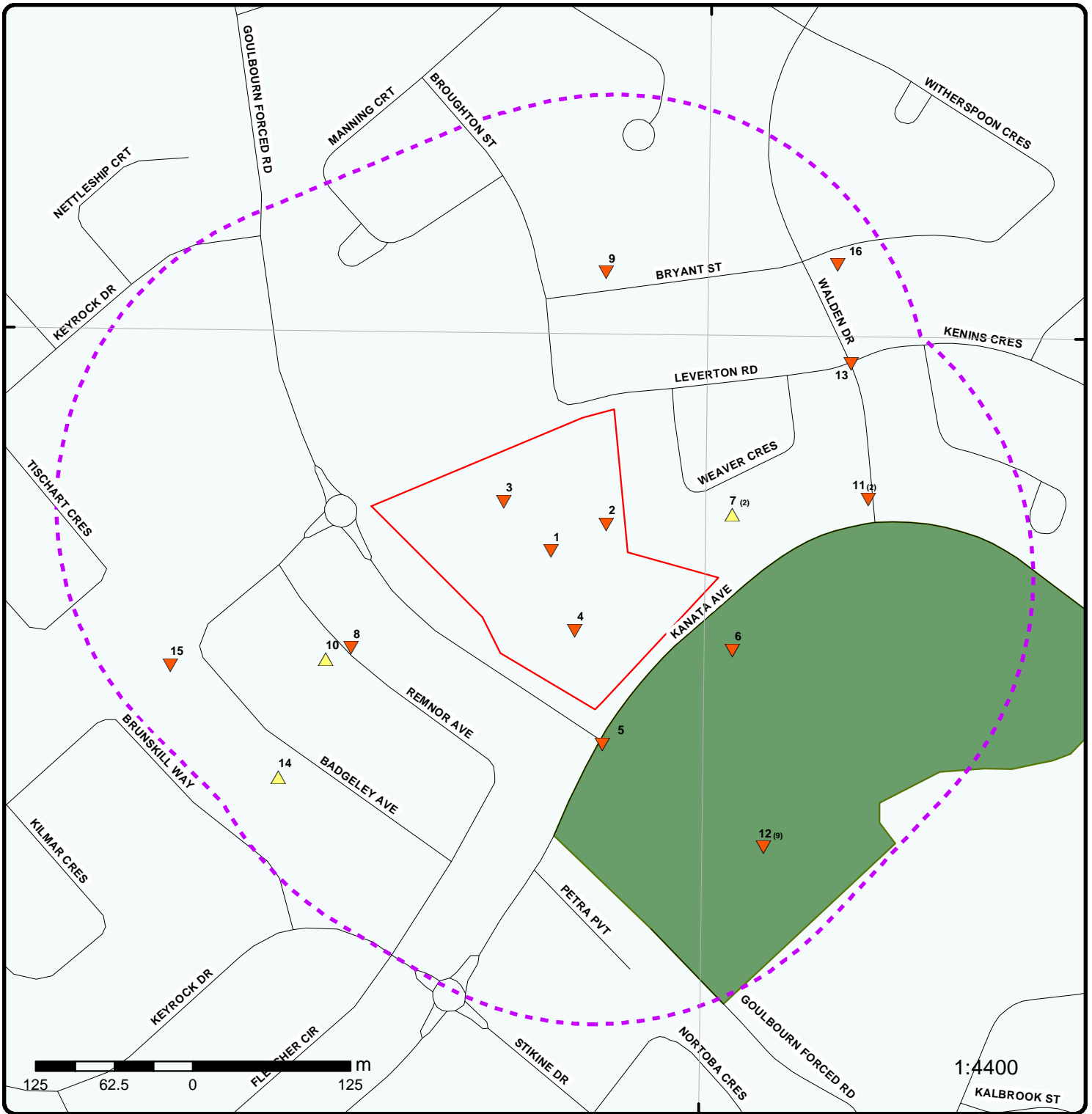
Database	Name	Searched	Project Property	Boundary to 0.25km	Total
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0
NDFT	<i>National Defense & Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense & Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence & Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBW	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGW	<i>Oil and Gas Wells</i>	Y	0	0	0
OOGW	<i>Ontario Oil and Gas Wells</i>	Y	0	0	0
OPCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
ORD	<i>Orders</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PES	<i>Pesticide Register</i>	Y	0	0	0
PINC	<i>TSSA Pipeline Incidents</i>	Y	0	0	0
PRT	<i>Private and Retail Fuel Storage Tanks</i>	Y	0	0	0
PTTW	<i>Permit to Take Water</i>	Y	0	0	0
REC	<i>Ontario Regulation 347 Waste Receivers Summary</i>	Y	0	0	0
RSC	<i>Record of Site Condition</i>	Y	0	0	0
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	0	0
SPL	<i>Ontario Spills</i>	Y	0	0	0
SRDS	<i>Wastewater Discharger Registration Database</i>	Y	0	0	0
TANK	<i>Anderson's Storage Tanks</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
VAR	<i>TSSA Variances for Abandonment of Underground Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Sites - MOE CA Inventory</i>	Y	0	0	0
WDSH	<i>Waste Disposal Sites - MOE 1991 Historical Approval Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Information System</i>	Y	1	3	4
Total:			4	22	26

Executive Summary: Site Report Summary - Project Property

<i>DB</i>	<i>Map Key</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
AMIS	4	O'BRIEN-FOWLER	MARCH ON	-/0.0	-2.23	11
EHS	1		5100 Kanata Ave Ottawa ON K2K2Z8	-/0.0	-0.16	13
EHS	3		5100 Kanata Ave Ottawa ON	-/0.0	-3.27	13
WWIS	2		lot 6 con 2 ON	-/0.0	-0.91	22

Executive Summary: Site Report Summary - Surrounding Properties

<i>DB</i>	<i>Map Key</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
CA	5	City of Ottawa	Goulbourn Forced Road and Kanata Avenue Ottawa ON	SSE/28.3	-0.45	12
CA	7	Kingsway Arms (Walden Village) Inc.	27 Weaver Crescent Ottawa ON	ENE/51.2	0.01	12
CA	11	GENSTAR DEVELOPMENT COMPANY EASTERN LTD.	CASTLEFRANK RD/WALDEN DR. KANATA ON	E/134.0	-1.72	12
CA	11	GENSTAR DEVELOPMENT COMPANY EASTERN LTD.	CASTLEFRANK RD/WALDEN DR. KANATA ON	E/134.0	-1.72	13
CA	13	IMASCO ENTERPRISES INC.	WALDEN DR/KENINS CRES. KANATA CITY ON	ENE/191.4	-1.76	13
EHS	7		27 Weaver Crescent Kanata ON K2K 2Z8	ENE/51.2	0.01	14
EHS	15		Campeau Drive Ottawa ON	WSW/203.4	-1.64	14
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	14
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	15
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	16
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	16
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	17
GEN	12	Ottawa-Carleton District Catholic School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	18
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	18
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON K2K 3K5	SE/172.2	-1.18	19
GEN	12	Ottawa Catholic District School Board	5115 Kanata Avenue Kanata ON	SE/172.2	-1.18	19
INC	14		242 Badgeley Avenue, Ottawa ON	SW/201.3	0.13	20
MNR	8	WILLIMOTT	ON	WSW/90.9	-1.06	21
MNR	16	O'BRIEN-FOWLER	ON	NE/211.2	-3.52	21
WWIS	6		lot 5 con 2 ON	ESE/47.5	-1.38	24
WWIS	9		lot 6 con 2 ON	N/109.0	-1.88	27
WWIS	10		lot 6 con 3 KANATA ON	WSW/111.6	0.67	30



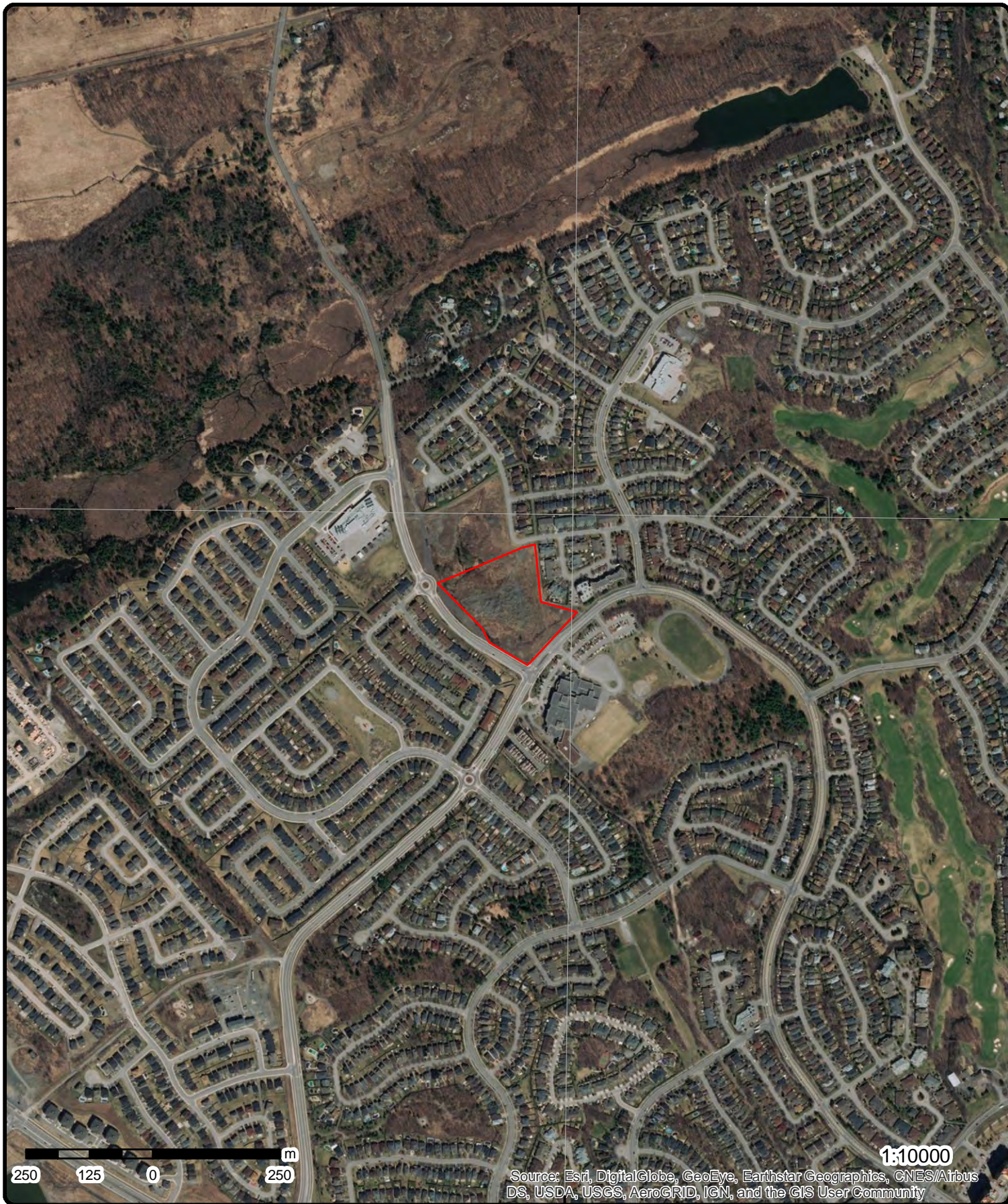
Map : 0.25 Kilometer Radius

Order No: 20170623337

Address: 5100 Kanata Anvue, 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	Proposed Road	Other Recreation Area
	Proposed Road		
	Ferry Route/Ice Road		



Aerial

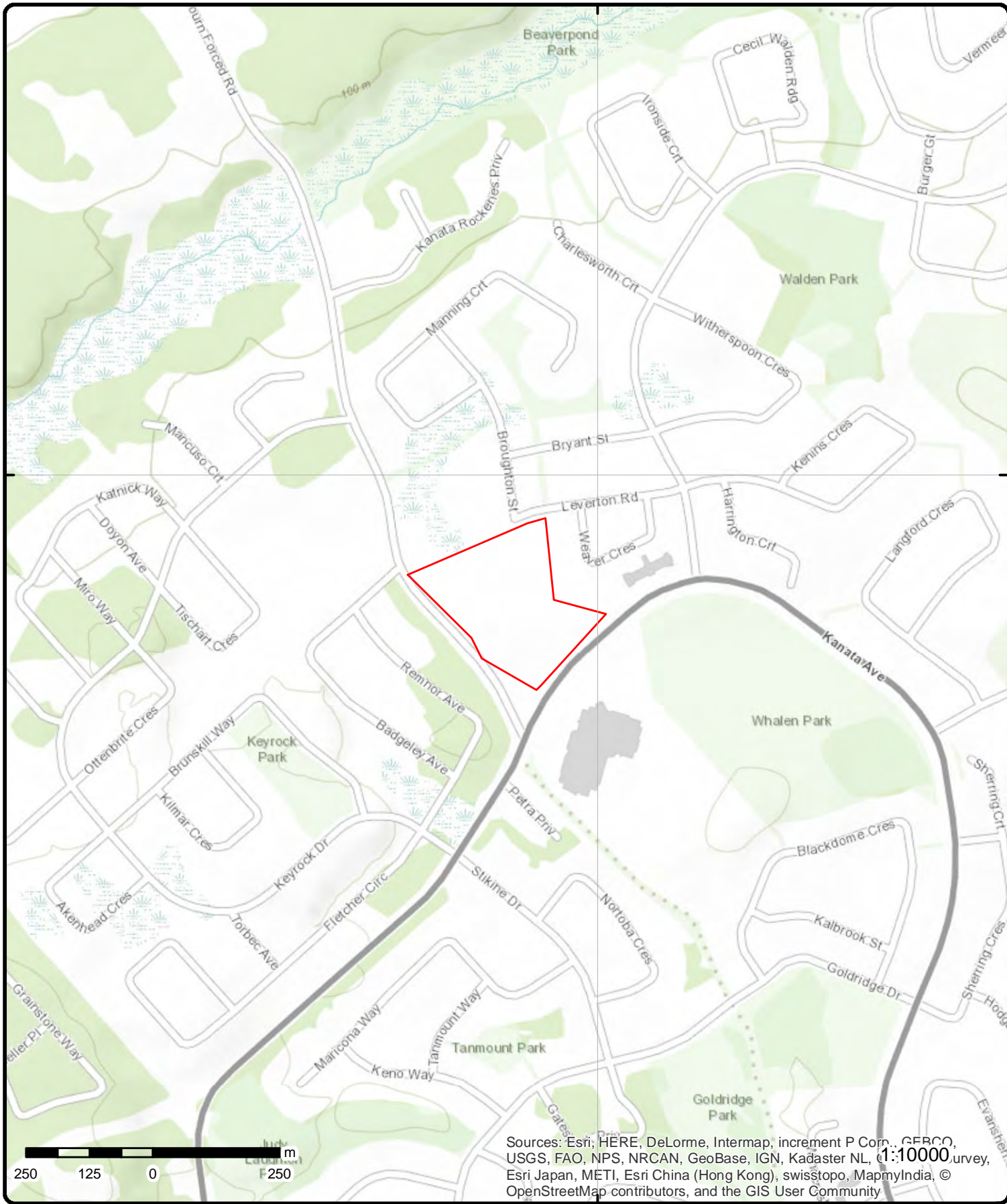
Address: 5100 Kanata Anvue, Ottawa, ON

Source: ESRI World Imagery

Order No: 20170623337



© ERIS Information Limited Partnership



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Topographic Map

Address: 5100 Kanata Anvue, Ottawa, ON

Source: ESRI World Topographic Map

Order No: 20170623337



© ERIS Information Limited Partnership

Detail Report

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
AMIS	<u>4</u>	1 of 1	-/0.0	105.4	O'BRIEN-FOWLER MARCH ON

Site Access Code: 6 AMIS Distr Code: SE Abandoned Mine ID: 06963 Old MDI ID: SO0472 New MDI ID: MDI31G05SW00008 Official Nm: O'BRIEN-FOWLER Mine Status: ABANDONED Mine Plan/Section: NO Site Class: Clos Reason Code: 3 Closure Plan: NO Prim Commod Code: FELD Prim Commod: FELDSPAR (NONMETALS) Operat Access: HIGHWAY Date Entered: Date Last Modified: 11/22/2006 Effective Date: 2003-01-27.15:37:01 District Desc: TWEED Animal Desc: Status Type Code: AB Mine Features Desc: MISCELLANEOUS STRUCTURES; MISCELLANEOUS STRUCTURES; QUARRY AMIS Bkgrd Info: ACCESS; FROM OTTAWA, EXIT HWY 417 TO NORTH TERRY FOX DRIVE AND CONTINUE 2KM TO INTERSECTION. BACK WALL OF QUARRY IS VISIBLE APPROX 120M DUE NORTH FROM INTERSECTION.	Start Year: 1/1/1919 End Year: 01-Jan-21 Prog Rehab Plan: NO Evid of Site Contam: UNK Evid of Sulphide: UNK Evid Animals Pres: UNK Revegetation: UNK Veg Condition: Veg Descr: Chemical Doc: UNK Jurisdiction: A.R.A. Lot No: 6 Concession: 2 Zone: 18 Northing: 5019237 Easting: 427405 Clos Reason: CEASING PRODUCTION - OTHER
---	---

PAST PRODUCER; PIT 40X9X9M DEEP & NO.2 PIT 15X9X6M DEEP.; LOCATED AT TRIANGLE SYMBOL "FEL,U" NEAREST SYMBOL 15, JUST SW. OF SOUTH MARCH STATION ON MAP OGS 1976, P1507 PEMBROKE AND PART OF THE OTTAWA SHEETS.; COMMODITY: FELDSPAR; LOT 16 CONC 2&3;

THE YEAR 2000 SURVEY REPORTS TW0 CONCRETE FOUNDATIONS AND A QUARRY THAT IS BENCHED <10M AND DRY.

Alias Nm: O'BRIEN-FOWLER

--Details--

Date Entered:
Dat Last Modified: 06-11-22
Mine Hazard Status Code: NH
Mine Feature Class Code: 3
Feature Class: STRUCTURE
Feature Type: MISCELLANEOUS STRUCTURES
Hazard Status: NOT A HAZARD
Description: 2000 ASSESSMENT; FOUNDATION OF UNKNOWN PURPOSE. CONSISTS OF CONCRETE ON GRADE. Note: many records provided by the department have a truncated Description field.

Date Entered: 06-11-22
Dat Last Modified: 06-11-22
Mine Hazard Status Code: NH
Mine Feature Class Code: 4
Feature Class: FEATURE TO SURFACE
Feature Type: QUARRY
Hazard Status: NOT A HAZARD
Description: 2000 ASSESSMENT; QUARRY THAT IS BENCHED <10M AND DRY. Note: many records provided by the department have a truncated Description field.

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Date Entered:					
Dat Last Modified:		06-11-22			
Mine Hazard Status Code:		NH			
Mine Feature Class Code:		3			
Feature Class:		STRUCTURE			
Feature Type:		MISCELLANEOUS STRUCTURES			
Hazard Status:		NOT A HAZARD			
Description:		2000 ASSESSMENT; FOUNDATION OF UNKNOWN PURPOSE. MADE OF CONCRETE ON A GRADE. Note: many records provided by the department have a truncated Description field.			

CA	<u>5</u>	1 of 1	SSE/28.3	107.2	City of Ottawa Goulbourn Forced Road and Kanata Avenue Ottawa ON
Certificate #:		8707-7YKMF2			
Application Year:		2009			
Issue Date:		12/10/2009			
Approval Type:		Municipal and Private Sewage Works			
Status:		Approved			
Application Type:					
Client Name::					
Client Address::					
Client City::					
Client Postal Code::					
Project Description::					
Contaminants::					
Emission Control::					

CA	<u>7</u>	1 of 2	ENE/51.2	107.6	Kingsway Arms (Walden Village) Inc. 27 Weaver Crescent Ottawa ON
Certificate #:		5684-6SGQP4			
Application Year:		2006			
Issue Date:		8/25/2006			
Approval Type:		Municipal and Private Sewage Works			
Status:		Approved			
Application Type:					
Client Name::					
Client Address::					
Client City::					
Client Postal Code::					
Project Description::					
Contaminants::					
Emission Control::					

CA	<u>11</u>	1 of 2	E/134.0	105.9	GENSTAR DEVELOPMENT COMPANY EASTERN LTD. CASTLEFRANK RD/WALDEN DR. KANATA ON
Certificate #:		3-0367-98-			
Application Year:		98			
Issue Date:		4/14/1998			
Approval Type:		Municipal sewage			
Status:		Approved			
Application Type:					
Client Name::					
Client Address::					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Client City:: Client Postal Code:: Project Description:: Contaminants:: Emission Control::					
CA	<u>11</u>	2 of 2	E/134.0	105.9	GENSTAR DEVELOPMENT COMPANY EASTERN LTD. CASTLEFRANK RD/WALDEN DR. KANATA ON
Certificate #: 7-0238-98- Application Year: 98 Issue Date: 4/14/1998 Approval Type: Municipal water Status: Approved Application Type: Client Name:: Client Address:: Client City:: Client Postal Code:: Project Description:: Contaminants:: Emission Control::					
CA	<u>13</u>	1 of 1	ENE/191.4	105.9	IMASCO ENTERPRISES INC. WALDEN DR/KENINS CRES. KANATA CITY ON
Certificate #: 7-0825-99- Application Year: 99 Issue Date: 10/15/1999 Approval Type: Municipal water Status: Approved Application Type: Client Name:: Client Address:: Client City:: Client Postal Code:: Project Description:: Contaminants:: Emission Control::					
EHS	<u>1</u>	1 of 1	-/0.0	107.5	5100 Kanata Ave Ottawa ON K2K2Z8
Postal Code: K2K2Z8 City: Ottawa Address2: Address1: 5100 Kanata Ave Provstate: ON Order No.: 20141217023 Addit. Info Ordered:: Report Date: 23-DEC-14 Report Type: Custom Report Search Radius (km): .25					
EHS	<u>3</u>	1 of 1	-/0.0	104.4	5100 Kanata Ave Ottawa ON

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Postal Code: City: Ottawa Address2: Address1: 5100 Kanata Ave Provstate: ON Order No.: 20160817050 Addit. Info Ordered:: Report Date: 24-AUG-16 Report Type: Standard Report Search Radius (km): .25					

EHS	<u>7</u>	2 of 2	ENE/51.2	107.6	27 Weaver Crescent Kanata ON K2K 2Z8
Postal Code: City: Address2: Address1: Provstate: Order No.: 20011121004 Addit. Info Ordered:: Report Date: 11/29/01 Report Type: Basic Report Search Radius (km): 0.25					

EHS	<u>15</u>	1 of 1	WSW/203.4	106.0	Campeau Drive Ottawa ON
Postal Code: City: Address2: Address1: Provstate: Order No.: 20110128038 Addit. Info Ordered:: Report Date: 2/8/2011 Report Type: Custom Report Search Radius (km): 0.2					

GEN	<u>12</u>	1 of 9	SE/172.2	106.4	Ottawa Catholic District School Board 5115 Kanata Avenue Kanata ON K2K 3K5
PO Box Num: Status: Registered Country: Canada Generator #: ON5505104 Approval Yrs.: As of Sep 2016 SIC Code: SIC Description:					
--Details--					
Waste Code: 145 L Waste Description: Wastes from the use of pigments, coatings and paints					
Waste Code: 145 I Waste Description: Wastes from the use of pigments, coatings and paints					

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
Waste Code:		148 L			
Waste Description:		Misc. wastes and inorganic chemicals			
Waste Code:		148 I			
Waste Description:		Misc. wastes and inorganic chemicals			
Waste Code:		148 C			
Waste Description:		Misc. wastes and inorganic chemicals			
Waste Code:		263 L			
Waste Description:		Misc. waste organic chemicals			
Waste Code:		263 I			
Waste Description:		Misc. waste organic chemicals			
Waste Code:		213 T			
Waste Description:		Petroleum distillates			
Waste Code:		213 L			
Waste Description:		Petroleum distillates			
Waste Code:		213 I			
Waste Description:		Petroleum distillates			
Waste Code:		252 L			
Waste Description:		Waste crankcase oils and lubricants			
Waste Code:		251 T			
Waste Description:		Waste oils/sludges (petroleum based)			
Waste Code:		251 L			
Waste Description:		Waste oils/sludges (petroleum based)			
Waste Code:		331 L			
Waste Description:		Waste compressed gases including cylinders			
Waste Code:		331 I			
Waste Description:		Waste compressed gases including cylinders			
Waste Code:		264 L			
Waste Description:		Photoprocessing wastes			
Waste Code:		264 C			
Waste Description:		Photoprocessing wastes			

GEN 12 2 of 9 SE/172.2 106.4 **Ottawa Catholic District School Board
5115 Kanata Avenue
Kanata ON K2K 3K5**

PO Box Num:
Status:
Country:
Generator #: ON5505104
Approval Yrs:: 2010
SIC Code: 611690
SIC Description: All Other Schools and Instruction

--Details--
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
		331			
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			
		145			
Waste Code:		145			
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
		263			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			
		264			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
		213			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
		252			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	<u>12</u>	3 of 9	SE/172.2	106.4	Ottawa Catholic District School Board 5115 Kanata Avenue Kanata ON K2K 3K5
PO Box Num:					
Status:					
Country:					
Generator #: ON5505104					
Approval Yrs.: 2011					
SIC Code: 611690					
SIC Description: All Other Schools and Instruction					
--Details--					
		145			
Waste Code:		145			
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
		251			
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
		263			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			
		264			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
		252			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
		148			
Waste Code:		148			
Waste Description:		INORGANIC LABORATORY CHEMICALS			
		213			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
		331			
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	<u>12</u>	4 of 9	SE/172.2	106.4	Ottawa Catholic District School Board 5115 Kanata Avenue Kanata ON K2K 3K5

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
PO Box Num:					
Status:					
Country:					
Generator #:		ON5505104			
Approval Yrs.:		2012			
SIC Code:		611690			
SIC Description:		All Other Schools and Instruction			
--Details--					
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
Waste Code:		145			
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
Waste Code:		148			
Waste Description:		INORGANIC LABORATORY CHEMICALS			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			

GEN	<u>12</u>	5 of 9	SE/172.2	106.4	Ottawa Catholic District School Board 5115 Kanata Avenue Kanata ON K2K 3K5
------------	------------------	---------------	-----------------	--------------	---

PO Box Num:
Status:
Country:
Generator #: ON5505104
Approval Yrs.: As of May 2015
SIC Code:
SIC Description:

--Details--

Waste Code: 213
Waste Description: Petroleum distillates

Waste Code: 145
Waste Description: Wastes from the use of pigments, coatings and paints

Waste Code: 331
Waste Description: Waste compressed gases including cylinders

Waste Code: 252
Waste Description: Waste crankcase oils and lubricants

Waste Code: 251
Waste Description: Waste oils/sludges (petroleum based)

Waste Code: 148

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Waste Description:		Misc. wastes and inorganic chemicals			
Waste Code:		263			
Waste Description:		Misc. waste organic chemicals			
Waste Code:		264			
Waste Description:		Photoprocessing wastes			

GEN	12	6 of 9	SE/172.2	106.4	Ottawa-Carleton District Catholic School Board 5115 Kanata Avenue Kanata ON K2K 3K5
PO Box Num:					
Status:					
Country:					
Generator #:		ON5505104			
Approval Yrs.:		03,04,05,06			
SIC Code:					
SIC Description:					
--Details--					
Waste Code:		145			
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
Waste Code:		148			
Waste Description:		INORGANIC LABORATORY CHEMICALS			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			

GEN	12	7 of 9	SE/172.2	106.4	Ottawa Catholic District School Board 5115 Kanata Avenue Kanata ON K2K 3K5
PO Box Num:					
Status:					
Country:					
Generator #:		ON5505104			
Approval Yrs.:		2009			
SIC Code:		611690			
SIC Description:		All Other Schools and Instruction			
--Details--					
Waste Code:		145			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
Waste Code:		148			
Waste Description:		INORGANIC LABORATORY CHEMICALS			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			

GEN	<u>12</u>	8 of 9	SE/172.2	106.4	Ottawa Catholic District School Board 5115 Kanata Avenue Kanata ON K2K 3K5
PO Box Num:					
Status:					
Country:					
Generator #:		ON5505104			
Approval Yrs.:		07,08			
SIC Code:		611690			
SIC Description:		All Other Schools and Instruction			
--Details--					
Waste Code:		145			
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
Waste Code:		148			
Waste Description:		INORGANIC LABORATORY CHEMICALS			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			

GEN	<u>12</u>	9 of 9	SE/172.2	106.4	Ottawa Catholic District School
------------	------------------	---------------	-----------------	--------------	--

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
					Board 5115 Kanata Avenue Kanata ON
PO Box Num:					
Status:					
Country:					
Generator #:		ON5505104			
Approval Yrs.:		2013			
SIC Code:		611690			
SIC Description:		ALL OTHER SCHOOLS AND INSTRUCTION			
--Details--					
Waste Code:		148			
Waste Description:		INORGANIC LABORATORY CHEMICALS			
Waste Code:		263			
Waste Description:		ORGANIC LABORATORY CHEMICALS			
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
Waste Code:		145			
Waste Description:		PAINT/PIGMENT/COATING RESIDUES			
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
Waste Code:		213			
Waste Description:		PETROLEUM DISTILLATES			
Waste Code:		264			
Waste Description:		PHOTOPROCESSING WASTES			
Waste Code:		331			
Waste Description:		WASTE COMPRESSED GASES			

INC	14	1 of 1	SW/201.3	107.8	242 Badgeley Avenue, Ottawa ON
Incident No:		719150			
Incident ID:		2876154			
Attribute Category:		FS-Perform L1 Incident Insp			
Status Code:		Causal Analysis Complete			
Incident Location:		242 Badgeley Avenue, Ottawa - CO Release			
Drainage System:					
Sub Surface Contam.:					
Aff. Prop. Use Water:					
Contam. Migrated:					
Contact Natural Env.:					
Near Body of Water:					
Approx. Quant. Rel.:					
Equipment Model:		GMN950703BXAC			
Serial No:		803002647			
Residential App. Type:		Furnace			
Commercial App. Type:					
Industrial App. Type:					
Institutional App. Type:					
Venting Type:		Forced Draft (e.g., Combustion Air Blower)			
Vent Connector Mater:					
Vent Chimney Mater:		Plastic - PVC			
Pipeline Type:					
Pipeline Involved:					
Pipe Material:					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Depth Ground Cover:					
Regulator Location:					
Regulator Type:					
Operation Pressure:					
Liquid Prop Make:					
Liquid Prop Model:					
Liquid Prop Serial No:					
Equipment Type:					
Cylinder Capacity:					
Cylinder Capac. Units:					
Cylinder Material Type:					
Tank Capacity:					
Fuels Occurrence Type:	CO Release				
Fuel Type Involved:	Natural Gas				
Date of Occurrence:	2012/01/16 00:00:00				
Time of Occurrence:	NULL				
Occur Insp Start Date:	2012/01/16 00:00:00				
Any Health Impact:	No				
Any Environmental Impact:	No				
Was Service Interrupted:	Yes				
Was Property Damaged:	Yes				
Operation Type Involved:	Private Dwelling				
Enforcement Policy:	NULL				
Prc Escalation Required:	NULL				
Task No:	3682374				
Notes:					
Occurrence Narrative:	NULL				
Tank Material Type:					
Tank Storage Type:					
Tank Location Type:					
Pump Flow Rate Capac:					
Liquid Prop Notes:					

MNR	8	1 of 1	WSW/90.9	106.6	WILLIMOTT
					ON
MDI Num:	MDI31G05SW00091			Geological District:	SOUTHEASTERN ONTARIO
OGF ID:	205255828			Easting:	427227.193
Mining Division:	SOUTHERN ONTARIO			Northing:	5019222.957
Zone:	18			Claim Map:	M-0121
Access Description:	N/A				
Deposit Status:	OCCURRENCE				
--Details--					
Year:	1993			Twp/Area:	MARCH
Deposit Charactr:				Con/Lot/Sec:	LOT: 6 Con: 2
Commodity:	MOLYBDENUM				

MNR	16	1 of 1	NE/211.2	104.1	O'BRIEN-FOWLER
					ON
MDI Num:	MDI31G05SW00008			Geological District:	SOUTHEASTERN ONTARIO
OGF ID:	205259099			Easting:	427613.197
Mining Division:	SOUTHERN ONTARIO			Northing:	5019526.96
Zone:	18			Claim Map:	M-0121
Access Description:	In the centre of the town of Kanata, which lies about 20 km southwest of Ottawa, a paved road leads southwest from Hwy 7 and intersects a gravel road after 2.5 km. The occurrence lies 300 m east of the intersection, and 200m north of the paved road.				
Deposit Status:	PAST PRODUCING MINE WITHOUT RESERVES				

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
--Details--					
Year:	1986			Twp/Area:	MARCH
Deposit Charactr:				Con/Lot/Sec:	LOT: 6 Con: 2
Commodity:		FELDSPAR (NONMETALS), MOLYBDENUM, THORIUM, URANIUM, ZINC			
Year:	1986			Twp/Area:	MARCH
Deposit Charactr:				Con/Lot/Sec:	LOT: 6 Con: 3
Commodity:		FELDSPAR (NONMETALS), MOLYBDENUM, THORIUM, URANIUM, ZINC			

WWIS	2	1 of 1	-/0.0	106.7	lot 6 con 2 ON
Well ID:	1519396			Lot:	006
Construction Date::				Concession:	02
Primary Water Use::	Domestic			Concession Name:	CON
Sec. Water Use::				Easting NAD83::	
Final Well Status::	Water Supply			Northing NAD83::	
Specific Capacity::				Zone::	
Municipality:	MARCH TOWNSHIP			UTM Reliability::	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--				
Bore Hole ID:	10041266				
DP2BR:	5				
Code OB:	r				
Code OB Description:	Bedrock				
Open Hole:					
Date Completed:	24-SEP-84				
Remarks:					
Zone:	18				
East 83:	427429.6				
North 83:	5019321				
UTMRC:	4				
UTMRC Description:	margin of error : 30 m - 100 m				
Location Method:	p4				
Org CS:					
Elevation:	106.55				
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--	--				
Overburden and Bedrock Materials Interval					
--	--				
Formation ID:	931041563				
Layer:	1				
General Color:	BROWN				
Most Common Material:	CLAY				
Other Materials:	FILL				
Other Materials:					
Formation Top Depth:	0				
Formation End Depth:	5				
Formation End Depth UOM:	ft				
--	--				
Formation ID:	931041564				
Layer:	2				
General Color:	GREY				
Most Common Material:	SANDSTONE				

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
		HARD			
		5			
		50			
		ft			
		--			
		--			
		961519396			
		5			
		Air Percussion			
		--			
		--			
		10589836			
		1			
		--			
		--			
		930072050			
		1			
		STEEL			
		22			
		6			
		inch			
		ft			
		--			
		930072051			
		2			
		OPEN HOLE			
		50			
		6			
		inch			
		ft			
		--			
		--			
		991519396			
		15			
		25			
		40			
		30			
		5			
		ft			
		GPM			
		2			
		CLOUDY			
		1			
		1			
		0			
		N			
		--			
		--			
		934108053			
		991519396			
		Draw Down			
		15			
		25			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Test Level UOM:		ft			
--		--			
Pump Test Detail ID:		934382790			
Pump Test ID:		991519396			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		25			
Test Level UOM:		ft			
--		--			
Pump Test Detail ID:		934652205			
Pump Test ID:		991519396			
Test Type:		Draw Down			
Test Duration:		45			
Test Level:		25			
Test Level UOM:		ft			
--		--			
Pump Test Detail ID:		934893529			
Pump Test ID:		991519396			
Test Type:		Draw Down			
Test Duration:		60			
Test Level:		25			
Test Level UOM:		ft			
--		--			
--		--			
Water Details					
--		--			
Water ID:		933476371			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		40			
Water Found Depth UOM:		ft			
--		--			
--		--			

WWIS	6	1 of 1	ESE/47.5	106.3	lot 5 con 2 ON
Well ID:	1519357			Lot:	005
Construction Date::				Concession:	02
Primary Water Use::	Industrial			Concession Name:	CON
Sec. Water Use::				Easting NAD83::	
Final Well Status::	Water Supply			Northing NAD83::	
Specific Capacity::				Zone::	
Municipality:	MARCH TOWNSHIP			UTM Reliability::	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--		--			
Bore Hole ID:	10041227				
DP2BR:	498				
Code OB:	h				
Code OB Description:	Mixed in a Layer				
Open Hole:					
Date Completed:	23-MAY-84				
Remarks:					
Zone:	18				
East 83:	427529.6				
North 83:	5019221				
UTMRC:	4				
UTMRC Description:	margin of error : 30 m - 100 m				
Location Method:	p4				
Org CS:					
Elevation:	104.61				
Elevrc:					
Elevrc Description:					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
<i>Location Source Date:</i>					
<i>Source Revision Comment:</i>					
<i>Improvement Location Source:</i>					
<i>Improvement Location Method:</i>					
<i>Supplier Comment:</i>					
<i>Spatial Status:</i>					
--					
<i>Overburden and Bedrock Materials Interval</i>					
--					
<i>Formation ID:</i> 931041421					
<i>Layer:</i> 1					
<i>General Color:</i> BROWN					
<i>Most Common Material:</i> OVERBURDEN					
<i>Other Materials:</i> BOULDERS					
<i>Other Materials:</i> FILL					
<i>Formation Top Depth:</i> 0					
<i>Formation End Depth:</i> 17					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 931041422					
<i>Layer:</i> 2					
<i>General Color:</i> GREY					
<i>Most Common Material:</i> STONES					
<i>Other Materials:</i> LIMESTONE					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 17					
<i>Formation End Depth:</i> 57					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 931041423					
<i>Layer:</i> 3					
<i>General Color:</i> BROWN					
<i>Most Common Material:</i> STONES					
<i>Other Materials:</i> LIMESTONE					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 57					
<i>Formation End Depth:</i> 60					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 931041424					
<i>Layer:</i> 4					
<i>General Color:</i> GREY					
<i>Most Common Material:</i> STONES					
<i>Other Materials:</i> LIMESTONE					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 60					
<i>Formation End Depth:</i> 487					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 931041425					
<i>Layer:</i> 5					
<i>General Color:</i> BROWN					
<i>Most Common Material:</i> STONES					
<i>Other Materials:</i> SANDSTONE					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 487					
<i>Formation End Depth:</i> 498					
<i>Formation End Depth UOM:</i> ft					
--					
<i>Formation ID:</i> 931041426					
<i>Layer:</i> 6					
<i>General Color:</i> GREY					
<i>Most Common Material:</i> STONES					
<i>Other Materials:</i> LIMESTONE					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i> 498					

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
	Formation End Depth:	505			
	Formation End Depth UOM:	ft			
	--	--			
	Method of Construction & Well Use				
	--	--			
	Method Construction ID:	961519357			
	Method Construction Code:	5			
	Method Construction:	Air Percussion			
	Other Method Construction:				
	--	--			
	Pipe Information				
	--	--			
	Pipe ID:	10589797			
	Casing Number:	1			
	Comment:				
	Alt Name:				
	--	--			
	Construction Record - Casing				
	--	--			
	Casing ID:	930071980			
	Layer:	1			
	Open Hole or Material:	STEEL			
	Depth From:				
	Depth To:	22			
	Casing Diameter:	8			
	Casing Diameter UOM:	inch			
	Casing Depth UOM:	ft			
	--	--			
	Casing ID:	930071981			
	Layer:	2			
	Open Hole or Material:	OPEN HOLE			
	Depth From:				
	Depth To:	505			
	Casing Diameter:				
	Casing Diameter UOM:	inch			
	Casing Depth UOM:	ft			
	--	--			
	Well Yield Testing				
	--	--			
	Pump Test ID:	991519357			
	Pump Set At:				
	Static Level:	20			
	Final Level After Pumping:	505			
	Recommended Pump Depth:	350			
	Pumping Rate:	40			
	Flowing Rate:				
	Recommended Pump Rate:	30			
	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			
	--	--			
	Draw Down & Recovery				
	--	--			
	Pump Test Detail ID:	934108015			
	Pump Test ID:	991519357			
	Test Type:	Recovery			
	Test Duration:	15			
	Test Level:	101			
	Test Level UOM:	ft			
	--	--			
	Pump Test Detail ID:	934382751			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Pump Test ID:		991519357			
Test Type:		Recovery			
Test Duration:		30			
Test Level:		20			
Test Level UOM:		ft			
--		--			
Pump Test Detail ID:		934652167			
Pump Test ID:		991519357			
Test Type:		Recovery			
Test Duration:		45			
Test Level:		20			
Test Level UOM:		ft			
--		--			
Pump Test Detail ID:		934893491			
Pump Test ID:		991519357			
Test Type:		Recovery			
Test Duration:		60			
Test Level:		20			
Test Level UOM:		ft			
--		--			
--		--			
Water Details					
--		--			
Water ID:		933476316			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		57			
Water Found Depth UOM:		ft			
--		--			
Water ID:		933476317			
Layer:		2			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		498			
Water Found Depth UOM:		ft			
--		--			
--		--			

WWIS	9	1 of 1	N/109.0	105.7	lot 6 con 2 ON
Well ID:	1515474			Lot:	006
Construction Date::				Concession:	02
Primary Water Use::	Domestic			Concession Name:	CON
Sec. Water Use::				Easting NAD83::	
Final Well Status::	Water Supply			Northing NAD83::	
Specific Capacity::				Zone::	
Municipality:	MARCH TOWNSHIP			UTM Reliability::	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--				
Bore Hole ID:	10037420				
DP2BR:	6				
Code OB:	r				
Code OB Description:	Bedrock				
Open Hole:					
Date Completed:	15-JUN-76				
Remarks:					
Zone:	18				
East 83:	427429.6				
North 83:	5019521				
UTMRC:	4				
UTMRC Description:	margin of error : 30 m - 100 m				
Location Method:	p4				

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
Org CS:					
Elevation:		104.79			
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--		--			
Overburden and Bedrock Materials Interval					
--		--			
Formation ID:		931029271			
Layer:		1			
General Color:					
Most Common Material:		TOPSOIL			
Other Materials:					
Other Materials:					
Formation Top Depth:		0			
Formation End Depth:		6			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		931029272			
Layer:		2			
General Color:		BLACK			
Most Common Material:		GRANITE			
Other Materials:					
Other Materials:					
Formation Top Depth:		6			
Formation End Depth:		195			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		931029273			
Layer:		3			
General Color:					
Most Common Material:		LIMESTONE			
Other Materials:		GRANITE			
Other Materials:					
Formation Top Depth:		195			
Formation End Depth:		220			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		931029274			
Layer:		4			
General Color:					
Most Common Material:		GRANITE			
Other Materials:					
Other Materials:					
Formation Top Depth:		220			
Formation End Depth:		240			
Formation End Depth UOM:		ft			
--		--			
Method of Construction & Well Use					
--		--			
Method Construction ID:		961515474			
Method Construction Code:		4			
Method Construction:		Rotary (Air)			
Other Method Construction:					
--		--			
Pipe Information					
--		--			
Pipe ID:		10585990			
Casing Number:		1			
Comment:					

<i>DB</i>	<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>
Alt Name:					
--					
Construction Record - Casing					
--					
Casing ID:		930066024			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		16			
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--					
Well Yield Testing					
--					
Pump Test ID:		991515474			
Pump Set At:					
Static Level:		6			
Final Level After Pumping:		240			
Recommended Pump Depth:		175			
Pumping Rate:		2			
Flowing Rate:					
Recommended Pump Rate:		2			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		0			
Pumping Duration MIN:		30			
Flowing:		N			
--					
Draw Down & Recovery					
--					
Pump Test Detail ID:		934646889			
Pump Test ID:		991515474			
Test Type:		Recovery			
Test Duration:		45			
Test Level:		110			
Test Level UOM:		ft			
--					
Pump Test Detail ID:		934896014			
Pump Test ID:		991515474			
Test Type:		Recovery			
Test Duration:		60			
Test Level:		73			
Test Level UOM:		ft			
--					
--					
Water Details					
--					
Water ID:		933471577			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		195			
Water Found Depth UOM:		ft			
--					
Water ID:		933471578			
Layer:		2			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		240			
Water Found Depth UOM:		ft			
--					
--					

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
WWIS	10	1 of 1	WSW/111.6	108.3	lot 6 con 3 KANATA ON
Well ID:	1536685			Lot:	006
Construction Date::				Concession:	03
Primary Water Use::				Concession Name:	CON
Sec. Water Use::				Easting NAD83::	
Final Well Status::				Northing NAD83::	
Specific Capacity::				Zone::	
Municipality:	MARCH TOWNSHIP			UTM Reliability::	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--	--	--	--	--
Bore Hole ID:	11691779				
DP2BR:					
Code OB:	--				
Code OB Description:	No formation data				
Open Hole:					
Date Completed:	21-AUG-06				
Remarks:					
Zone:	18				
East 83:	427207				
North 83:	5019214				
UTMRC:	3				
UTMRC Description:	margin of error : 10 - 30 m				
Location Method:	wwr				
Org CS:	UTM83				
Elevation:	106				
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--	--	--	--	--	--
Annular Space/Abandonment Sealing Record					
--	--	--	--	--	--
Plug ID:	933302030				
Layer:	1				
Plug From:	12.8				
Plug To:	0				
Plug Depth UOM:	m				
--	--	--	--	--	--
Method of Construction & Well Use					
--	--	--	--	--	--
Method Construction ID:	961536685				
Method Construction Code:					
Method Construction:					
Other Method Construction:					
--	--	--	--	--	--
Pipe Information					
--	--	--	--	--	--
Pipe ID:	11696645				
Casing Number:	1				
Comment:					
Alt Name:					
--	--	--	--	--	--

Unplottable Summary

Total: 25 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA		Lot 6, Concession 2 & 3 Walden Drive	Ottawa ON	
CA	IMASCO ENTERPRISES INC.	EASEMENT BLK.54/KENINS CRES.	KANATA CITY ON	
CA	IMASCO ENTERPRISES INC.	EASEMENT BLK.54/KENINS CRES.	KANATA CITY ON	
CA		Kanata Avenue	Ottawa ON	
CA	TEGA Developments Inc.	Kanata Ave	Ottawa ON	
CA	GENSTAR DEV. CO EASTERN LTD.-LOT 5,CON.2	HERRINGTON CT./MANNING CRES.	KANATA CITY ON	
CA	GENSTAR DEV. CO. EASTERN LTD.-LOT 5/C-2	HERRINGTON CT./MANNING CRES.	KANATA CITY ON	
CA	MINTO DEVELOPMENTS INC.	LOT 10,C.3/GOULBOURN FORCED RD	KANATA CITY ON	
CA	MINTO DEVELOPMENTS INC.	LOT 10,C.3/GOULBOURN FORCED RD	KANATA CITY ON	
CA	1250353 Ontario Limited	Part of Lot 6, Concession 2 and 3, Rideau	Ottawa ON	
CA	First Capital Asset Management ULC	Part of Lot 6, Concession 2 Reference Plan 4R-22210	Ottawa ON	
CA	Longwood Building Corporation	Part of Lot 6, Between Concession 2 & 3	Ottawa ON	
CA	Longwood Building Corporation	Part of Lot 6 in the Gore Concession between Concessions 2 & 3, Rideau Front	Ottawa ON	
CA		Lot 6, Concession 2 and 3	Ottawa ON	
CA		Lot 6, Concession 2 and 3	Ottawa ON	
CA		Lot 6, Concession 2 and 3	Ottawa ON	
CA		Lot 6, Concession 2 & 3 Walden Drive	Ottawa ON	

CA		Weaver Crescent	Ottawa ON	
CA		Walden Drive	Kanata ON	
CA		Lot 6, Concession 2 & 3, Walden Drive	Ottawa ON	
CA		Weaver Crescent	Ottawa ON	
CA		Lot 6, Concession 2 & 3, Walden Drive	Ottawa ON	
CA		Walden Drive	Kanata ON	
ECA	2436026 Ontario Inc.	Lot 5	City of Ottawa ON	K4P 1A2
SPL	SET CONSTRUCTION LTD.	LOT 5, CONC. II RR #1 MOODIE DR. NEPEAN	KANATA CITY ON	

Unplottable Report

Database: CA

Site:

Lot 6, Concession 2 & 3 Walden Drive Ottawa ON

Certificate #: 1072-4PSK5W
Application Year: 01
Issue Date: 5/18/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: Notice
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: The name of the Company has been changed from Genstar Development Company Limited to KNL Developments Inc.
Contaminants::
Emission Control::

Database: CA

Site:

*IMASCO ENTERPRISES INC.
EASEMENT BLK.54/KENINS CRES. KANATA CITY ON*

Certificate #: 3-1223-99-
Application Year: 99
Issue Date: 10/22/1999
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA

Site:

*IMASCO ENTERPRISES INC.
EASEMENT BLK.54/KENINS CRES. KANATA CITY ON*

Certificate #: 7-0837-99-
Application Year: 99
Issue Date: 10/21/1999
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA Site: Kanata Avenue Ottawa ON

Certificate #: 3692-5CKGW5
Application Year: 02
Issue Date: 8/2/02
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: The Corporation of the City of Ottawa
Client Address:: 110 Laurier Avenue West
Client City:: Ottawa
Client Postal Code:: K1P 1J1
Project Description:: Approval is sought for the construction of storm sewers on Kanata Avenue.
Contaminants::
Emission Control::

Database: CA Site: TEGA Developments Inc.
Kanata Ave Ottawa ON

Certificate #: 3400-7RJJW8
Application Year: 2009
Issue Date: 5/1/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA Site: GENSTAR DEV. CO EASTERN LTD.-LOT 5,CON.2
HERRINGTON CT./MANNING CRES. KANATA CITY ON

Certificate #: 7-0475-92-
Application Year: 92
Issue Date: 5/26/1992
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA Site: GENSTAR DEV. CO. EASTERN LTD.-LOT 5/C-2
HERRINGTON CT./MANNING CRES. KANATA CITY ON

Certificate #: 3-0560-92-
Application Year: 92
Issue Date: 8/21/1992
Approval Type: Municipal sewage
Status: Revised
Application Type:
Client Name::

Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA **Site:** MINTO DEVELOPMENTS INC.
LOT 10,C.3/GOULBOURN FORCED RD KANATA CITY ON

Certificate #: 7-0817-99-
Application Year: 99
Issue Date: 10/6/1999
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA **Site:** MINTO DEVELOPMENTS INC.
LOT 10,C.3/GOULBOURN FORCED RD KANATA CITY ON

Certificate #: 3-1198-99-
Application Year: 99
Issue Date: 10/6/1999
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA **Site:** 1250353 Ontario Limited
Part of Lot 6, Concession 2 and 3, Rideau Ottawa ON

Certificate #: 9386-674PJH
Application Year: 2004
Issue Date: 12/16/2004
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Database: CA **Site:** First Capital Asset Management ULC

Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Storm and sanitary sewers to be constructed on Witherspoon Crescent
Contaminants::
Emission Control::

Database: CA **Site:** **Lot 6, Concession 2 and 3 Ottawa ON**

Certificate #: 6816-54HQ5P
Application Year: 01
Issue Date: 11/16/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Sanitary Sewers including appurtenances from approximately 50m west of Ironside Court to the Goulbourn Forced Road to serve the Kanata Lakes Subdivision, City of Ottawa
Contaminants::
Emission Control::

Database: CA **Site:** **Lot 6, Concession 2 and 3 Ottawa ON**

Certificate #: 1760-4W5ML6
Application Year: 01
Issue Date: 4/25/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Watermains to be constructed on Witherspoon Crescent
Contaminants::
Emission Control::

Database: CA **Site:** **Lot 6, Concession 2 & 3 Walden Drive Ottawa ON**

Certificate #: 4825-4WEQC9
Application Year: 01
Issue Date: 5/14/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: watermains to be constructed on Easements between Lots 54 & 55, and on Block 74 between Lots 57 & 58
Contaminants::
Emission Control::

Database: CA **Site:**

Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: This application is for the construction of watermains and appurtenances on Weaver Crescent.
Contaminants::
Emission Control::

Database: CA **Site:** Lot 6, Concession 2 & 3, Walden Drive Ottawa ON

Certificate #: 8868-4WEQWK
Application Year: 01
Issue Date: 5/14/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Sanitary sewers to be constructed on Charlesworth Lane and Walden Drive
Contaminants::
Emission Control::

Database: CA **Site:** Walden Drive Kanata ON

Certificate #: 1072-4PSK5W
Application Year: 00
Issue Date: 10/4/00
Approval Type: Municipal & Private water
Status: Amended
Application Type: New Certificate of Approval
Client Name:: Genstar Development Company Limited
Client Address:: 235 Stafford Road West
Client City:: Nepean
Client Postal Code:: K2H 9C1
Project Description:: Construction of watermains on Street No.s 1 & 2
Contaminants::
Emission Control::

Database: ECA **Site:** 2436026 Ontario Inc.
Lot 5 City of Ottawa ON K4P 1A2

Approval No: 3201-A8TKSD
Project Type: Industrial Sewage Works
Date: 2016-05-11
Status: Approved
Longitude:
Latitude:
Record Type:
PDF URL: <https://www.accessenvironment.ene.gov.on.ca/instruments/5348-A33PWR-14.pdf>
Full Address: Lot 5, Concession 4 City of Ottawa, Ontario K4P 1A2

Database: SPL **Site:** SET CONSTRUCTION LTD.
LOT 5, CONC. II RR #1 MOODIE DR. NEPEAN KANATA CITY ON

Ref No: 46922
Contaminant Code:
Contaminant Name:

Contaminant Quantity:
Incident Cause: PIPE/HOSE LEAK
Incident Dt: 2/22/1991
Incident Reason: EQUIPMENT FAILURE
Incident Summary: SET CONSTRUCTION -1/2 L. HYDRAULIC OIL TO GROUND FROM BACKHOE.
MOE Reported Dt: 2/22/1991
Environmental Impact: NOT ANTICIPATED
Nature of Impact:
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Receiving Environment:
Incident Event:
Site Municipality: 20103

Appendix: Database Descriptions

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

Abandoned Aggregate Inventory:

Provincial [AAGR](#)

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

Government Publication Date: Sept 2002*

Aggregate Inventory:

Provincial [AGR](#)

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

Government Publication Date: Up to Sep 2016

Abandoned Mine Information System:

Provincial [AMIS](#)

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

Government Publication Date: 1800-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 - Oct 2016

Borehole:

Provincial [BORE](#)

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

Government Publication Date: 1875-Jul 2014

Certificates of Approval:

Provincial [CA](#)

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

Government Publication Date: 1985-Oct 30, 2011*

Commercial Fuel Oil Tanks:

Provincial **CFOT**

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

Government Publication Date: 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 - Oct 2016

Compressed Natural Gas Stations:

Private **CNG**

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

Government Publication Date: Dec 31, 2012

Inventory of Coal Gasification Plants and Coal Tar Sites:

Provincial **COAL**

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

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions:

Provincial **CONV**

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

Government Publication Date: 1989-May 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-May 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-Aug 2015

Environmental Activity and Sector Registry:

Provincial **EASR**

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

Government Publication Date: Oct 2011-Mar 2017

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-May 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-Mar 2017

Environmental Effects Monitoring:

Federal **EEM**

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

Government Publication Date: 1992-2007*

ERIS Historical Searches:

Private **EHS**

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

Government Publication Date: 1999-Aug 2016

Environmental Issues Inventory System:

Federal **EIIS**

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

Government Publication Date: 1992-2001*

Emergency Management Historical Event:

Provincial **EMHE**

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: June 2000-Aug 2016

Fisheries & Oceans Fuel Tanks:

Federal **FOFT**

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

Government Publication Date: 1964-Sept 2003

Fuel Storage Tank:

Provincial **FST**

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

Government Publication Date: 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-Sep 2016

Greenhouse Gas Emissions from Large Facilities:

Federal **GHG**

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

Government Publication Date: 2013-Dec 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, 2014

National Defense & Canadian Forces Fuel Tanks:

Federal

NDFT

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

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills:

Federal

NDSP

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

Government Publication Date: Mar 1999-Aug 2010

National Defence & Canadian Forces Waste Disposal Sites:

Federal

NDWD

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

Government Publication Date: 2001-Apr 2007*

National Energy Board 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 2016

National Energy Board Wells:

Federal

NEBW

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

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES):

Federal

NEES

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

Government Publication Date: 1974-2003*

National PCB Inventory:

Federal

NPCB

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

Government Publication Date: 1988-2008*

National Pollutant Release Inventory:

Federal

NPRI

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

Government Publication Date: 1993-2014

Oil and Gas Wells:

Private

OGW

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

Government Publication Date: 1988-Jan 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 2016

Inventory of PCB Storage Sites:

Provincial

OPCB

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

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

Orders:

Provincial

ORD

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

Government Publication Date: 1994-May 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-Oct 2016

TSSA Pipeline Incidents:

Provincial PINC

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

Government Publication Date: 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-May 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: 1986-2013

Record of Site Condition:

Provincial RSC

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

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

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

Scott's Manufacturing Directory:

Private SCT

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

Government Publication Date: 1992-Mar 2011*

Ontario Spills:

Provincial SPL

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

Government Publication Date: 1988-Dec 2016

Wastewater Discharger Registration Database:

Provincial **SRDS**

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

Government Publication Date: 1990-2014

Anderson's Storage Tanks:

Private **TANK**

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

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks:

Federal **TCFT**

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

Government Publication Date: 1970-Jan 2015

TSSA Variances for Abandonment of Underground Storage Tanks:

Provincial **VAR**

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: 1970-Mar 2017

Waste Disposal Sites - MOE 1991 Historical Approval Inventory:

Provincial **WDSH**

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

Government Publication Date: Up to Oct 1990*

Water Well Information System:

Provincial **WWIS**

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

Government Publication Date: Jun 30, 2016

Definitions

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

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

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

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

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

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

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

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

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

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

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

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



APPENDIX C

Site Photographs



Photo 1 : View of west side of Site from Goulbourn Forced Road



Photo 2 : Filling in a depression on west side of site with ripped bedrock.



Photo 3 : North end of Site looking east. Stockpile of sand fill is off-site to north.



Photo 4: Southeast corner of Site on Kanata Ave, looking east at adjacent Senior's Residence.



Photo 5: All Saints High School on adjacent site to south of Site on Kanata Ave.



Photo 6: View of south site of Site looking north.



Photo 7 View of east side of Site looking west.



Photo 8: Off-site stockpile of sandy fill. No evidence of waste debris or contamination.





APPENDIX D

Aerial Photographs



LEGEND

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA




NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

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

CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO**

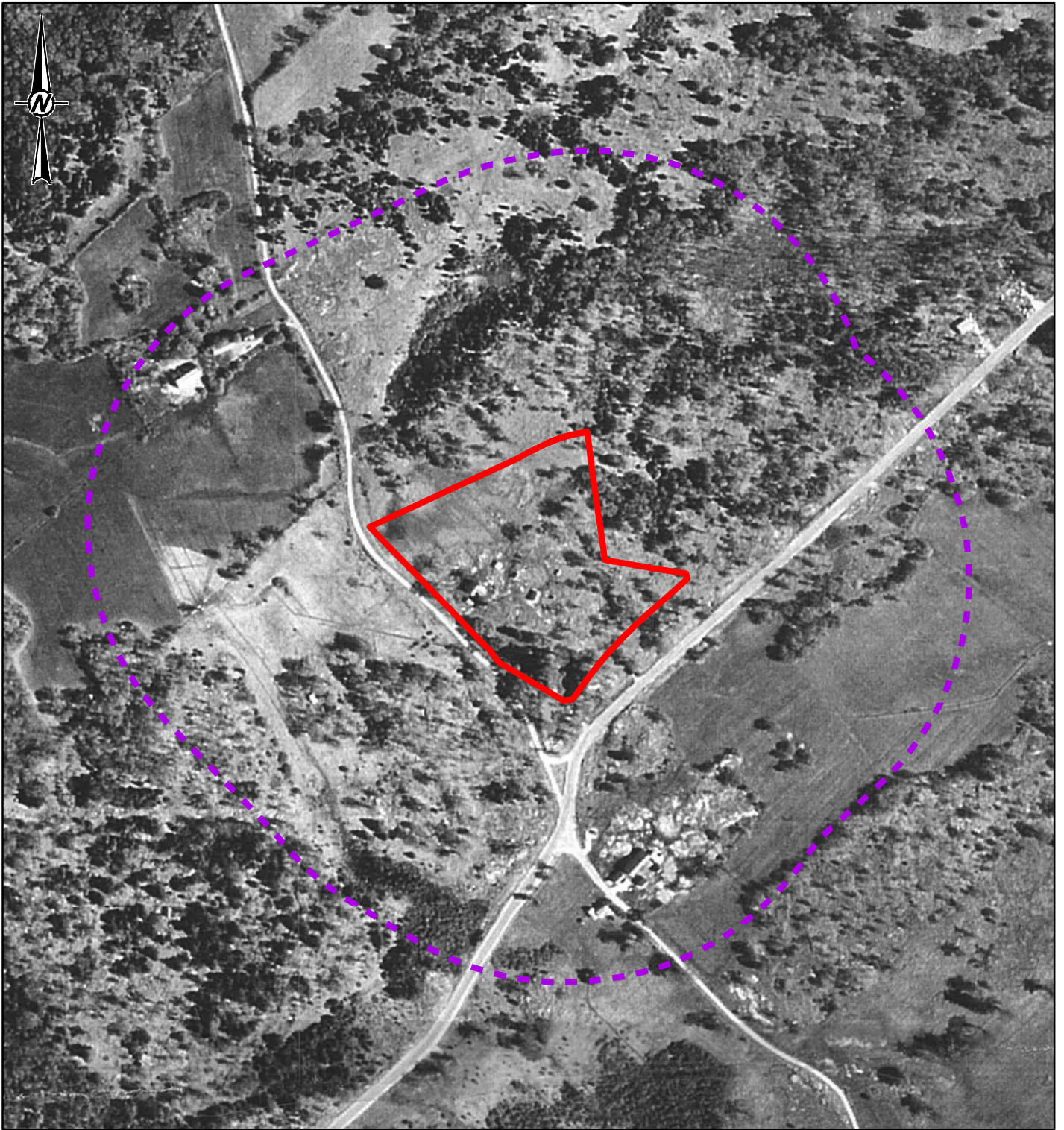
TITLE
1945 AIR PHOTO

CONSULTANT	YYYY-MM-DD	2017-06-28
	DESIGNED	----
	PREPARED	JEM
	REVIEWED	AT
	APPROVED	DHP



PROJECT NO. 1783116	CONTROL 0001	REV. 0	APPENDIX D1
------------------------	-----------------	-----------	-----------------------

Path: N:\Active\Spatial\IMC\Ottawa\5100_Kanata_130_Goulbourn\99a_PROD\1783116_Urbandale_Phase1_ESA\0 PROD\0001_Phase1_ESA\1783116-001-HS-001.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm



LEGEND

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA




NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

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

CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO**

TITLE
1963 AIR PHOTO

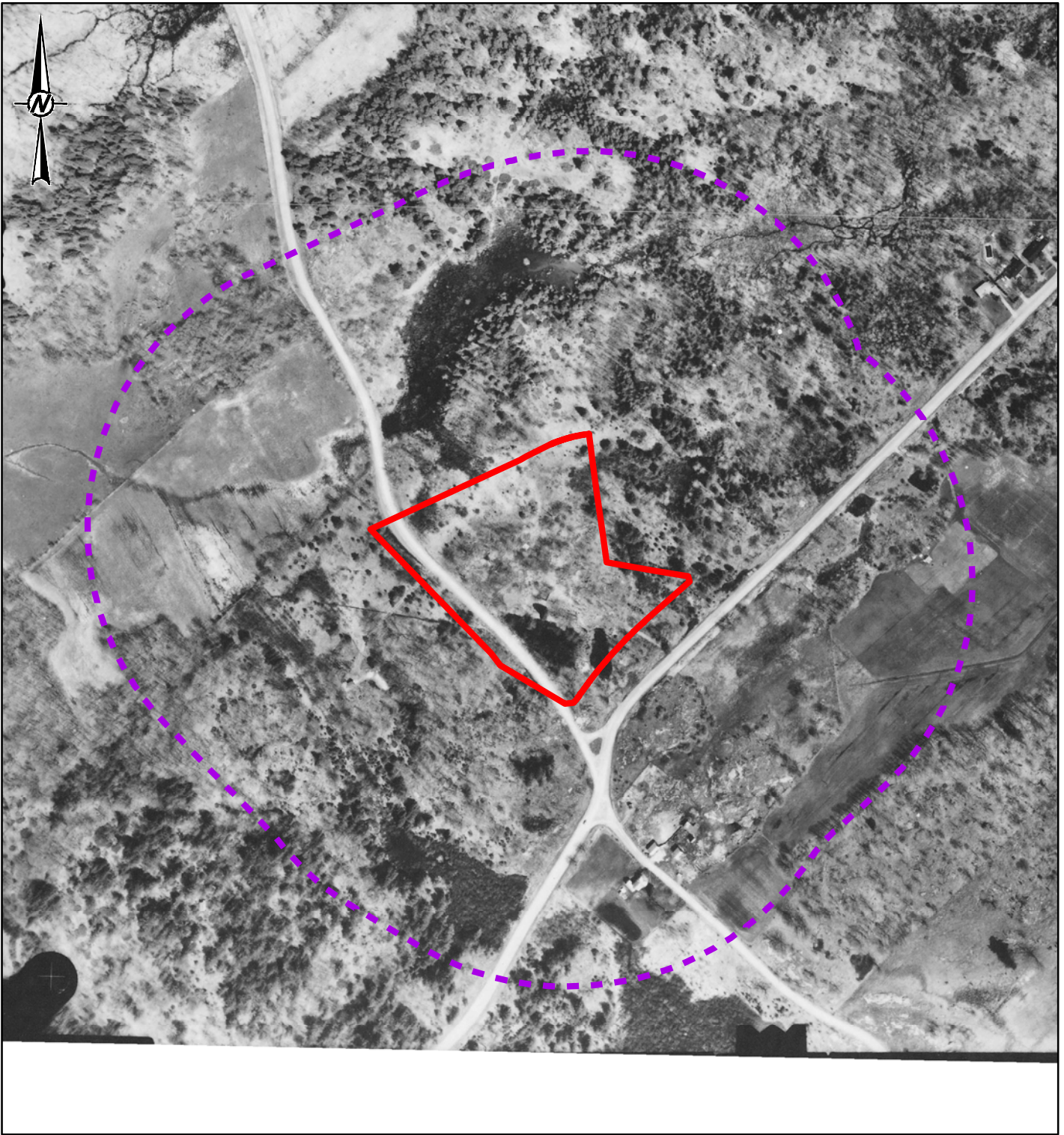
CONSULTANT	YYYY-MM-DD	2017-06-28
	DESIGNED	----
	PREPARED	JEM
	REVIEWED	AT
	APPROVED	DHP

PROJECT NO. 1783116	CONTROL 0001	REV. 0	APPENDIX D2
------------------------	-----------------	-----------	-----------------------



Path: N:\Active\Spatial\IMC\Ottawa\5100_Kanata_130_Goulbourn\99a_PROD\1783116_Urbandale_Phase1_ESA\00_PROD\0001_Phase1_ESA\1783116-001-HS-00D2.mxd

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

25mm



LEGEND

-  PHASE ONE SITE
-  PHASE ONE STUDY AREA




NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

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

CLIENT
URBANDALE CORPORATION

PROJECT
**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 5100 KANATA AVENUE AND 130 GOULBOURN FORCED ROAD,
 OTTAWA, ONTARIO**

TITLE
1983 AIR PHOTO

CONSULTANT	YYYY-MM-DD	2017-06-28
	DESIGNED	----
	PREPARED	JEM
	REVIEWED	AT
	APPROVED	DHP

PROJECT NO. 1783116	CONTROL 0001	REV. 0	APPENDIX D3
------------------------	-----------------	-----------	-----------------------

Path: N:\Active\Spatial_Img\CityOfOttawa\5100_Kanata_130_Goulbourn\98a_PROD\1783116_Urbandale_Phase1_ESA\0 PROCD\0001_Phase1_ESA\1783116-001-HS-00D3.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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

For more information, visit golder.com

Africa	+ 27 11 254 4800
Asia	+ 86 21 6258 5522
Australasia	+ 61 3 8862 3500
Europe	+ 44 1628 851851
North America	+ 1 800 275 3281
South America	+ 56 2 2616 2000

solutions@golder.com
www.golder.com

Golder Associates Ltd.
1931 Robertson Road
Ottawa, Ontario, K2H 5B7
Canada
T: +1 (613) 592 9600

