



Terraprobe

Consulting Geotechnical & Environmental Engineering
Construction Materials Inspection & Testing

**PHASE ONE
ENVIRONMENTAL SITE ASSESSMENT
PROPOSED COSTCO FUEL OUTLET
KANATA COSTCO
OTTAWA, ONTARIO**

Prepared For: Costco Wholesale
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Attention: Mr. Mark Marchisano, Director of Development

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1.0 EXECUTIVE SUMMARY

Terraprobe was retained by Costco Wholesale to conduct a Phase One Environmental Site Assessment (ESA). The Phase One Property, identified as 770 Silver Seven Road, is located on the south side of Highway 417 and east of Silver Seven Road in Kanata, Ontario. The property is an irregular shaped parcel and is approximately 0.3 hectares in size. The site currently consists of a storm water management pond and associated landscaped area. The Phase One ESA is being completed in order to assess baseline conditions prior to the development of the northern portion of the subject site as a commercial fuel outlet.

A Phase One Environmental Site Assessment was required to identify areas of potential environmental concern associated with the current and past activities on the Phase One Property and within the Phase One Study Area. The results of the investigation are as follows:

- The review of the historical documents, historical map, aerial photographs, City Directory search and the Chain of Title search indicates that the Phase One Property has been developed for agricultural use since passing from Crown ownership in 1832 and was developed for commercial use by Costco Wholesale in 2005.
- The regulatory review did not identify any issues of environmental concern with the Phase One Property.
- The review of the report completed by Terraprobe entitled “*Draft Geotechnical Investigation Proposed Kanata Fuel Outlet, 770 Silver Seven Road, Ottawa, Ontario*”, File No. 11-11-1130, dated November 15, 2011, indicated that a layer of earth fill material was present on the subject site beneath the topsoil surface layer. The fill extended to depths ranging from 0.8 to 1.5 m in thickness. Based on the results of the soil investigation, no issues with respect to environmental quality of the soil (i.e. staining or odours) were identified. The chemical characterization of the soils and groundwater at the subject site indicated that both the soil and groundwater analytical results met MOE Table 3 ICC (Standards for Industrial / Commercial / Community Use in a Non-Potable Ground Water Condition).
- Potentially contaminating activities within the Phase One Study area include Highway 417 located immediately northeast of the property.

Based on the results of the Phase One Environmental Site Assessment, it is concluded that it is unlikely that on-site activities may have impacted soil and/or groundwater at the site. However, there is a potential for offsite impacts from the adjacent properties. No further investigation is recommended at this time.



2.0 INTRODUCTION

Terraprobe Inc. (Terraprobe) was retained by Costco Wholesale to conduct a Phase One Environmental Site Assessment of the property at 770 Silver Seven Road, in the City of Ottawa, formerly the City of Kanata. The property is located on the south side of Highway 417 and east of Silver Seven Road in the Greater Ottawa Area. The general location of the Phase One Property is presented on Figure 1.

2.1 Phase One Property Information

Legal Description:

- Part of Lot 2, Concession 2, Geographic Township of March (Formerly City of Kanata), City of Ottawa.

Property Identification Number (PIN):

- PIN 04509-0123 (LT)

Municipal Address:

- 770 Silver Seven Road

Zoning:

Based on information available in the City of Ottawa Zoning By-Laws, the property is zoned for Light Industrial land use.

Property Owner Information:

Costco Wholesale
45940 Horseshoe Drive, Suite 150
Sterling, VA, USA
2016620

Contact:

Mr. Mark D. Marchisano, Director of Development
Phone: (703) 406-6874
Fax: (703) 406-6835
E-mail: MMarchi@costco.com

2.2 Site Description

The property is located at 770 Silver Seven Road, in the City of Ottawa, formerly the City of Kanata. The property is located on the south side of Highway 417 and east of Silver Seven Road in the Greater Ottawa Area. The property is irregular in shape and is approximately 0.3 hectares in size. The site currently consists of a storm water management pond and associated landscaped area. It is proposed to develop the subject site as a commercial fuel outlet. General site features are presented in Figure 3.

2.2.1 Buildings

No buildings were present on the Phase One Property at the time of the site inspection.

2.3 Purpose of Investigation

The objective of the Phase One ESA was to assess the environmental condition of the Phase One Property to identify issues of potential or obvious environmental concern and to identify potentially contaminating



activities on the Phase One Property and within the study area. The work included an assessment of the likelihood that the environmental quality of the soil and groundwater on or under the Phase One Property may have been adversely affected by past and present practices at the site and/or from activities on the surrounding properties.

The Phase One ESA was completed to satisfy the intent of the requirements, methodology and practices for a Phase One Environmental Site Assessment described in Ontario Regulation 153/04 (O.Reg. 153/04) as amended.



3.0 SCOPE OF INVESTIGATION

3.1 Records Review

The records review is designed to provide information on historical site activities. Specifically, the objectives of the records review are summarized as follows:

- To obtain and review records that relate to the Phase One Property and to the current and past uses of the site and activities at or affecting the Phase One Property in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.
- To obtain and review records that relate to the Phase One Study Area, other than the Phase One property, in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.

Tasks that were completed for the records review included the following:

- a review of available archival information for the site including aerial photographs, topographic mapping, available historical maps and drawings;
- a review of available site specific environmental reports or records (e.g., Certificates of Approval, waste generator registration, approvals, permits) that were provided to Terraprobe;
- a review of geological and hydrogeological information in published government maps and/or reports;
- a review of information on file with EcoLog ERIS, a commercial database that provides information from numerous private, provincial, and federal environmental databases/registries;
- a review of information on file with Risk Management Service Inc. (RMS), a commercial database for fire insurance plans and insurance inspection reports (and related plans);
- a review of published Ontario Ministry of the Environment (MOE) directories related to registered PCB storage sites and active and closed landfill sites;
- a review of the Ontario Ministry of Natural Resources (MNR) Natural Heritage Information Centre database for information specific to natural areas, environmentally sensitive areas, endangered or protected species, etc.

3.2 Interviews

The objectives of conducting the Phase One ESA interview with individuals having knowledge of the Phase One Property activities are:

- To obtain information to assist in determining if an area of potential environmental concern exists.
- To identify details of potentially contaminating activities or potential contaminant pathways in, on, or under the Phase One property.



Key personnel (owners or site managers) are contacted/interviewed and as applicable, are asked to fill out or respond to a series of questions related to specific site activities such as the nature of the operations, handling and storage of environmentally sensitive products and related wastes, environmental approvals and registrations, knowledge of previous reports related to the environmental condition of the property, and any issues related to non-compliance, orders, or charges related to environmental conditions on the property.

3.3 Site Reconnaissance

The objectives of the site reconnaissance are the following:

- To determine through observation if areas of potential environmental concern exist associated with current and past uses and potentially contaminating activity on, in or under the Phase One Property and, as practicable, current and past uses and activities and potentially contaminating activity in the Phase One Study Area.
- To identify details of potential contaminant pathways on, in or under the Phase One Property and areas of potential environmental concern and contaminants of potential concern.

The site reconnaissance included a review of numerous issues of potential environmental concern, including but not limited to the following:

- a review of activities and practices (including waste management) currently carried out on the Phase One property;
- an assessment for the potential presence of visible/exposed materials which may contain friable and non-friable asbestos;
- an assessment for the potential presence of PCB-containing electrical equipment;
- an assessment for evidence of past waste disposal or landfill on the Phase One property;
- an assessment of the presence of existing or former above ground and / or underground fuel storage tanks;
- an assessment for the potential presence of hazardous or toxic materials; and,
- an assessment for evidence of stained/odorous soils and stressed vegetation.

In addition, an inspection of adjacent properties within the Phase One Study Area was completed to assess the potential for operations being carried out on those properties to impact on the environmental condition of the phase one property. The inspection of adjacent properties was limited to inspection from the Phase One Property boundaries and public areas (road, sidewalks, etc.).



4.0 RECORDS REVIEW

4.1 General

4.1.1 Phase One Study Area Determination

The Phase One Property is located in an urban area of the City of Ottawa, formerly the City of Kanata. The Phase One Study Area includes an assessment of the properties located within 250 m of the boundary of the Phase One Property. The Phase One Property boundaries are shown on Figure 1. The Phase One Study Area is shown on Figure 2.

The properties located within 250 metres of the Phase One Property are developed for light industrial, commercial and residential use. Based on the historical property use and development on the Phase One Property and surrounding area, it was determined that a 250 metre study area around the property was sufficient to identify issues of potential environmental concern that could potentially impact on the environmental condition of the Phase One Property.

4.1.2 First Developed Use Determination

The determination of first developed use was based on the review of aerial photographs and topographic maps and other records. Based upon the historical documents, a Chain of Title search and a review of the aerial photographs, the property has been in agricultural use since passing from Crown in 1832, until it was developed for commercial use by Costco Wholesale in 2005.

4.1.3 Fire Insurance Plans

Risk Management Services (RMS) is a private organization that provides risk information to insurers, private corporations, and risk managers. RMS was contacted to determine whether any reports or plans were available for the subject property. No records were available for the subject property. A copy of the search is provided in Appendix A.

4.1.4 City Directory Search

A search of the available City Directory dating back to 1992 was conducted for the Phase One Property and adjacent properties. No potential contaminating activities were noted for the subject site or for the adjacent properties. A copy of the City Directory document can be found in Appendix B.

4.1.5 Chain of Title

A chain of title was prepared for Terraprobe by Domsons Title Search Inc. Site ownership dating back to Crown ownership was reviewed. Copies of the two roots of the Chain of Title documents can be found in Appendix C. The property passed from Crown ownership in 1832 and was held by private individuals until 1960 when it was corporately owned. Costco has held the property since 2005.



4.1.6 Environmental Reports

No previous environmental reports for the Phase One Property were available for review.

4.1.7 Review of Other Historical Information

No other historical information for the Phase One Property was available for review.

4.2 Environmental Source Information

4.2.1 EcoLog ERIS Report

EcoLog Environmental Risk Information Services Ltd. (ERIS) is an organization that maintains and searches various government and private databases for property-related environmental information. ERIS was retained by Terraprobe Inc. to conduct a database search for the properties with 250 m of the Phase One Property. The full EcoLog ERIS report is presented in Appendix D. No entries were listed for the subject site. The following summarizes the results of environmentally significant records found with the EcoLog ERIS Search, within the Phase One Study Area (0.25 km of the site):

Location	Database	Entry Details
770 Silver Seven Drive (Immediately south) Costco Wholesale	Certificates of Approval Pesticide Register	Approved in 2004 for industrial sewage works. Approved vendor.
10 Frank Nighbor Place (approx. 40 m west) Home Depot	Certificates of Approval Ontario 347 Waste Generators Summary Pesticide Register	Approved in 2004 and 2005 for industrial sewage works and municipal and private sewage works. Approved generators of acid solutions of heavy metals, other metals and non-metals, alkaline solutions, wastes from the use of pigments, paints and coatings, other specified inorganic sludges, slurries or solids, chemical fertilizer wastes, petroleum distillates, light fuels, halogenated pesticides and herbicides, petroleum based waste oils/sludges, waste crankcase oils and lubricants, organic non-halogenated pesticides and herbicides, waste compressed gases including cylinders, and aliphatic solvents from 1999 to 2010. Approved vendor, licence number 23-01-11564-0.
Highway 417 (approx. 30 – 270 m north)	Ontario Spills	North of Terry Fox Drive, north ditch, fuel truck overturned with operating and cargo fuel to ditch in 1989. Westbound at Terry Fox Drive, transport truck



		overturned spilling liquid asphalt to median in 1998. Westbound at Terry Fox Drive, transport truck overturned spilling 45 L of diesel fuel to road and ditch in 1995.
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4.2.2 MOE Databases

Terraprobe Inc. reviewed directories published by the MOE related to registered PCB storage sites and waste disposal sites through Ecolog ERIS, as summarized in section 4.2.1. The following summarizes the information presented in those documents for the property and surrounding properties:

- The review of the MOE's *Ontario Inventory of PCB Storage Sites* and the *National PCB Inventory* did not list the Phase One Property or any properties in the study area as a licensed PCB storage facility.
- The review of the MOE's *Waste Disposal Site Inventory* did not identify the Phase One Property or any properties in the study area as an active or closed waste disposal facility.

4.2.3 MNR National Heritage Information Centre Database

Terraprobe Inc. reviewed the Ontario Ministry of Natural Resources (MNR) National Heritage Information Centre database for listings of Areas of Natural or Scientific Interest (ANSIs). According to the database, there is one geologic ANSI, the Queenston Sandstone Extension, located to the northeast of the Phase One Property in the middle of Highway 417. No other ANSIs were located within approximately 2 km of the property. A copy of the MNR Natural Areas map is provided in Figure 12.

4.2.4 Conservation Authorities

The Mississippi Valley Conservation (MVC) Authority was contacted by Terraprobe. A response was received from Craig Cunningham, Environmental Planner, stating that the subject property is not in an area regulated by MVC. A copy of the response is provided in Appendix E.

4.2.5 Request for Information: Technical Standards and Safety Authority

The Technical Standards and Safety Authority (TSSA) maintains records related to storage tanks for petroleum related products. The TSSA records were searched as part of the Ecolog ERIS database search, the results of which are summarized in Section 4.2.1.

It is noted that the TSSA did not register private fuel storage tanks prior to January of 1990, and also does not register residential waste oil tanks, nor does it maintain records of aboveground gasoline or diesel storage tanks.



4.2.6 Request for Information: Municipality

The Phase One Property is currently associated with a Costco Wholesale commercial building, located to the immediate south, which has municipal water and waste water connections. An inquiry was made to the City of Ottawa on November 29, 2011 to determine if there were any issues related to by-law infractions. At the time writing a response has not been received. A copy of the response will be forwarded upon receipt.

4.2.7 Request for Information: Hydro PCB Inquiry

The local hydro company was not contacted for any information related to PCBs as no transformers were noted on the Phase One Property at the time of the site inspection.

4.2.8 Municipal Official Plan

Select figures from the City of Ottawa Official were reviewed. The Official Plan listed the property use as light industrial.

4.3 Physical Setting Sources

4.3.1 Aerial Photographs

Aerial photographs from 1945 to 2007 were reviewed. The aerial photographs were selected in order to allow the collection of information regarding development of the property and the surrounding area. These documents provide a visual record of the historic physical conditions on the property and surrounding area.

Table 4.3 Aerial Photographs Reviewed

Reference		Phase One Property	Surrounding Area
Date	Source		
1945	Provincial Collection	The Phase One Property appears to be developed for agricultural land use.	Agricultural land use.
1976	Provincial Collection	No change.	No change.
1983	Ontario Base Map	No change.	Highway 417 has been constructed to the north and residential development is present to the east.
1994	Provincial Collection	No change.	Industrial and commercial development is present to the southwest.
2002	City of Ottawa	No change.	Further industrial and commercial development is present to the southwest.
2005	City of Ottawa	The Phase One Property has been cleared and graded for development. Construction appears to be taking place on the site.	No change.

The series of aerial photographs indicate that the Phase One Property was undeveloped from at least 1945 until sometime after 2002. The aerial photographs indicate that the property was developed with the



current Costco Wholesale commercial development between 2002 and 2005. The surrounding area was developed with residential, commercial and light industrial land uses which intensified in density over time.

4.3.2 Topography, Hydrology, Geology

Based on geologic mapping, the site is situated in an area characterized by lacustrine deposits of silt, sand, and clay. The bedrock is of the Beekmantown group, which is dolostone and sandstone. Depth to bedrock ranges from exposed bedrock outcrops to 9 metres below ground level (mbgl).

Based upon topographic mapping, the elevation of the Phase One Property ranges from approximately 95 to 96 metres above sea level (masl). The topography slopes down to the southwest.

Regional ground water flow is expected to be in a northerly direction towards the Ottawa River. Locally, near surface ground water flow is expected to flow in a westerly direction towards the Carp River. Local groundwater direction and elevation may be influenced by underground structures (ie. Service trenches, foundations, etc.).

4.3.3 Fill Materials

No soil fill materials were present on the Phase One Property at the time of the site inspection. Quarried rocks and rock-filled gabions were part of the erosion control for the storm water management pond.

4.3.4 Water Bodies and Areas of Natural Significance

The Phase One Property is located approximately 470 m northeast of Carp River. There are no areas of natural significance within the Phase One Study Area.

4.3.5 Well Records

A review of MOE water well records for the subject site was included in the EcoLog ERIS report. No wells were listed for the subject property. One water well record was located within 250 m of the subject site. Information in the well record was as follows:

- 25.9 m deep well for commercial use constructed in 1972 with a static water level of 0.3 m. Rock and sand were recorded from 0.9 m to 25 m, at which depth bedrock was encountered.

4.4 Site Operating Records

No site operating records were available for review. No buildings were identified on the Phase One Property.



4.5 Review of Previous and Other Reports

A geotechnical investigation of the subject property was completed by Terraprobe, as reported in: “Draft Geotechnical Investigation Proposed Kanata Fuel Outlet, 770 Silver Seven Road, Ottawa, Ontario”, File No. 11-11-1130 dated November 15, 2011. The report indicated that there exists a surficial layer of topsoil approximately 50 mm thick across the perimeter of the storm water management pond. Below the surficial topsoil, 7 of the 9 boreholes encountered a layer of earth fill between 0.8 m to 1.5 m in thickness. The earth fill consisted of a sandy silt with some clay and trace organics and rootlets, but also varied in composition from a gravelly sand with some silt to a clayey silt with some sand. The earth fill layer is underlain by a relatively thin native deposit of clayey silt with frequent silty sand layers, followed by a native deposit of clay and silt with trace sand to being sandy and a deposit of sandy silt with some clay and trace gravel was encountered in Boreholes 3, 6 and 8. The native soil extended to the inferred bedrock surface at 8.5 to 16.1 meters below present grade (Elev. 88.1 to 79.9 m).

Based on the results of the geotechnical investigation, no issues with respect to environmental quality of the soil (i.e., staining or odours) were identified in the ground fill material. The chemical characterization of the soils and groundwater at the subject site indicated that both the soil and groundwater analytical results met MOE Table 3 ICC (Standards for Industrial / Commercial / Community Use in a Non-Potable Ground Water Condition).



5.0 INTERVIEWS

Date of Interview	November 30, 2011
Method of Interview	Phone call
Place of Interview	N/A
Named of Person Interviewed	Trevor Kealey, R.V. Anderson & Associates
Reason for Interviewee Selection	Civil Engineer for the SWMP construction.

The interview with Mr. Kealey provided the following information concerning the history and condition of the property:

- The storm water management pond (SWMP) was constructed between 2004 and 2005.
- The site was formerly a green field not in agricultural use prior to excavation of the SWMP.
- The SWMP collects surface runoff from across the Costco Wholesale site at 770 Silver Seven Road.
- No above or underground storage tanks were noted at the site.
- No natural depression was present at the location of the SWMP before the excavation activities took place
- No buildings were present on the site prior to the excavation of the SWMP.
- The SWMP was created by excavating from the native soil and adding a liner. Minor amounts of rock fill may have been added to the side of the pond for contouring.



6.0 SITE RECONNAISSANCE

6.1 General Requirements

Date of Investigation:	November 2, 2011
Time of Investigation:	09:00
Weather Conditions:	Sunny, 10°C
Length of Time of Investigation:	5 hours
Was the Facility Operating:	No buildings on site. Currently a storm water management pond at the site.
Name and Qualifications of Person(s) Conducting Assessment:	Mark Carhart, Environmental Technologist

The site reconnaissance inspection included a walking tour of the Phase One Property, as well as compiling written and photographic records. The layout of the Phase One Property at the time of the site inspection is presented in the Figure 3. Photographs of the site and accompanying descriptions are presented in Appendix F.

Inspection of adjacent properties and properties with the Phase One Study Area was limited to visual observations from public roads and the Phase One Property. At the time of the site inspection the property was vacant.

6.2 Specific Observations at Phase One Property

6.2.1 General Description Structures and Other Improvements

A storm water management pond associated with Costco Wholesale was located in the center of the site. The rest of the property consisted of landscaped areas with shrubs, trees and grass. No buildings or structures were present on the Phase One Property at the time of the inspection.

6.2.2 General Description Belowground Structures

No evidence of below ground storage structures was observed on the Phase One Property at the time of inspection.

6.2.3 Above-Ground Storage Tanks

No above-ground storage tanks were noted on the Phase One Property at the time of inspection.

6.2.4 Underground Storage Tanks

No evidence of underground storage tanks was noted on the Phase One Property at the time of inspection.



6.2.5 Potable and Non-Potable Water Sources

The property was not serviced with municipally supplied water. The surrounding properties are supplied by municipal water from the City of Ottawa, which obtains potable water from the Ottawa River.

6.2.6 Underground Utility and Service Locations

The inspection of the Phase One property found the following information regarding utilities and services at the site:

- Underground hydro lines are present along the southern site boundary.
- The majority of the site consists of a storm water management pond. The associated storm sewer inlet pipe is present on the south east corner of the site and the outlet storm water pipe is present on the western portion of the site.

The locations of underground utilities and services on the Phase One property are shown on the Site Plan (Figure 2).

6.2.7 Structures and Buildings

No buildings or structures were present on the Phase One Property at the time of inspection.

6.2.7.1 Building Entry and Exit Points

No buildings or structures were present on the Phase One Property at the time of inspection.

6.2.7.2 Existing and Former Heating Systems

No existing or former heating systems were present on the Phase One Property at the time of inspection.

6.2.7.3 Existing and Former Cooling Systems

No existing or former cooling systems were present on the Phase One Property at the time of inspection.

6.2.7.4 Drains, Pits and Sumps

No drains, pits, or sumps were observed on the Phase One Property at the time of the site inspection.

6.2.8 Current and Former Wells

No current or former wells were noted on the Phase One Property at the time of inspection.



6.2.9 Sewage Works

The majority of the property is occupied by a storm water management pond with an inlet on the eastern property boundary and an outlet on the western property boundary. No other waste water or sewage works were noted on the Phase One Property at the time of inspection.

6.2.10 Ground Surface

The Phase One Property consisted of a storm water management pond and landscaped area at the time of inspection. Quarried rock and rock-filled gabions were part of the erosion control for the storm water management pond. Details of the ground surfaces observed during the site inspection are shown in the Site Plan, Figure 2.

6.2.11 Current or Former Railways

No evidence of current or former railway lines or spurs were noted on the Phase One Property during the site inspection.

6.2.12 Stained or Odorous Soils

No stained areas of soil or pavement were observed on the Phase One Property at the time of the site inspection.

6.2.13 Stressed Vegetation

No stressed vegetation was noted on the property during the site inspection.

6.2.14 Fill and Debris Material

No debris or fill material was observed at the site at the time of inspection.

6.2.15 Potentially Contaminating Activity

No potentially contaminating activities were observed on the Phase One Property at the time of inspection.

6.2.16 Unidentified Substances

No unidentified substances were observed on the Phase One Property at the time of inspection.

6.2.17 Watercourses, Ditches, or Standing Water

A storm water management pond was located on the site, as identified in Figure 3. No other watercourses, ditches or standing water were noted on the property during the site inspection.



6.2.18 Roads, Parking Facilities, and Right-of-Ways

There were no obvious right-of-ways, parking facilities, or roads noted on the Phase One Property.

6.2.19 Special Attention Items

Special attention items, for a large part, include designated substances that may be present in building materials. The presence of these in building/construction materials does not necessarily imply adverse impact to the environmental condition of the Phase One property.

Asbestos: No materials potentially containing asbestos were observed on the Phase One Property at the time of the site inspection.

Polychlorinated Biphenyls (PCBs): No materials potentially containing PCBs, such as electrical equipment or transformers, were observed on the Phase One Property at the time of the site inspection.

Lead: The use of lead as a base in paints and plumbing solder was phased out in the late 1970s. No materials potentially containing lead were observed on the Phase One Property at the time of the site inspection.

Ozone Depleting Substances: The phase-out of ozone depleting substances, such as chlorofluorocarbons (CFCs), began in the early 1990s. No ozone depleting substances were observed on the Phase One Property at the time of the site inspection.

Urea-Formaldehyde Foam Insulation (UFFI): No suspected UFFI containing materials were observed on the Phase One Property at the time of the site inspection.

Herbicides and Pesticides: The Phase One Property has historically been developed for agricultural use. Therefore, use of herbicides or pesticides at the site is possible. Storage of herbicides and pesticides was not observed during the site inspection.

Radioactive Materials & Radon Gas: Man-made sources of radioactive materials were not observed on the Phase One Property at the time of the site inspection. A radiometric survey was not conducted during this investigation.

Mould: No mould was observed on the Phase One Property at the time of the site inspection.

6.3 Written Description of Investigation

The site reconnaissance inspection included a walking tour of the property conducted on November 2, 2011. The tour consisted of an inspection of the Phase One Property. Complete details of the site inspections are provided above in Section 6 Site Reconnaissance. The layout of the property at the time of



the site inspection is presented in Figure 2. Photographs of the site and accompanying descriptions are presented in Appendix F.

6.4 Investigation of Phase One Study Area

6.4.1 Adjacent Property Use

At the time of the site inspection, the following land uses were noted on the properties immediately adjacent to the phase one property.

Direction	Land Uses
North	<ul style="list-style-type: none">• Highway 417 and commercial
South	<ul style="list-style-type: none">• Costco Wholesale (commercial)
East	<ul style="list-style-type: none">• Highway 417 and residential
West	<ul style="list-style-type: none">• Silver Seven Drive then Home Depot (commercial)

6.4.2 Potentially Contaminating Activities

At the time of the site inspection no potentially contaminating activities were noted in the Phase One Study Area.



7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Current and Past Uses

Current and past uses of the Phase One Property have been determined primarily on the basis of the information provided in the aerial photographs, topographic plan, Chain of Title, and City Directory search. The Phase One Property was developed for agricultural use since passing from Crown ownership in 1832 and was developed for commercial use by Costco Wholesale in 2005.

7.2 Potentially Contaminating Activity

Potentially contaminating activities identified for the property itself and the study area are summarized in the Table 7.2 below.

Table 7.2 Potentially Contaminating Activity

	Potentially Contaminating Activities & Issues of Concerns
Phase One Property	<ul style="list-style-type: none"> No issues.
Phase One Study Area	<ul style="list-style-type: none"> Highway 417 immediately northeast of the Phase One Property.

7.3 Areas of Potential Environmental Concern

The areas of potential environmental concern for the subject property are summarized in Table 7.3 below.

Table 7.3 Potential Environmental Concern

Area of Potential Environmental Concern	Potentially Contaminating Activity	Contaminants of Potential Concern	Media Potentially Impacted	Recommended Activities for Phase Two ESA
Northeast portion of property	On site migration of impact from Highway 417	SAR Electrical Conductivity PHC fractions F1-F4 BTEX	Soil/Groundwater	

7.4 Phase One Conceptual Site Model

The property and Phase One Study Area are illustrated in Figure 3. The conceptual site model has been based on the information presented above (Sections 7.1, 7.2 and 7.3). The Conceptual Site Model identifies the locations of areas where potentially contaminating activities could have resulted in adverse impact to the soil and groundwater quality on or below the Phase One Property.



8.0 CONCLUSIONS

Based on the results of the Phase One Environmental Site Assessment, it is concluded that it is unlikely that on-site activities may have impacted soil and/or groundwater at the site. However, there is a potential for offsite impacts from the adjacent properties. No further investigation is recommended at this time.

8.1 Qualifications of the Assessors

James L. McCourt, M.A.Sc., P.Eng. OP_{ESA}

Mr. McCourt is a Project Engineer and Associate of Terraprobe with over 12 years of experience in the environmental field. Mr. McCourt has managed numerous projects including Phase I and Phase II Environmental Site Assessments, Risk Assessments and site remediations. Mr. McCourt is a qualified person under O.Reg. 153/04 for submitting Records of Site Condition. He holds a Bachelor of Applied Science in Chemical Engineering, and a Master of Applied Science in Civil Engineering, both from the University of Waterloo.

Freesia A. Waxman, B.Eng., M.A.Sc.

Ms. Waxman is a Project Manager with Terraprobe. She holds a Bachelor of Engineering degree and a Master of Applied Science degree in Environmental Engineering from McMaster University, and is a registered Engineer-In-Training.

8.2 Signatures

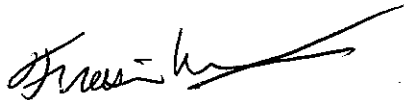
The Phase One Environmental Site Assessment was carried out in compliance with O.Reg. 153/04 as amended. The findings and conclusions presented in this report have been determined on the basis of the information that was obtained and reviewed, and on an assessment of the existing conditions on the Phase One Property and properties within the Phase One Study Area



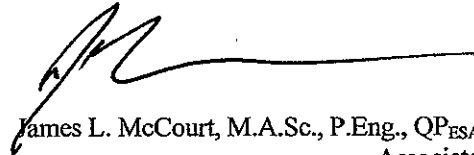
We trust this report meets with your requirements. Should you have any questions regarding the information presented, please do not hesitate to contact our office.

Yours truly,

Terraprobe Inc.



Freesia A. Waxman, B.Eng., M.A.Sc.
Project Manager



James L. McCourt, M.A.Sc., P.Eng., QP_{ESA}
Associate



9.0 REFERENCES

- Barnett, P.J., Cowan, W.R. and Henry, A.P. 1991: Quaternary Geology of Ontario, Southern Sheet; Ontario Geological Survey Map 2544, scale 1:1,000,000.

- Terraprobe Inc. “*Draft Geotechnical Investigation Proposed Kanata Fuel Outlet, 770 Silver Seven Road, Ottawa, Ontario*”, File No. 11-11-1130, dated November 15, 2011.

- Ontario Geological Survey, OGS Earth, 2011
 - Surficial Geology (1:1000000)
 - Townships
 - NOEGTS (1:1000000)
 - Assessment files
 - Lake sediment chemistry
 - Shaded relief
 - Bathymetry
 - Gravity
 - Magnetism
 - Magnetism 1st derivative

- Ontario Geological Survey, OGS Earth 2, 2011
 - Surficial Geology (1:50000)
 - Paleozoic Geology (1:50000)
 - Drift Thickness/ Bedrock topography
 - Physiography
 - Karst compilation
 - Geophysics
 - Magnetism
 - Publication Index map



10.0 LIMITATIONS

This report was prepared for the exclusive use of Costco Wholesale and is intended to provide an assessment of the environmental conditions on the property identified as Part of 770 Silver Seven Road, in the City of Ottawa. The report was prepared for the purpose of identifying obvious potential environmental concerns, including an assessment of the likelihood that the environmental quality of the soil and ground water at the site may have been adversely affected by past and present practices at the site, and/or those of the surrounding properties prior to development of the property. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Terraprobe accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, including consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The assessment should not be considered a comprehensive audit that eliminates all risks of encountering environmental problems. The information presented in this report is based on information collected during the completion of the Phase One Environmental Site Assessment by Terraprobe. It is based on the conditions on the property at the time of the site inspection supplemented by a review of historical information to assess the environmental conditions on the property, as reported herein. Sampling and analysis of soil, ground water or any other material was not carried out as part of this assessment.

In assessing the environmental conditions / history of the property, Terraprobe has relied in good faith on information provided by others, as noted in this report, and has assumed that the information provided by those individuals is factual and accurate. Terraprobe accepts no responsibility for any deficiency, misstatement or inaccuracy in this report resulting from the information provided by those individuals.

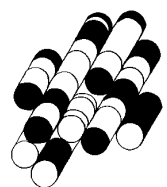
There is no warranty expressed or implied by this report regarding the environmental status of the property. Professional judgment was exercised in gathering and analyzing information collected by our staff, as well as that submitted by others. The conclusions presented are the product of professional care and competence, and cannot be construed as an absolute guarantee.

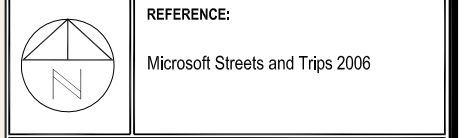
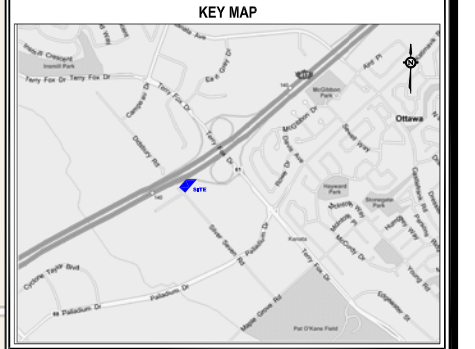
In the event that during future work new information regarding the environmental condition of the property is encountered, or in the event that the outstanding responses from the regulatory agencies indicate outstanding issues on file with respect to the property, Terraprobe should be notified in order that we may re-evaluate the findings of this assessment and provide amendments, as required.



FIGURES

TERRAPROBE INC.





NOTES:

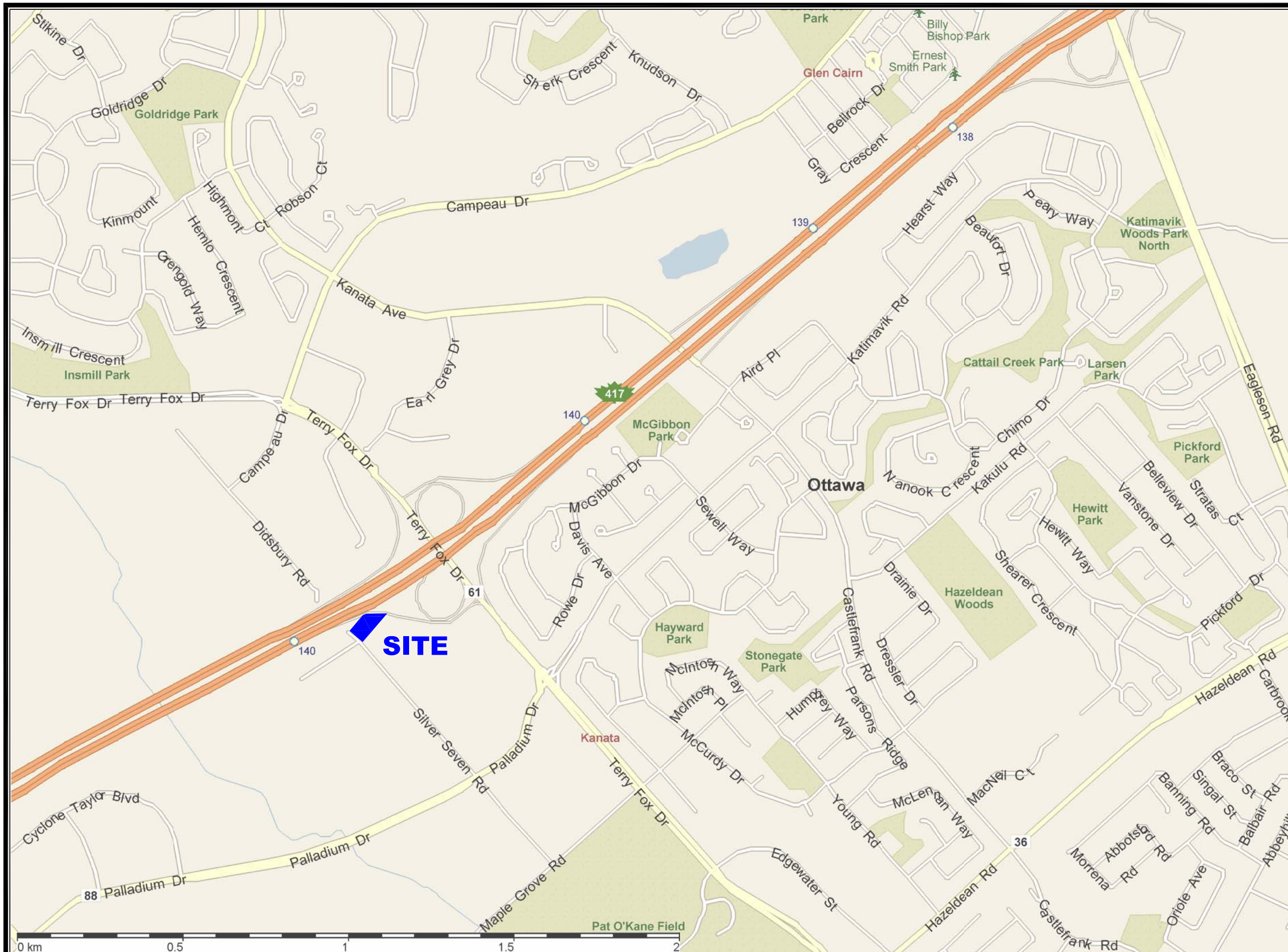
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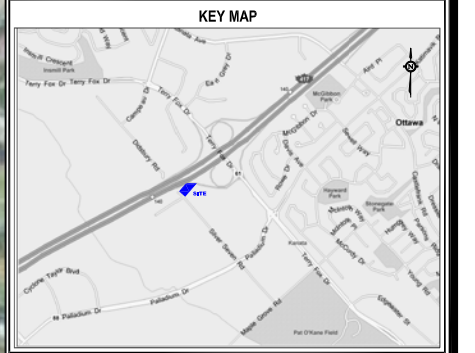
PROJECT TITLE:
Phase One Environmental Site Assessment

SITE LOCATION:
770 Silver Seven Road
Ottawa, Ontario

FIGURE TITLE:
SITE LOCATION PLAN

REV NO: 0	FILE NO: 13-11-6171
SCALE: AS SHOWN	FIGURE NO: 1
DATE: November 3, 2011	





REFERENCE:
 Google Earth
 Imagery Date: 9/30/2008

NOTES:

LEGEND:

PROJECT TITLE:
 Phase One Environmental Site Assessment

SITE LOCATION:
 770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:
 Phase One Study Area

REV NO.: 0	FILE NO.: 13-11-6171
SCALE: AS SHOWN	FIGURE NO.: 2
DATE: November 3, 2011	





NOTES:

REFERENCE:
 MMM Geomatics Ontario Limited
 Ontario Land Surveyors
 Drawing Number: 1410213_T01
 Job Number: 14-10-213-001-SU1
 Topographic Plan of
 PART OF LOT 2 CONCESSION 2
 Geographic Township of March
 (Formerly City of Kanata)
 Now City of Ottawa

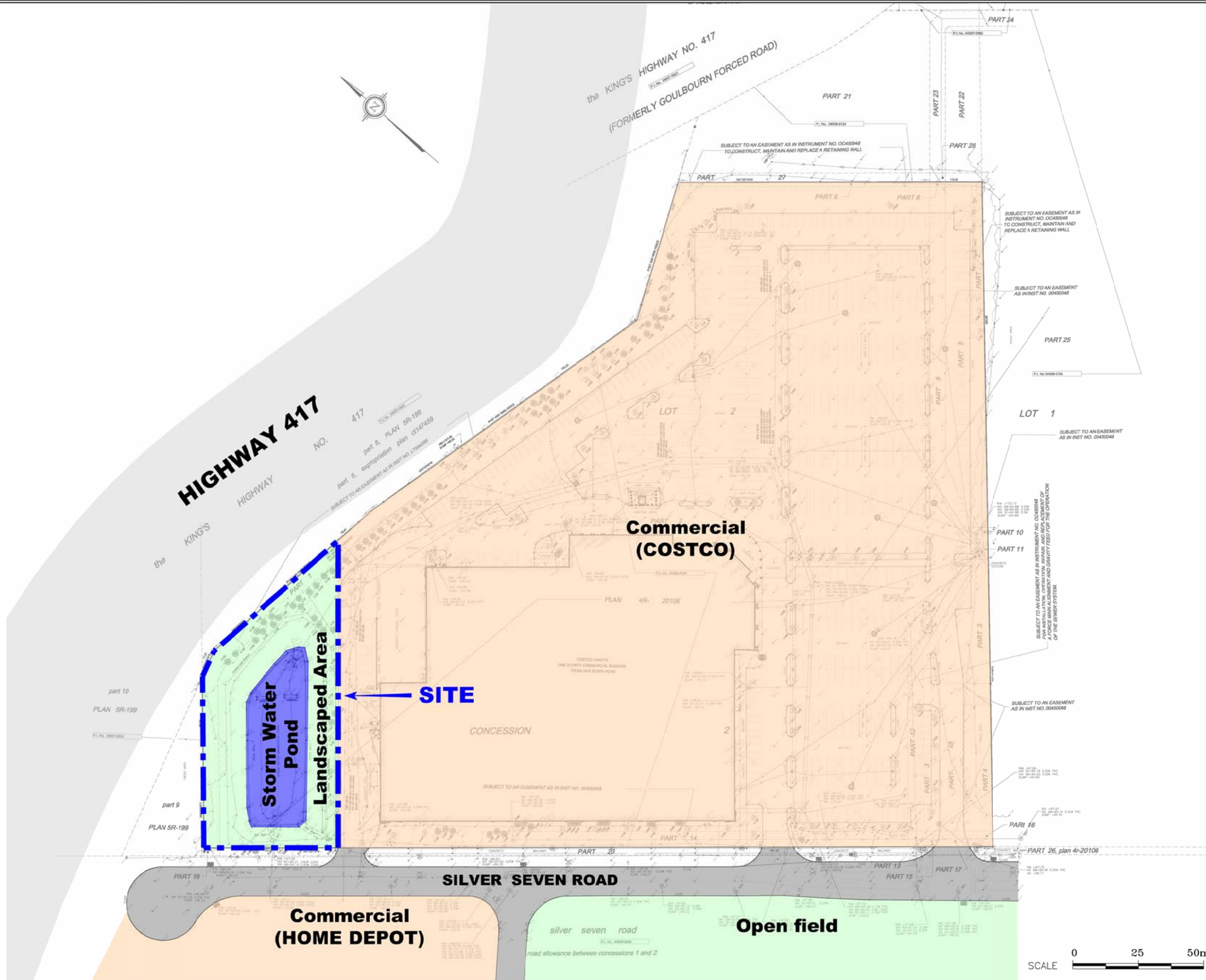
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PROJECT TITLE:
 Phase One Environmental Site Assessment

SITE LOCATION:
 770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:
 Phase One Conceptual Site Model

REV NO: 0	FILE NO: 13-11-6171
SCALE: As Shown	FIGURE NO: 3
DATE: November 3, 2011	





NOTES:

(Symbol: A circle with a diagonal line through it, indicating a note or warning.)

REFERENCE:

MMM Geomatics Ontario Limited
 Ontario Land Surveyors
 Drawing Number: 1410213_T01
 Job Number: 14-10-213-001-SU1
 Topographic Plan of
 PART OF LOT 2 CONCESSION 2
 Geographic Township of March
 (Formerly City of Kanata)
 Now City of Ottawa

LEGEND:

PROJECT TITLE:

Phase One Environmental Site Assessment

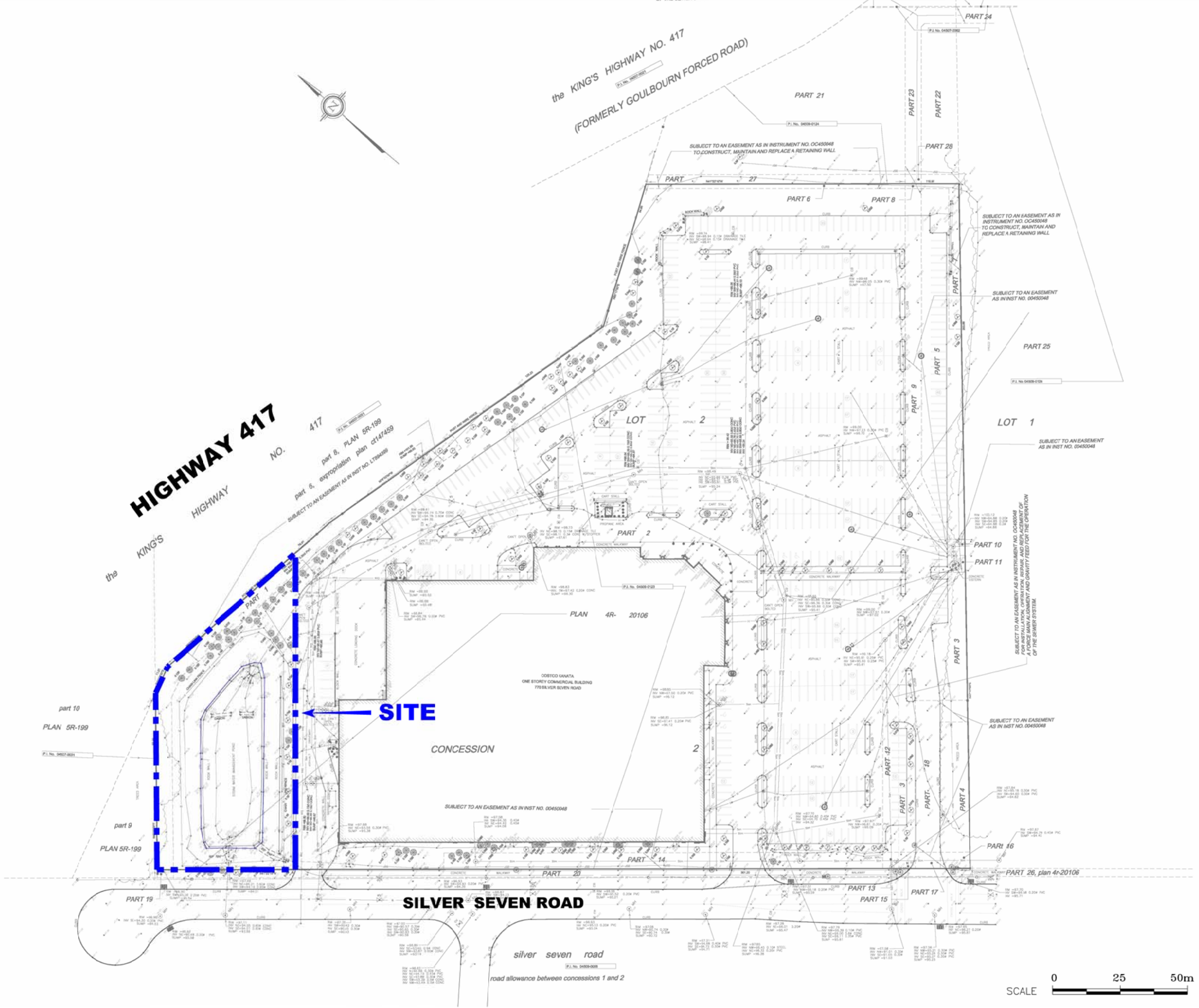
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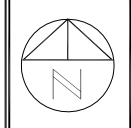
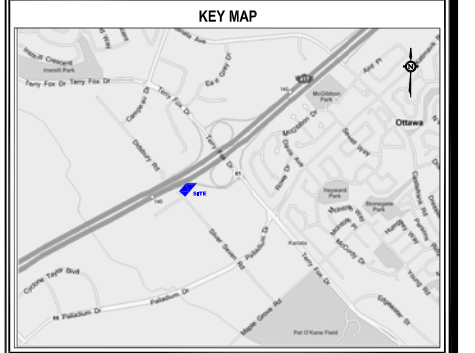
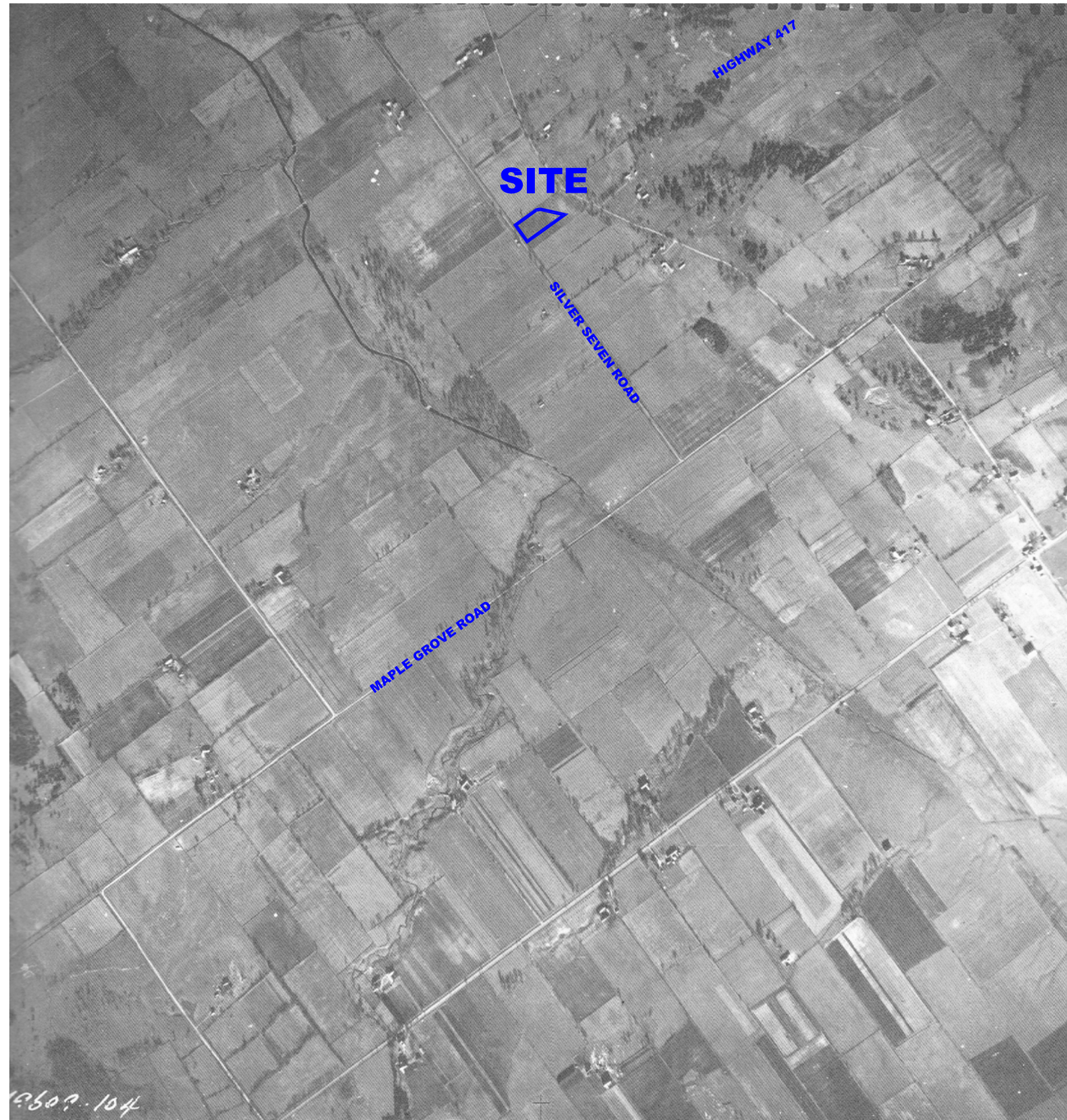
770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:

Site Survey

REV NO.: 0	FILE NO.: 13-11-6171
SCALE: As Shown	FIGURE NO.: 4
DATE: November 3, 2011	





REFERENCE:

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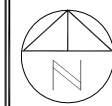
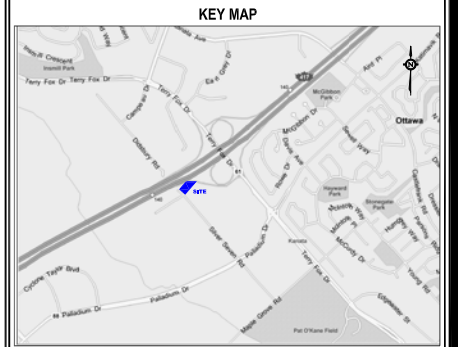
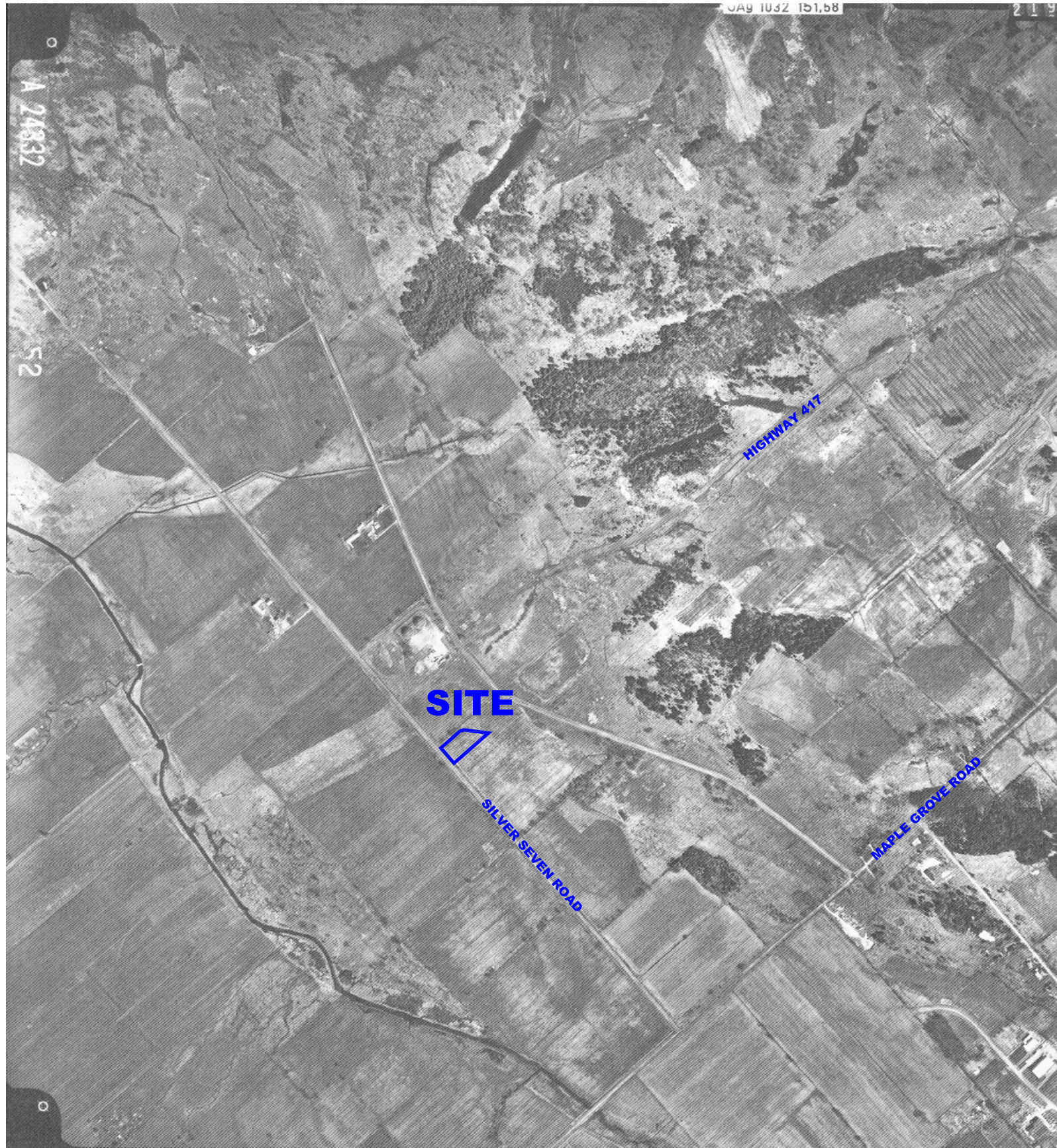
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PROJECT TITLE:
 Phase One Environmental Site Assessment

SITE LOCATION:
 770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:
 Aerial Photograph - 1945

REV NO: 0	FILE NO: 13-11-6171
SCALE: Not to Scale	FIGURE NO: 5
DATE: November 3, 2011	



REFERENCE:

NOTES:

LEGEND:

PROJECT TITLE:

Phase One Environmental Site Assessment

SITE LOCATION:

770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:

Aerial Photograph - 1976

REV NO.:

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FILE NO.:

13-11-6171

SCALE:

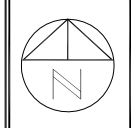
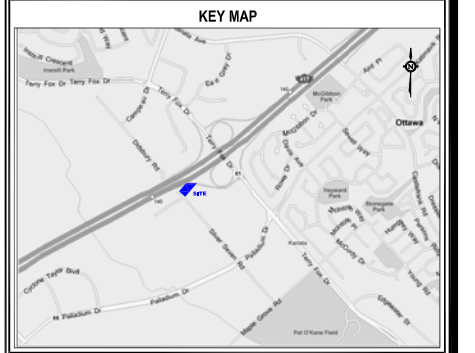
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FIGURE NO.:

DATE:

November 3, 2011

6



REFERENCE:
 Ministry of Natural Resources

NOTES:

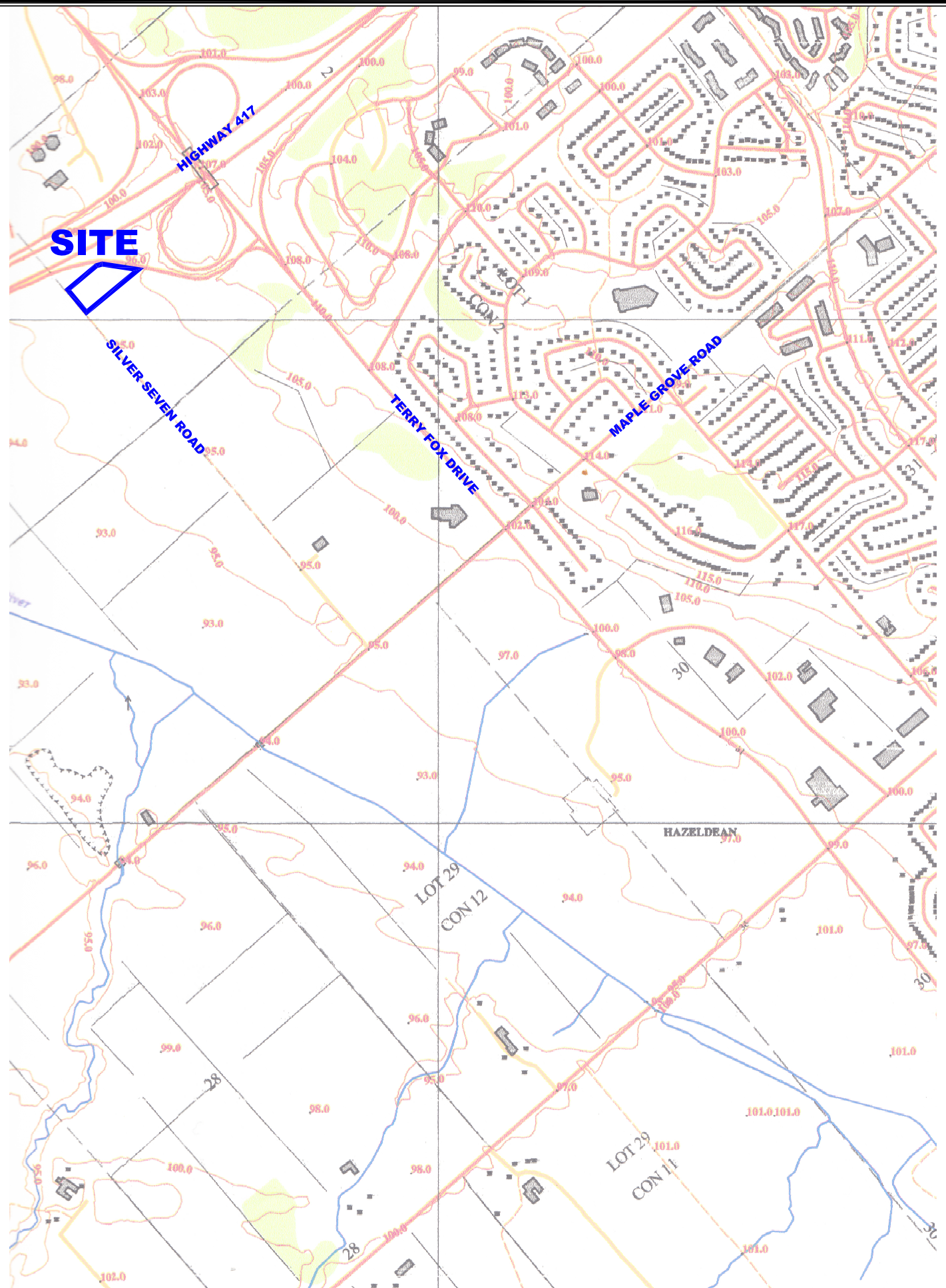
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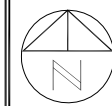
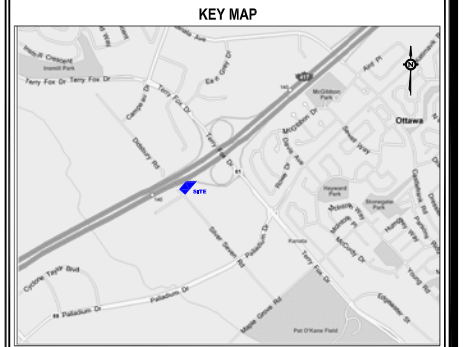
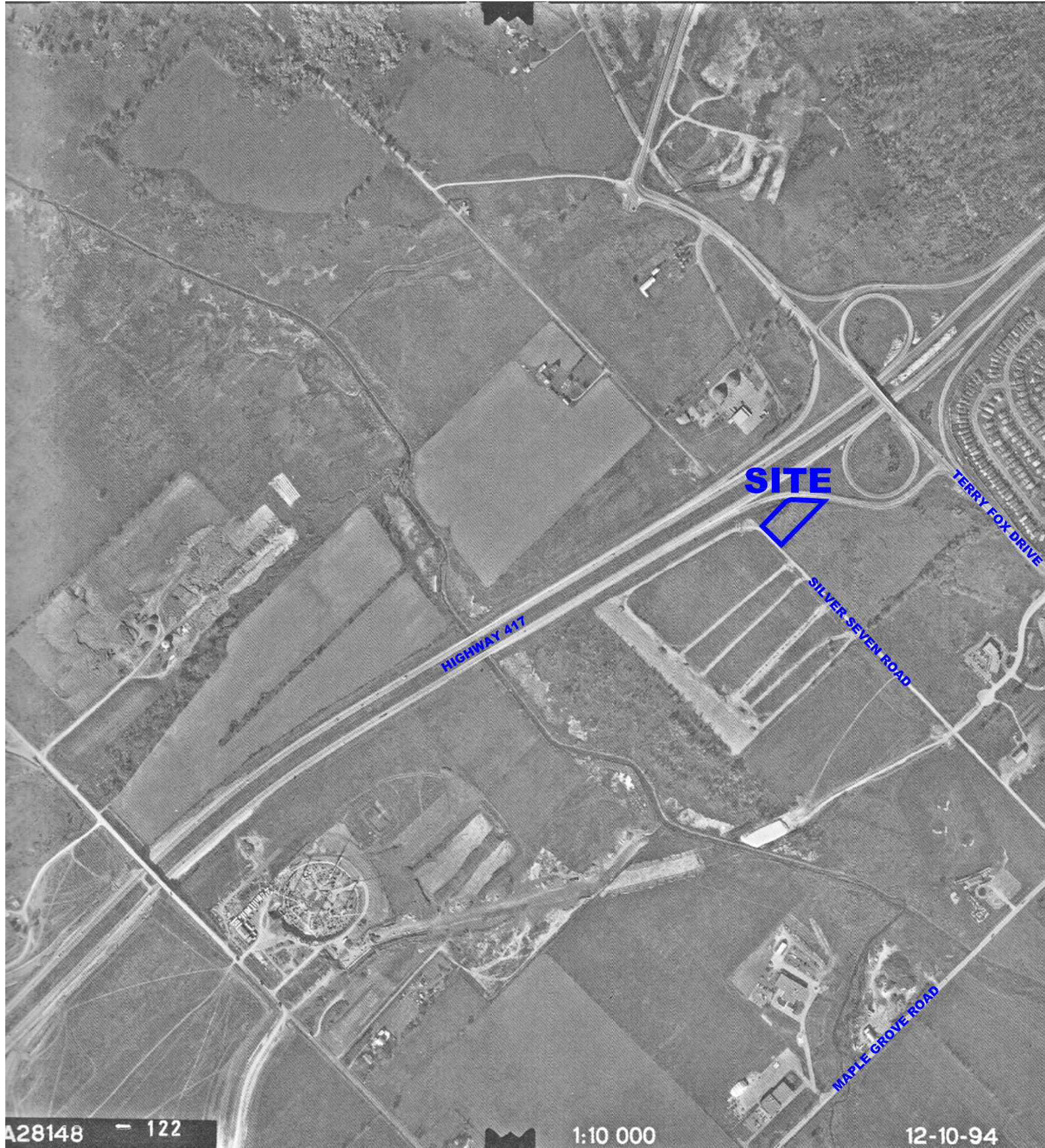
PROJECT TITLE:
 Phase One Environmental Site Assessment

SITE LOCATION:
 770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:
 ONTARIO BASE MAP - 1982

REV NO: 0	FILE NO: 13-11-6171
SCALE: 1:10,000	FIGURE NO: 7
DATE: November 3, 2011	





REFERENCE:

NOTES:

LEGEND:

PROJECT TITLE:

Phase One Environmental Site Assessment

SITE LOCATION:

770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:

Aerial Photograph - 1994

REV NO.:

0

FILE NO.:

13-11-6171

SCALE:

Not to Scale

FIGURE NO.:

8

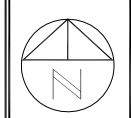
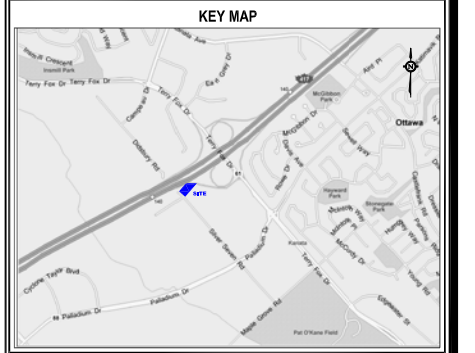
DATE:

November 3, 2011

A28148 - 122

1:10 000

12-10-94



REFERENCE:
 eMap - City of Ottawa

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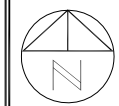
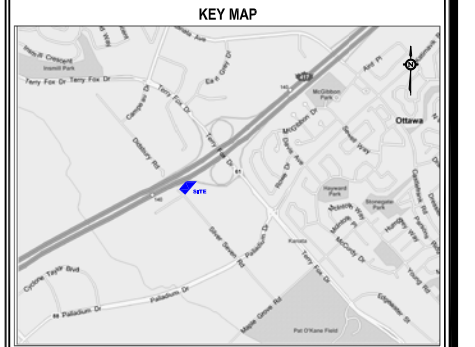
PROJECT TITLE:
 Phase One Environmental Site Assessment

SITE LOCATION:
 770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:
 AERIAL PHOTOGRAPH - 2002

REV NO: 0	FILE NO: 13-11-6171
SCALE: AS SHOWN	FIGURE NO: 9
DATE: November 3, 2011	





REFERENCE:

eMap - City of Ottawa

NOTES:

LEGEND:

PROJECT TITLE:

Phase One Environmental Site Assessment

SITE LOCATION:

770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:

AERIAL PHOTOGRAPH - 2005

REV NO.:

0

FILE NO.:

13-11-6171

SCALE:

AS SHOWN

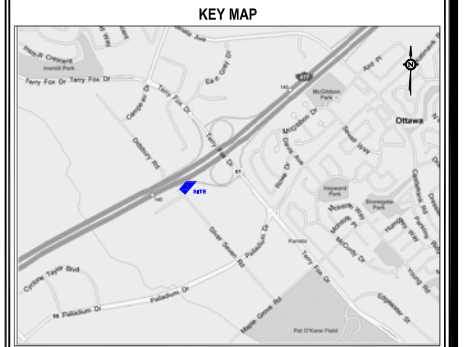
FIGURE NO.:

10

DATE:

November 3, 2011





REFERENCE:
 eMap - City of Ottawa

NOTES:

LEGEND:

PROJECT TITLE:
 Phase One Environmental Site Assessment

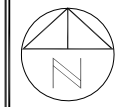
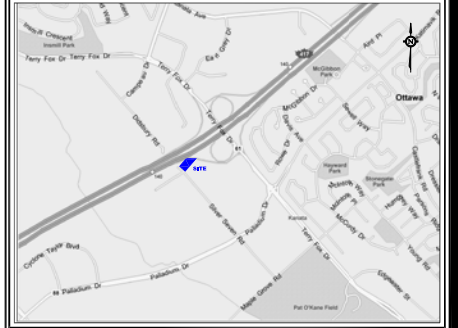
SITE LOCATION:
 770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:
 PROPERTY ZONING MAP - 2002

REV NO.: 0	FILE NO.: 13-11-6171
SCALE: AS SHOWN	FIGURE NO.: 11
DATE: November 3, 2011	



KEY MAP



REFERENCE:
 Ministry of Natural Resources

NOTES:

LEGEND:

ANSI

PROJECT TITLE:

Phase One Environmental Site Assessment

SITE LOCATION:

770 Silver Seven Road
 Ottawa, Ontario

FIGURE TITLE:

MNR Natural Areas

REV NO:

0

SCALE:

AS SHOWN

DATE:

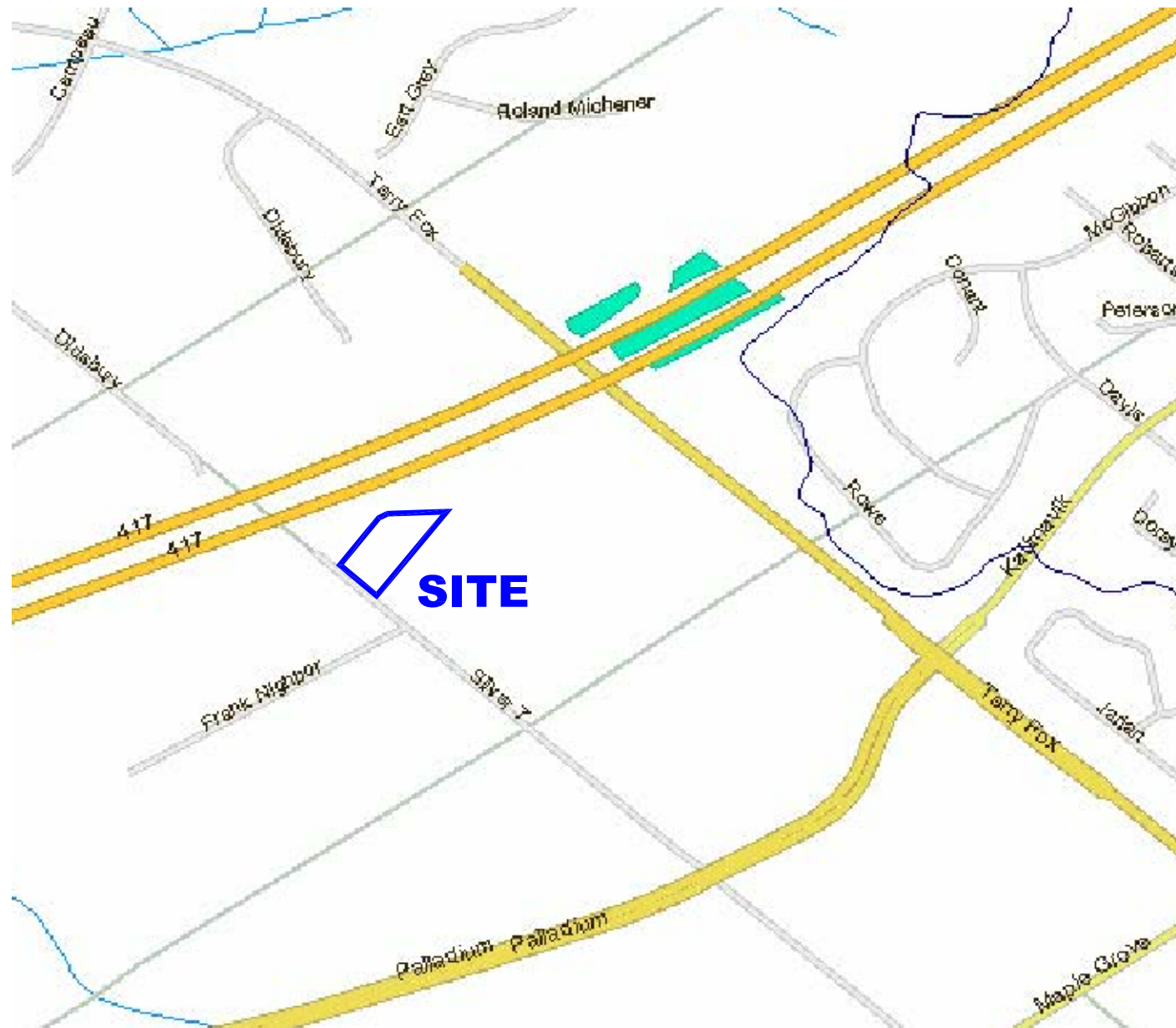
November 3, 2011

FILE NO:

13-11-6171

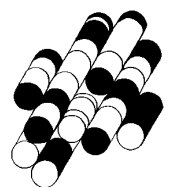
FIGURE NO:

12



APPENDIX A

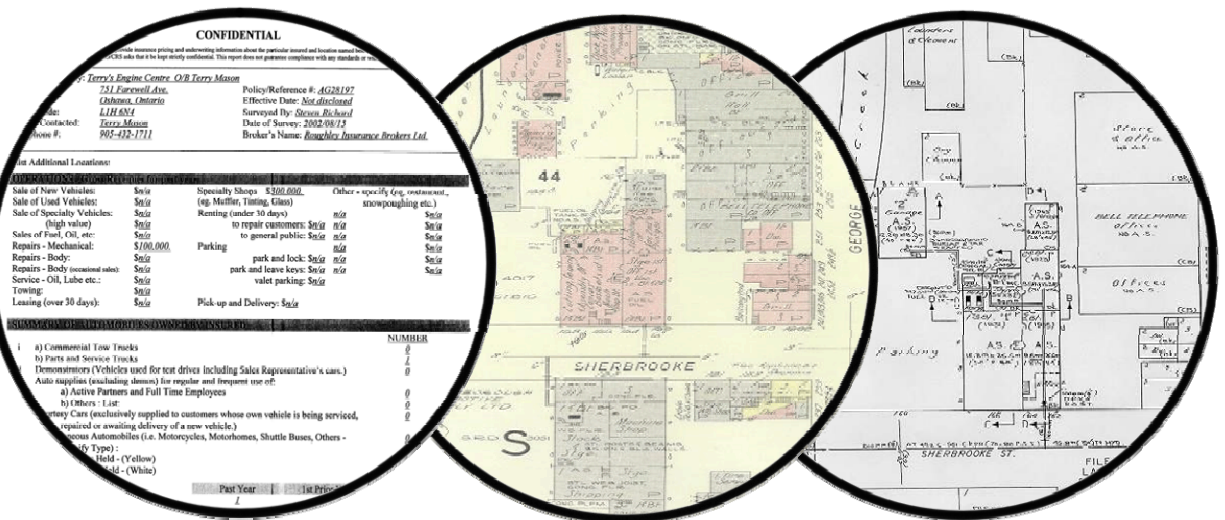
TERRAPROBE INC.



HEIRS™



Historical
Environmental
Information
Reporting
System



Site Address:
770 Silver Seven Rd
Ottawa, ON

Project No:
2011026042

Requested by:
E. Goolab
Ecolog ERIS

Date Completed:
November 4, 2011



RISK MANAGEMENT SERVICES
An **SCM** Company

150 Commerce Valley Drive W
Thornhill, ON L3T 7Z3
Tel: (905) 882-6300 ext 5410
www.scm-rms.ca

Report Completed By:
Vanessa Ode



ISO 9001 Certified

Risk Management Services
150 Commerce Valley Drive W
8th Floor
Markham, ON
L3T 7Z3

Tel: (905) 882-6300 x5410
Fax: (905) 695-6543

Historical Environmental Information Reporting System (HEIRS™)

Eleanor Goolab
EcologERIS
12 Concorde Place, Suite 800
Toronto, ON
M3C 4J2

November 4, 2011

Regarding: 770 Silver Seven Rd, Ottawa - 20111026042

As requested, we have searched our records concerning the above site and the following information as listed below is appended hereto:

Table with 2 columns: Information, Date(s). Rows include Fire Insurance Plan(s), Property Underwriters' Report(s), and Property Underwriters' Plan(s), all with 'NRF' in the date column.

NRF: No Records Found NO: Not Ordered

Our invoice in the amount of \$45.00 (+ HST) for the information provided will follow in due course.

Thank you for employing our services.

Handwritten signature of Vanessa Ode

Vanessa Ode
Environmental Services

New Website – www.scm-rms.ca

TERMS AND CONDITIONS

Report. The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in RMS's records relating to the described property (hereinafter referred to as the "Property"). RMS makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. RMS does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.
Disclaimer. RMS disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on RMS Reports or from any tortious acts or omissions of RMS's agents, employees or representatives.
Entire Agreement. The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.
Governing Document. In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.
Law. This agreement shall be governed by and construed in accordance with the laws of the Province of * and the laws of Canada applicable therein.

HEIRS™

Historical
Environmental
Information
Reporting
System



NO RECORDS FOUND

Site Address:

770 Silver Seven Rd
Ottawa, ON

Project No:

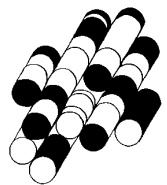
20111026042

rms



APPENDIX B

TERRAPROBE INC.



City Directory Information Source

Vernon's Ottawa, Ontario City Directory

PROJECT NUMBER: 20111026042	
Site Address:	770 Silver Seven Rd. Kanata, Ontario
Year: 2010	
Site Listing:	-Costco Wholesale
Adjacent Properties:	
700 Silver Seven Rd.	-Multi Tenant Office
578 Terry Fox Dr.	-Country Inn & Suites Ottawa West
350 Palladium Dr.	-Multi Tenant Office
500 Palladium Dr.	-Avnet Computer -Breconridge Mfg.
10 Frank Nighbour Place	-Home Depot

PROJECT NUMBER: 20111026042	
Site Address:	770 Silver Seven Rd. Kanata, Ontario
Year: 2004/2005	
Site Listing:	-Address Not Listed
Adjacent Properties:	
700 Silver Seven Rd.	-Multi Tenant Office
578 Terry Fox Dr.	-Country Inn & Suites Ottawa West

350 Palladium Dr.	-Multi Tenant Office
500 Palladium Dr.	-Address Not Listed
10 Frank Nighbour Place	-Home Depot

PROJECT NUMBER: 20111026042	
Site Address:	770 Silver Seven Rd. Kanata, Ontario
Year: 1999/2000	
Site Listing:	-Address Not Listed
Adjacent Properties:	
700 Silver Seven Rd.	-Address Not Listed
578 Terry Fox Dr.	-Address Not Listed
350 Palladium Dr.	-Mosaic Court Restaurant -Actioneers Party & Play
500 Palladium Dr.	-Address Not Listed
10 Frank Nighbour Place	-Home Depot

PROJECT NUMBER: 20111026042	
Site Address:	770 Silver Seven Rd. Kanata, Ontario
Year: 1994/1995	
Site Listing:	-Address Not Listed
Adjacent Properties:	

700 Silver Seven Rd.	-Address Not Listed
578 Terry Fox Dr.	-Address Not Listed
350 Palladium Dr.	-Address Not Listed
500 Palladium Dr.	-Address Not Listed
10 Frank Nighbour Place	-Address Not Listed

PROJECT NUMBER: 20111026042	
Site Address:	770 Silver Seven Rd. Kanata, Ontario
Year: 1992	
Site Listing:	-Address Not Listed
Adjacent Properties:	
700 Silver Seven Rd.	-Address Not Listed
578 Terry Fox Dr.	-Address Not Listed
350 Palladium Dr.	-Address Not Listed
500 Palladium Dr.	-Address Not Listed
10 Frank Nighbour Place	-Address Not Listed

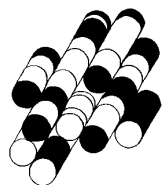
-All listings for businesses were listed as they are in the city directory.

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

*****Kanata, Ontario is listed from 1992 to 2010 within the city directory archives*****

APPENDIX C

TERRAPROBE INC.



CHAIN OF TITLE REPORT

**Project # 13-11-6171
770 Silver Seven Road, Ottawa
Part Lot 2 Con 2 March Township
Parts 1 to 18 4R20106
PIN 04509-0123(LT)**

Root 2

Page 1

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent (N ½ of Lot 2)	28 05 1832	Crown	Sarah CADDY
RO5470	Deed	23 12 1851	Sarah Caddy	John S. SAVAGE
MH4826	Deed	18 05 1897	John S. Savage	James SAVAGE
MH1896	Deed	01 03 1907	James Savage	Alonzo RICHARDSON
MH3888	Deed	17 10 1951	Alonzo Richardson – estate	Kenneth RICHARDSON
MH4619	Deed	20 10 1960	Kenneth Richardson	Golden Ridge Realty Limited
MH5067	Deed	15 04 1964	Golden Ridge Realty Limited	William Teron Limited
LT425604	Deed	16 09 1985	Campeau Corporation (formerly Wm. Teron Limited)	The Governing Council of The Salvation Army in Canada

Cont'd on page 2

CHAIN OF TITLE REPORT

**Project # 13-11-6171
770 Silver Seven Road, Ottawa
Part Lot 2 Con 2 March Township
Parts 1 to 18 4R20106
PIN 04509-0123(LT)**

Root 2

Page 2

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
LT1269583	Deed	15 03 2000	The Governing Council of The Salvation Army in Canada	1394868 Ontario Limited
LT1325955	Deed	02 10 2000	1394868 Ontario Limited	PCM Kanata South Inc.
OC450048	Deed	08 04 2005	PCM Kanata South Inc.	Costco Wholesale Canada Ltd.

CHAIN OF TITLE REPORT

**Project # 13-11-6171
770 Silver Seven Road, Ottawa
Part Lot 2 Con 2 March Township
Parts 1 to 18 4R20106
PIN 04509-0123(LT)**

Root 1

Page 1

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent (south ½ lot 2)	15 06 1824	Crown	Joseph SIMPSON
RO66	Deed	30 10 1826	Joseph Simpson	William HODGINS
RO7412	Deed	05 05 1854	William Hodgins	John HODGINS
MH1267	Deed	01 05 1896	John Hodgins	Joseph RALPH
MH1405	Deed	26 05 1898	Joseph Ralph	John BOUCHER
MH1677	Deed	27 05 1903	John Boucher	Horace BOUCHER
MH2592	Deed	02 03 1918	Horace Boucher	John NESBITT
MH3542	Deed	05 08 1942	John Nesbitt	John H. DOUGLAS

Cont'd on page 2

CHAIN OF TITLE REPORT

**Project # 13-11-6171
770 Silver Seven Road, Ottawa
Part Lot 2 Con 2 March Township
Parts 1 to 18 4R20106
PIN 04509-0123(LT)**

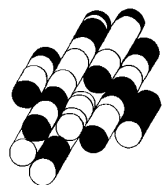
Root 1

Page 2

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
MH4626	Deed	02 11 1960	John H. Douglas	Golden Ridge Realty Limited
MH5067	Deed	15 04 1964	Golden Ridge Realty Limited	William Teron Limited
LT425604	Deed	16 09 1985	Campeau Corporation (formerly William Teron Limited)	The Governing Council of The Salvation Army In Canada
LT1269583	Deed	15 03 2000	The Governing Council of The Salvation Army In Canada	1394868 Ontario Limited
LT1325955	Deed	02 10 2000	1394868 Ontario Limited	PCM Kanata South Inc.
OC450048	Deed	08 04 2005	PCM Kanata South Inc.	Costco Wholesale Canada Ltd.

APPENDIX D

TERRAPROBE INC.





Canada's Primary Environmental Risk Information Service

Project Site: Kanata Costco
770 Silver Seven Road
Ottawa, ON

Client: Freesia Waxman
Terraprobe Ltd
11 Indell Lane
Brampton, ON L6T3Y3

ERIS Project No: 20111026042

Report Type: Custom Report - .25km Search Radius

Prepared By: Rafal Wojtasik
rwojtasik@eris.ca

Date: November 04, 2011

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Order Number: 20111026042
Site Name: Kanata Costco
Site Address: 770 Silver Seven Road Ottawa, ON
Report Type: Custom Report, 0.25 km Search Radius

	<u>Section</u>
Report Summary <i>This outlines the number of records from each database that fall on the site, and within various distances from the site.</i>	i
Site Diagram <i>The records that were found within a specified distance from the project property (the primary search radius) have been plotted on a diagram to provide you with a visual representation of the information available. Sites will be plotted on the diagram if there is sufficient information from the database source to determine accurate geographic coordinates. Each plotted site is marked with an acronym identifying the database in which the record was found (i.e., WDS for Waste Disposal Sites). These are referred to as "Map Keys". A variety of problems are inherent when attempting to associate various government or private source records with locations. EcoLog ERIS has attempted to make the best fit possible between the available data and their positions on the site diagram.</i>	ii
Site Profile <i>This table describes the records that relate directly to the property that is being researched.</i>	iii
Detail Report <i>This section represents information, by database, for the records found within the primary search radius. Listed at the end of each database are the sites that could not be plotted on the locator diagram because of insufficient address information. These records will not have map keys. They have been included because they may be found to be relevant during a more detailed investigation.</i>	iv
	<u>Page</u>
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Certificates of Approval	15
Environmental Registry	18
ERIS Historical Searches	19
Ontario Regulation 347 Waste Generators Summary	20
National Pollutant Release Inventory	27
Pesticide Register	29
Scott's Manufacturing Directory	30
Ontario Spills	32
Water Well Information System	33
Appendix: Database Descriptions	

Report Summary

Order Number: 20111026042
 Site Name: Kanata Costco
 Site Address: 770 Silver Seven Road Ottawa, ON
 Report Type: Custom Report, 0.25 km Search Radius

Number of Mappable Records Surrounding the Site

Database	Selected	On-site	Within 0.25	0.25km to 0.25km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	14	14
CA	Certificates of Approval	Y	1	8	8
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Register	Y	0	0	0
COAL	Coal Gasification Plants	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
EBR	Environmental Registry	Y	0	5	5
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	0	7	7
EIIS	Environmental Issues Information System	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Storage Tanks	Y	0	0	0
FST	Fuel Storage Tank	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	8	8
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defence & Canadian Forces Fuel Storage Tanks	Y	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	6	6
OGW	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	2	4	4
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0

Report Summary

Order Number: 20111026042
Site Name: Kanata Costco
Site Address: 770 Silver Seven Road Ottawa, ON
Report Type: Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 0.25km	Total
SCT	Scott's Manufacturing Directory	Y	0	10	0	10
SPL	Ontario Spills	Y	0	5	0	5
SRDS	Wastewater Discharger Registration Database	Y	0	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0	0
WWIS	Water Well Information System	Y	0	1	0	1
		TOTAL	3	68	0	68

The databases chosen by the client as per the submitted order form are denoted in the 'Selected' column in the above table. Counts have been provided outside the primary buffer area for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.



Pinpointing Your Environmental Risks

12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

Project Property: Kanata Costco
770 Silver Seven Road
Ottawa, ON

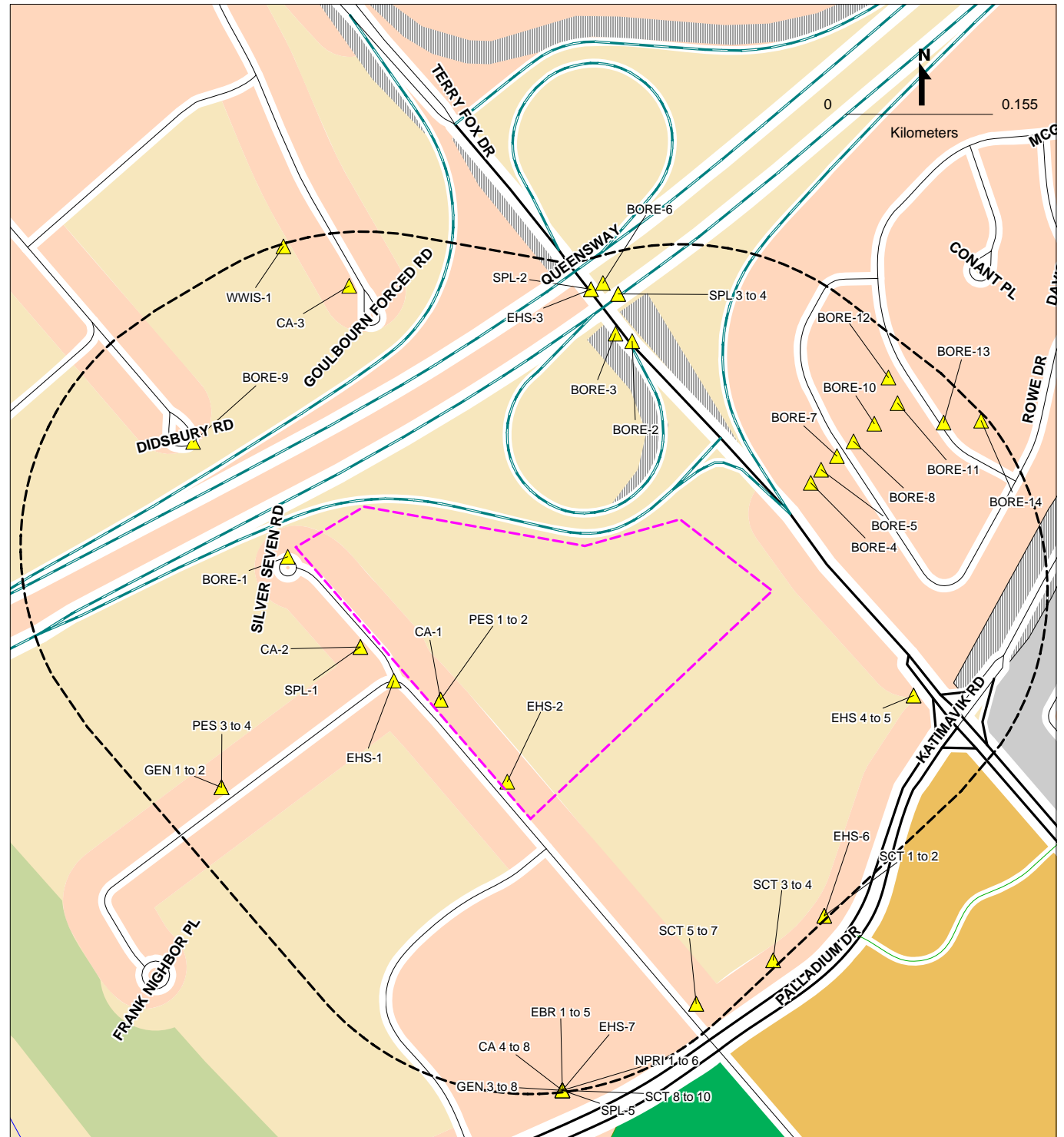
ERIS Project #: 20111026042

Date: NOV-04-2011

LEGEND

Project Property	Landuse Classifications
▲ Database Location	Open Area
Points of Interest	Residential
🏠 Chimney	Commercial
○ Silo	Resource and Industrial
Pipe & Transmission Lines	Government and Institutional
--- Pipeline	Parks and Recreational
--- Transmission Line	Waterbody
🏗️ Transmission Tower	Recreation
🏢 Transformer Station	Golf Course/Driving Range
Rail	Park/Sports Field
🚂 Railway - Main	Other Recreation Area
🚂 Railway - Sidetrack	Sports/Race Track
🚂 Railway - Abandoned	Cemetery
🌉 Bridge	Campground
🚇 Tunnel	Vegetation
Transportation - Other	Wooded Area
🛤️ Embankment	Orchard
🛤️ Trail	Vineyard
🛤️ Runway	Industrial Resources
Hydrographic Features	🏗️ Conveyor
🌊 Permanent Waterway	🚗 Crane: Moveable
🌊 Intermittent Waterway	🚗 Crane: Stationary
🟦 Open Reservoir	⚙️ Tank
🛡️ Dyke/Levee	🏗️ Rock Cut
🛡️ Dam	🏗️ Auto Wrecker
🛡️ Breakwall	🏗️ Lumber Yard
🌊 Wetland	🏗️ Pit

SITE DIAGRAM



This diagram is to be used solely for relative street location purposes. It may not accurately portray street or site positions.

Site Report

Order Number: 20111026042
Site Name: Kanata Costco
Site Address: 770 Silver Seven Road Ottawa, ON
Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Certificates of Approval

Map Key	Company Name	Address	City	Postal Code
CA-1	Costco Wholesale Canada Ltd.	770 Silver Seven Road	Ottawa	

Pesticide Register

Map Key	Company Name	Address	City	Postal Code
PES-1	COSTCO WHOLESALE CANADA LTD	770 SILVER SEVEN RD	KANATA	K2V 0A1
PES-2	COSTCO WHOLESALE CANADA LTD	770 SILVER SEVEN RD	KANATA	K2V 0A1

Detail Report

Order Number: 20111026042
Site Name: Kanata Costco
Site Address: 770 Silver Seven Road Ottawa ON
Report Type: Custom Report, 0.25 km Search Radius

If information is required for sites located beyond the selected address, please contact your ERIS representative.

Borehole

Certificates of Approval

Environmental Registry

ERIS Historical Searches

Ontario Regulation 347 Waste Generators Summary

National Pollutant Release Inventory

Pesticide Register

Scott's Manufacturing Directory

Ontario Spills

Water Well Information System

Borehole

Map Key	Company	Address	Borehole ID	Type	Use
BORE-1			807173	Borehole	Geotechnical/Geological Investigation

Status:
Drill Method: Hollow stem auger
UTM Zone: 18
Easting: 428245.300
Northing: 5017060.975
Location Accuracy:
Orig. Ground Elevation(m):
Elev. Reliability Note:
DEM Ground Elevation(m): 95.800003
Total Depth(m): 9.100000
Primary Name: AH 1
Township:
Concession:
Lot:
Municipality
Completion Date: 1989-APR-27
Static Water Level:
Primary Water Use:
Secondary Water Use:
Location Description:

<u>Geology</u> <u>Stratum ID</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
218591883	0	0.200000	Crushed Stone
218591884	0.200000	0.500000	Topsoil
218591885	0.500000	3	Grey-Brown Silty Clay
218591886	3	9.100000	Grey Silty Clay

Borehole

Map Key	Company	Address	Borehole ID	Type	Use																				
BORE-2			847963	Borehole	Geotechnical/Geological Investigation																				
<p> Status: Decommissioned Drill Method: Diamond Drill UTM Zone: 18 Easting: 428561.000 Northing: 5017253.000 Location Accuracy: Orig. Ground Elevation(m): 102.800003 Elev. Reliability Note: DEM Ground Elevation(m): 107.400002 Total Depth(m): 5 Primary Name: Township: MARCH Concession: CON 2 Lot: LOT 2 Municipality Completion Date: 1971-JUN-22 Static Water Level: 0.800000 Primary Water Use: Secondary Water Use: Location Description: </p>																									
<table border="1"> <thead> <tr> <th><u>Geology Stratum ID</u></th> <th><u>Top Depth(m)</u></th> <th><u>Bottom Depth(m)</u></th> <th><u>Stratum Desc</u></th> </tr> </thead> <tbody> <tr> <td>6559408</td> <td>0</td> <td>0.300000</td> <td>TOPSOIL</td> </tr> <tr> <td>6559409</td> <td>0.300000</td> <td>4.100000</td> <td>SILTY CLAY WITH SOME SAND. FIRM TO STIFF. GREY.</td> </tr> <tr> <td>6559410</td> <td>4.100000</td> <td>4.400000</td> <td>GLACIAL TILL</td> </tr> <tr> <td>6559411</td> <td>4.400000</td> <td>5</td> <td>BEDROCK - SANDSTONE. SOUND.</td> </tr> </tbody> </table>						<u>Geology Stratum ID</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>	6559408	0	0.300000	TOPSOIL	6559409	0.300000	4.100000	SILTY CLAY WITH SOME SAND. FIRM TO STIFF. GREY.	6559410	4.100000	4.400000	GLACIAL TILL	6559411	4.400000	5	BEDROCK - SANDSTONE. SOUND.
<u>Geology Stratum ID</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>																						
6559408	0	0.300000	TOPSOIL																						
6559409	0.300000	4.100000	SILTY CLAY WITH SOME SAND. FIRM TO STIFF. GREY.																						
6559410	4.100000	4.400000	GLACIAL TILL																						
6559411	4.400000	5	BEDROCK - SANDSTONE. SOUND.																						

Borehole

Map Key	Company	Address	Borehole ID	Type	Use																								
BORE-3			847961	Borehole	Geotechnical/Geological Investigation																								
<p> Status: Decommissioned Drill Method: Diamond Drill UTM Zone: 18 Easting: 428546.000 Northing: 5017260.000 Location Accuracy: Orig. Ground Elevation(m): 102.300003 Elev. Reliability Note: DEM Ground Elevation(m): 105.500000 Total Depth(m): 6.400000 Primary Name: Township: MARCH Concession: CON 2 Lot: LOT 2 Municipality Completion Date: 1971-JUN-22 Static Water Level: Primary Water Use: Secondary Water Use: Location Description: </p>																													
<table border="1"> <thead> <tr> <th><u>Geology</u></th> <th><u>Top Depth(m)</u></th> <th><u>Bottom Depth(m)</u></th> <th><u>Stratum Desc</u></th> </tr> <tr> <th><u>Stratum ID</u></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>6559401</td> <td>0</td> <td>0.300000</td> <td>TOPSOIL</td> </tr> <tr> <td>6559402</td> <td>0.300000</td> <td>4.100000</td> <td>SILTY CLAY WITH SOME SAND. FIRM TO STIFF. GREY. SOFT.</td> </tr> <tr> <td>6559403</td> <td>4.100000</td> <td>4.700000</td> <td>GLACIAL TILL. FIRM.</td> </tr> <tr> <td>6559404</td> <td>4.700000</td> <td>6.400000</td> <td>BEDROCK. SANDSTONE. SOUND. LIGHT GREY.</td> </tr> </tbody> </table>						<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>	<u>Stratum ID</u>				6559401	0	0.300000	TOPSOIL	6559402	0.300000	4.100000	SILTY CLAY WITH SOME SAND. FIRM TO STIFF. GREY. SOFT.	6559403	4.100000	4.700000	GLACIAL TILL. FIRM.	6559404	4.700000	6.400000	BEDROCK. SANDSTONE. SOUND. LIGHT GREY.
<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>																										
<u>Stratum ID</u>																													
6559401	0	0.300000	TOPSOIL																										
6559402	0.300000	4.100000	SILTY CLAY WITH SOME SAND. FIRM TO STIFF. GREY. SOFT.																										
6559403	4.100000	4.700000	GLACIAL TILL. FIRM.																										
6559404	4.700000	6.400000	BEDROCK. SANDSTONE. SOUND. LIGHT GREY.																										

Borehole

Map Key	Company	Address	Borehole ID	Type	Use
BORE-4			803564	Borehole	Geotechnical/Geological Investigation

Status:
Drill Method: Other Method
UTM Zone: 18
Easting: 428722.217
Northing: 5017122.592
Location Accuracy:
Orig. Ground Elevation(m): 110.699997
Elev. Reliability Note:
DEM Ground Elevation(m): 109.199997
Total Depth(m): 0.500000
Primary Name: TP.1
Township:
Concession:
Lot:
Municipality:
Completion Date: 1986-SEP-26
Static Water Level:
Primary Water Use:
Secondary Water Use:
Location Description:

<u>Geology</u> <u>Stratum ID</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
218576985	0	0.200000	Dark Brown Topsoil Silt
218576986	0.200000	0.500000	Dark Brown Silt - Sand With: Gr W Cob End of TP - Sandstone BR

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-5			803565	Borehole	Geotechnical/Geological Investigation	
<p>Status: Drill Method: Other Method UTM Zone: 18 Easting: 428731.717 Northing: 5017134.414 Location Accuracy: Orig. Ground Elevation(m): 110.500000 Elev. Reliability Note: DEM Ground Elevation(m): 109.099998 Total Depth(m): 0.300000 Primary Name: TP.2 Township: Concession: Lot: Municipality: Completion Date: 1986-SEP-26 Static Water Level: Primary Water Use: Secondary Water Use: Location Description:</p>						
			<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
			<u>Stratum ID</u>			
			218576987	0	0.200000	Dark Brown Topsoil Silt
			218576988	0.200000	0.300000	Brown Silt - Sand With: Cob End of TP - sandstone BR

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-6			847960	Borehole	Geotechnical/Geological Investigation	
<p> Status: Decommissioned Drill Method: Diamond Drill UTM Zone: 18 Easting: 428535.000 Northing: 5017306.000 Location Accuracy: Orig. Ground Elevation(m): 102.500000 Elev. Reliability Note: DEM Ground Elevation(m): 104.699997 Total Depth(m): 4.300000 Primary Name: Township: MARCH Concession: CON 2 Lot: LOT 2 Municipality Completion Date: 1971-JUN-21 Static Water Level: 1.200000 Primary Water Use: Secondary Water Use: Location Description: </p>						
			<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
			<u>Stratum ID</u>			
			6559397	0	0.300000	TOPSOIL
			6559398	0.300000	0.900000	SILTY CLAY, STIFF. GREY.
			6559399	0.900000	3	GLACIAL TILL. CLAYEY SILT WITH SAND, TRACE OF GRAVEL, VERY STIFF. GREY.
			6559400	3	4.300000	BEDROCK. SANDSTONE. SOUND. LIGHT GREY.

Borehole

Map Key	Company	Address	Borehole ID	Type	Use
BORE-7			803567	Borehole	Geotechnical/Geological Investigation

Status:
Drill Method: Other Method
UTM Zone: 18
Easting: 428746.225
Northing: 5017146.643
Location Accuracy:
Orig. Ground Elevation(m): 110.199997
Elev. Reliability Note:
DEM Ground Elevation(m): 108.599998
Total Depth(m): 0.500000
Primary Name: TP.3
Township:
Concession:
Lot:
Municipality:
Completion Date: 1986-SEP-26
Static Water Level:
Primary Water Use:
Secondary Water Use:
Location Description:

<u>Geology</u> <u>Stratum ID</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
218576998	0	0.200000	Dark Brown Topsoil Silt
218576999	0.200000	0.400000	Brown Silt - Sand With: Gr W Cob
218577000	0.400000	0.500000	Bedrock

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-8			803568	Borehole	Geotechnical/Geological Investigation	
<p>Status: Drill Method: Other Method UTM Zone: 18 Easting: 428761.469 Northing: 5017159.858 Location Accuracy: Orig. Ground Elevation(m): 109.699997 Elev. Reliability Note: DEM Ground Elevation(m): 107.599998 Total Depth(m): 0.400000 Primary Name: TP.4 Township: Concession: Lot: Municipality: Completion Date: 1986-SEP-26 Static Water Level: Primary Water Use: Secondary Water Use: Location Description:</p>						
			<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
			<u>Stratum ID</u>			
			218577001	0	0.100000	Brown Topsoil Silt
			218577002	0.100000	0.200000	Brown Sand With: Gr
			218577003	0.200000	0.400000	Dark Brown Sand With: Si W Cob End of TP - Sandstone BR

Borehole

Map Key	Company	Address	Borehole ID	Type	Use																								
BORE-9			807175	Borehole	Geotechnical/Geological Investigation																								
<p> Status: Drill Method: Hollow stem auger UTM Zone: 18 Easting: 428160.326 Northing: 5017166.047 Location Accuracy: Orig. Ground Elevation(m): Elev. Reliability Note: DEM Ground Elevation(m): 96.300003 Total Depth(m): 9.100000 Primary Name: AH 2 Township: Concession: Lot: Municipality: Completion Date: 1989-APR-27 Static Water Level: Primary Water Use: Secondary Water Use: Location Description: </p>																													
<table border="1"> <thead> <tr> <th><u>Geology</u></th> <th><u>Top Depth(m)</u></th> <th><u>Bottom Depth(m)</u></th> <th><u>Stratum Desc</u></th> </tr> </thead> <tbody> <tr> <td><u>Stratum ID</u></td> <td></td> <td></td> <td></td> </tr> <tr> <td>218591889</td> <td>0.800000</td> <td>2.700000</td> <td>Grey-Brown Silty Clay</td> </tr> <tr> <td>218591887</td> <td>0</td> <td>0.600000</td> <td>Brown Sand - Gravel</td> </tr> <tr> <td>218591888</td> <td>0.600000</td> <td>0.800000</td> <td>Topsoil</td> </tr> <tr> <td>218591890</td> <td>2.700000</td> <td>9.100000</td> <td>Grey Silty Clay</td> </tr> </tbody> </table>						<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>	<u>Stratum ID</u>				218591889	0.800000	2.700000	Grey-Brown Silty Clay	218591887	0	0.600000	Brown Sand - Gravel	218591888	0.600000	0.800000	Topsoil	218591890	2.700000	9.100000	Grey Silty Clay
<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>																										
<u>Stratum ID</u>																													
218591889	0.800000	2.700000	Grey-Brown Silty Clay																										
218591887	0	0.600000	Brown Sand - Gravel																										
218591888	0.600000	0.800000	Topsoil																										
218591890	2.700000	9.100000	Grey Silty Clay																										

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-10			803571	Borehole	Geotechnical/Geological Investigation	
<p>Status: Drill Method: Other Method UTM Zone: 18 Easting: 428780.540 Northing: 5017175.501 Location Accuracy: Orig. Ground Elevation(m): 109.800003 Elev. Reliability Note: DEM Ground Elevation(m): 105.699997 Total Depth(m): 1.400000 Primary Name: TP.5 Township: Concession: Lot: Municipality: Completion Date: 1986-SEP-26 Static Water Level: Primary Water Use: Secondary Water Use: Location Description:</p>						
			Geology	Top Depth(m)	Bottom Depth(m)	Stratum Desc
			Stratum ID			
			218577016	0	0.600000	Dark Brown Peat With: Si W Sa
			218577017	0.600000	1.400000	Brown to Grey Till sand silt With: Gr W Cob End of TP - Sandstone BR

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-11			803573	Borehole	Geotechnical/Geological Investigation	
<p>Status: Drill Method: Other Method UTM Zone: 18 Easting: 428801.916 Northing: 5017194.102 Location Accuracy: Orig. Ground Elevation(m): 108.300003 Elev. Reliability Note: DEM Ground Elevation(m): 103.800003 Total Depth(m): 0.200000 Primary Name: TP.6 Township: Concession: Lot: Municipality: Completion Date: 1986-SEP-26 Static Water Level: Primary Water Use: Secondary Water Use: Location Description:</p>						
			<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
			<u>Stratum ID</u>			
			218577022	0	0.200000	Dark Brown Topsoil Silt End of TP - Sandstone BR

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-12			803582	Borehole	Geotechnical/Geological Investigation	
<p> Status: Drill Method: Other Method UTM Zone: 18 Easting: 428793.941 Northing: 5017217.248 Location Accuracy: Orig. Ground Elevation(m): 108.199997 Elev. Reliability Note: DEM Ground Elevation(m): 103.599998 Total Depth(m): 0.500000 Primary Name: TP.11 Township: Concession: Lot: Municipality: Completion Date: 1986-SEP-27 Static Water Level: Primary Water Use: Secondary Water Use: Location Description: </p>						
			Geology	Top Depth(m)	Bottom Depth(m)	Stratum Desc
			Stratum ID			
			218577056	0	0.200000	Brown Topsoil Silt
			218577057	0.200000	0.500000	Bedrock Some Sandy Silt. Sandstone BR at end of TP

Borehole

Map Key	Company	Address	Borehole ID	Type	Use	
BORE-13			803580	Borehole	Geotechnical/Geological Investigation	
<p> Status: Drill Method: Other Method UTM Zone: 18 Easting: 428843.697 Northing: 5017175.826 Location Accuracy: Orig. Ground Elevation(m): 111.199997 Elev. Reliability Note: DEM Ground Elevation(m): 108.400002 Total Depth(m): 0.200000 Primary Name: TP.10 Township: Concession: Lot: Municipality: Completion Date: 1986-SEP-27 Static Water Level: Primary Water Use: Secondary Water Use: Location Description: </p>						
			<u>Geology</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
			<u>Stratum ID</u>			
			218577046	0	0.100000	Brown Topsoil Silt
			218577047	0.100000	0.200000	Bedrock End of TP - Sandstone BR

Borehole

Map Key	Company	Address	Borehole ID	Type	Use
BORE-14			803574	Borehole	Geotechnical/Geological Investigation

Status:
Drill Method: Other Method
UTM Zone: 18
Easting: 428877.844
Northing: 5017177.190
Location Accuracy:
Orig. Ground Elevation(m): 111.199997
Elev. Reliability Note:
DEM Ground Elevation(m): 109
Total Depth(m): 0.700000
Primary Name: TP.7
Township:
Concession:
Lot:
Municipality:
Completion Date: 1986-SEP-26
Static Water Level:
Primary Water Use:
Secondary Water Use:
Location Description:

<u>Geology</u> <u>Stratum ID</u>	<u>Top Depth(m)</u>	<u>Bottom Depth(m)</u>	<u>Stratum Desc</u>
218577023	0	0.100000	Dark Brown Topsoil Silt
218577024	0.100000	0.700000	Grey Till sand silt With: Gr W Cob End of TP - Sandstone BR

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-1	Costco Wholesale Canada Ltd.	770 Silver Seven Road Ottawa	4649-66SHEW	2004	11/17/2004	Industrial Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-2	HOME DEPOT OF CANADA INC.	PT.LOT 2/CON.1,FIRST LINE RD. KANATA	3-0929-98-	98	7/23/1998	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-3	Ontario Realty Corporation	21 Goulbourn Forced Rd Kanata Ottawa	6152-7DKP27	2008	4/18/2008	Industrial Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-4	BreconRidge Manufacturing Solutions Corporation	500 Palladium Drive Ottawa	8092-6EFK9Y	2005	10/11/2005	Air	Revoked and/or Replaced	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-5	BreconRidge Manufacturing Solutions Corporation	500 Palladium Drive Ottawa	8860-79ET5C	2008	1/31/2008	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-6		500 Palladium Drive Kanata K2V 1C2	4172-4TXR5F	01	4/10/01	Industrial air	Approved	Amended CofA
			Client Name: Nortel Networks Optical Components Corporation Client Address: 500 Palladium Drive Client City: Kanata Client Postal Code: K2V 1C2 Project Description: This application is an amendment to the existing Air Certificate of Approval which proposes to add the following air quality emission sources: one (1) general exhaust, comprised of three (3) stacks plus one (1) backup stack operating at 7,000 cfm each; seven (7) 6,000 MBH natural gas fired boilers (maximum 4 operating at once); one (1) 1,100 kW emergency diesel generators; and one (1) three-celled cooling tower (maximum 2 of 3 cells operating at once at 1000 tonnes each). The noise assessment for this C of A amendment includes all the sources listed above with the exception of the solvent storage tank as well as the following sources: fresh air and exhaust louvers; outdoor air intakes; exhaust fans; and chiller intake hoods. Contaminants: Emission Control: No Controls					
CA-7		500 Palladium Drive Kanata K2V 1C2	7282-4JKSCH	01	4/10/01	Industrial air	Revoked and/or Replaced	New Certificate of Approval
			Client Name: Nortel Networks Corporation, Palladium One Client Address: 185 Corkstown Road Client City: Nepean Client Postal Code: K2H 8V4 Project Description: The proposed facility will manufacture advanced gallium arsenide micro-electronic integrated circuits utilizing the following exhaust equipment: -one process exhaust, comprised of two stacks plus one back-up stack operating at a minimum flow rate of 15,000 cfm (each), from a common plenum; -one acid scrubber, exhausted through one stack plus one back-up acid scrubber exhausted through one back-up stack, operating at a minimum flow rate of 7,500 cfm each; -six 6,000,000 BTU/hour natural gas boilers; and - three cooling towers. The above sources were considered for air quality assessment. These sources as well as the sources listed below have been included for noise assessment: -fresh air and exhaust louvres; -outdoor air intakes; -boiler flues; -exhaust vent stacks; and -exhaust fans. Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-8	BreconRidge Manufacturing Solutions Corporation	500 Palladium Drive Ottawa	9259-5YBQPG	2004	4/26/2004	Air	Revoked and/or Replaced	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	Costco Wholesale Canada Ltd.	Ottawa	3795-67VQLX	2005	1/14/2005	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	Costco Wholesale Canada Ltd.	Ottawa	8486-67BPPB	2004	12/6/2004	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Environmental Registry

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
EBR-1	Nortel Networks Corporation	500 Palladium Drive Kanata K2V 1C2	2000	IA00E1937		Instrument
				Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)	
				Proposal Date:		
				Location:	500 Palladium Drive, Kanata, Ontario, K2V 1C2 Kanata	
				Proponent Address:	Nortel Networks Corporation 500 Palladium Drive MS 198/11 E02, Kanata, Ontario, K2V 1C2	
EBR-2	Nortel Networks Corporation, Palladium One	500 Palladium Dr Kanata K2V 1C2	2000	IA00E0325	8014-4GDPUL	Instrument Decision
				Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9	
				Proposal Date:	2/10/00	
				Location:	500 Palladium Drive Kanata Ontario	
				Proponent Address:	185 Corkstown Road Nepean Ontario K2H 8V4	
EBR-3	BreconRidge Manufacturing Solutions Corporation	500 Palladium Drive Kanata K2V 1C2	2005	IA05E0173	5940-696MRY	Instrument Decision
				Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9	
				Proposal Date:		
				Location:	500 Palladium Drive Kanata Ontario	
				Proponent Address:	500 Palladium Drive Kanata Ontario K2V 1C2	
EBR-4	Breconridge Manufacturing Solutions Corporation	500 Palladium Drive Ottawa K2V 1C2	2004	IA04E0241	3797-5T2JUN	Instrument Decision
				Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9	
				Proposal Date:		
				Location:	500 Palladium Drive Ottawa Ontario K2V 1C2	
				Proponent Address:	500 Palladium Drive Ottawa Ontario K2V 1C2	
EBR-5	BreconRidge Manufacturing Solutions Corporation	500 Palladium Drive Kanata K2V 1C2	2005	IA05E1711	9458-6HBPHB	Instrument Proposal
				Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9	
				Proposal Date:	November 28, 2006	
				Location:	500 Palladium Drive Kanata Ontario	
				Proponent Address:	500 Palladium Drive Kanata Ontario K2V 1C2	

ERIS Historical Searches

Map Key	Company	Address	Order No.	Report Date	Report Type	Search Radius (km)
EHS-1		Frank Nighbor Place & Silver Seven Road Kanata (Ottawa)	20050829021 Addit. Info Ordered:	8/31/2005	Basic Report	0.25
EHS-2		720 Silver Seven Road Ottawa	20100302004 Addit. Info Ordered:	3/10/2010	Standard Report	0.25
EHS-3		Highway 417 & Terry Fox Drive Ottawa	20020403014 Addit. Info Ordered:	4/12/02	Complete Report	0.50
EHS-4		578 Terry Fox Dr Kanata K2L 4G8	20061023029 Addit. Info Ordered:	10/31/2006	Complete Report	0.25
EHS-5		578 Terry Fox Dr Kanata K2L 4G8	20040714017 Addit. Info Ordered:	7/16/04	Complete Report	0.35
EHS-6		308 PALLADIUM DRIVE OTTAWA	20070302009 Addit. Info Ordered:	3/12/2007	CAN - Custom Report	0.25
EHS-7		500 Palladium Drive Ottawa	20100330009 Addit. Info Ordered:	3/31/2010	Custom Report	0.25

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-1	HOME DEPOT CANADA, THE	10 FRANK NIGHBOR PLACE KANATA K2V 1B9		Generator #: ON1881331 Approval Yrs: As of Oct 2010	112	Acid solutions - containing heavy metals
					113	Acid solutions - containing other metals and non-metals
					122	Alkaline slutions - containing other metals and non-metals (not cyanide)
					145	Wastes from the use of pigments, coatings and paints
					146	Other specified inorganic sludges, slurries or solids
					147	Chemical fertilizer wastes
					213	Petroleum distillates
					221	Light fuels
					242	Halogenated pesticides and herbicides
					251	Waste oils/sludges (petroleum based)
					252	Waste crankcase oils and lubricants
					263	Misc. waste organic chemicals
					269	Organic non-halogenated pesticide and herbicide wastes
					331	Waste compressed gases including cylinders

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-2	HOME DEPOT CANADA, THE	10 FRANK NIGHBOR PLACE KANATA L2T 1C4	6531	HARDWARE STORES	112	ACID WASTE - HEAVY METALS
					122	ALKALINE WASTES - OTHER METALS
					145	PAINT/PIGMENT/COATING RESIDUES
					148	INORGANIC LABORATORY CHEMICALS
					211	AROMATIC SOLVENTS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					242	HALOGENATED PESTICIDES
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					269	NON-HALOGENATED PESTICIDES
					331	WASTE COMPRESSED GASES
					113	ACID WASTE - OTHER METALS
					146	OTHER SPECIFIED INORGANICS
					147	CHEMICAL FERTILIZER WASTES

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-3	NORTEL NETWORKS OPTICAL COMPONENTS CORP.	500 PALLADIUM DRIVE KANATA K2V 1C2	3351	TELECOMMUNICATIONS	112	ACID WASTE - HEAVY METALS
					113	ACID WASTE - OTHER METALS
					121	ALKALINE WASTES - HEAVY METALS
					146	OTHER SPECIFIED INORGANICS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					232	POLYMERIC RESINS
					241	HALOGENATED SOLVENTS
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					268	AMINES
					312	PATHOLOGICAL WASTES
					331	WASTE COMPRESSED GASES
			Approval Yrs: 00,01			

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-4	BreconRidge Manufacturing Solutions Inc	500 Palladium Drive Kanata K2V 1C2	334410	Semiconductor and Other Electronic Component Manuf	112	ACID WASTE - HEAVY METALS
					114	OTHER INORGANIC ACID WASTES
					121	ALKALINE WASTES - HEAVY METALS
					145	PAINT/PIGMENT/COATING RESIDUES
					146	OTHER SPECIFIED INORGANICS
					148	INORGANIC LABORATORY CHEMICALS
					211	AROMATIC SOLVENTS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					231	LATEX WASTES
					232	POLYMERIC RESINS
					241	HALOGENATED SOLVENTS
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					312	PATHOLOGICAL WASTES
					331	WASTE COMPRESSED GASES
			Approval Yrs: 06			

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-5	BreconRidge Corporation	500 Palladium Drive Kanata K2V 1C2	334410	Semiconductor and Other Electronic Component Manufacturing	112	ACID WASTE - HEAVY METALS
					114	OTHER INORGANIC ACID WASTES
					121	ALKALINE WASTES - HEAVY METALS
					145	PAINT/PIGMENT/COATING RESIDUES
					146	OTHER SPECIFIED INORGANICS
					148	INORGANIC LABORATORY CHEMICALS
					211	AROMATIC SOLVENTS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					231	LATEX WASTES
					232	POLYMERIC RESINS
					241	HALOGENATED SOLVENTS
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					312	PATHOLOGICAL WASTES
					331	WASTE COMPRESSED GASES

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-6	BreconRidge Manufacturing Solutions	500 Palladium Drive Kanata	334410	Semiconductor & Electronic Component Mfg. Generator #: ON1446539 Approval Yrs: 03,04,05	112	ACID WASTE - HEAVY METALS
					114	OTHER INORGANIC ACID WASTES
					121	ALKALINE WASTES - HEAVY METALS
					145	PAINT/PIGMENT/COATING RESIDUES
					146	OTHER SPECIFIED INORGANICS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					232	POLYMERIC RESINS
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					312	PATHOLOGICAL WASTES
					331	WASTE COMPRESSED GASES
GEN-7	Sanmina-SCI Corporation	500 Palladium Drive Kanata K2V 1C2		Generator #: ON1446539 Approval Yrs: As of Oct 2010	112	Acid solutions - containing heavy metals
					121	Alkaline slutions - containing heavy metals
					145	Wastes from the use of pigments, coatings and paints
					146	Other specified inorganic sludges, slurries or solids
					148	Misc. wastes and inorganic chemicals
					212	Aliphatic solvents and residues
					232	Polymeric resins
					252	Waste crankcase oils and lubricants
					263	Misc. waste organic chemicals
					312	Pathological wastes
331	Waste compressed gases including cylinders					

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-8	NORTEL NETWORKS	500 PALLADIUM DRIVE KANATA K2V 1C2	3351	TELECOMMUNICATIONS	112	ACID WASTE - HEAVY METALS
					113	ACID WASTE - OTHER METALS
					121	ALKALINE WASTES - HEAVY METALS
					135	REACTIVE ANION WASTES
					146	OTHER SPECIFIED INORGANICS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					232	POLYMERIC RESINS
					241	HALOGENATED SOLVENTS
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					268	AMINES
					312	PATHOLOGICAL WASTES
331	WASTE COMPRESSED GASES					

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-1	BreconRidge Corporation	500 Palladium Drive Ottawa K2V 1C2	11008	2009	-75.9125	45.2997	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						kg	Lead (and its compounds)
NPRI-2	BreconRidge Corporation	500 Palladium Drive Ottawa	11008	2006	-75.9089	45.2998	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						kg	Lead (and its compounds)
NPRI-3	BreconRidge Manufacturing Solutions	500 Palladium Drive Ottawa	11008	2005	-75.9089	45.2998	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						kg	Lead (and its compounds)
NPRI-4	BreconRidge Manufacturing Solutions	500 Palladium Drive Ottawa	11008	2004	-75.9089	45.2998	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						kg	Lead (and its compounds)
NPRI-5	BreconRidge Corporation	500 Palladium Drive Ottawa K2V 1C2	11008	2008	-75.9089	45.2998	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						kg	Lead (and its compounds)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude
NPRI-6	BreconRidge Corporation	500 Palladium Drive Ottawa K2V 1C2	11008	2007		
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
						<u>Substances Released</u>
					kg	Lead (and its compounds)

Pesticide Register

Map Key	Company	Address	Licence No.	Licence Type
PES-1	COSTCO WHOLESALE CANADA LTD	770 SILVER SEVEN RD KANATA K2V 0A1		Limited Vendor
PES-2	COSTCO WHOLESALE CANADA LTD	770 SILVER SEVEN RD KANATA K2V 0A1		Vendor
PES-3	HOME DEPOT CANADA	10 FRANK NIGHBOR PLACE KANATA K2V 1B9	23-01-11564-0	Limited Vendor
PES-4	HOME DEPOT OF CANADA INC. STORE #7108	10 FRANK NIGHBOR PLACE KANATA K2V 1B9		Vendor

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-1	Xilinx Inc.	308 Palladium Dr Suite 210 Ottawa K2V 1A1				334410	Semiconductor and Other Electronic Component Manufacturing
						541330	Engineering Services
SCT-2	Electro Source Inc.	308 Palladium Dr Suite 210 Kanata K2V 1A1	01-SEP-84	6000		419120	Wholesale Trade Agents and Brokers
						419120	Wholesale Trade Agents and Brokers
SCT-3	Canada Inc.	350 Palladium Dr Kanata K2V 1A8	2005		15	511110	Newspaper Publishers
SCT-4	Peleton Photonics Systems Inc.	350 Palladium Dr Suite 200 Kanata K2V 1A8	1998			339110	Medical Equipment and Supplies Manufacturing
SCT-5	Freescale Semiconductor Inc.	700 Silver Seven Rd Suite 300 Kanata K2V 1C3	01-AUG-51			541510	Computer Systems Design and Related Services
						334410	Semiconductor and Other Electronic Component Manufacturing
SCT-6	Freescale Semiconductor Inc.	700 Silver Seven Rd Suite 300 Ottawa K2V 1C3	6/1/1951			541510	Computer Systems Design and Related Services
						334410	Semiconductor and Other Electronic Component Manufacturing
SCT-7	Anritsu Electronics Ltd.	700 Silver Seven Rd Suite 120 Kanata K2V 1C3				335920	Communication and Energy Wire and Cable Manufacturing
						334512	Measuring, Medical and Controlling Devices Manufacturing
SCT-8	BreconRidge Corporation	500 Palladium Dr Kanata K2V 1C2				541330	Engineering Services
						334410	Semiconductor and Other Electronic Component Manufacturing

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-9	Sanmina-SCI - Centre	500 Palladium Dr Ottawa K2V 1C2	01-AUG-80			334410	Semiconductor and Other Electronic Component Manufacturing
						334410	Semiconductor and Other Electronic Component Manufacturing
						334110	Computer and Peripheral Equipment Manufacturing
SCT-10	Breconridge Corporation	500 Palladium Dr Kanata K2V 1C2	6/1/2001			334410	Semiconductor and Other Electronic Component Manufacturing

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-1	OTTAWA-CARLETON, R.M. OF	CONS 1.LOT 3. 1ST LINE ROAD SANITARY SEWER SYSTEM KANATA CITY	53335	6/27/1991	6/28/1991		
			Incident Summary:	CITY OF KANATA-250 LITRES OF SEWAGE/WATER MIXTURE TO GROUND & CREEK.			
			Incident Cause:	CONTAINER OVERFLOW			
			Incident Reason:	POWER INTERRUPTION			
			Nature of Impact:				
			Receiving Medium:	LAND / WATER			
			Environmental Impact:	NOT ANTICIPATED			
SPL-2	TRANSPORT TRUCK	HWY 417 NORTH OF T.FOX DR. NORTH DITCH MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY	28289	11/28/1989	11/28/1989		
			Incident Summary:	FUEL TRUCK OVERTURNED. OPERATING AND CARGO FUEL TO DITCH.			
			Incident Cause:	TRUCK/TRAILER OVERTURN			
			Incident Reason:	UNKNOWN			
			Nature of Impact:				
			Receiving Medium:	LAND			
			Environmental Impact:	NOT ANTICIPATED			
SPL-3	SCHOONER TRANSPORT	HWY 417 WESTBOUND AT TERRY FOX DRIVE TANK TRUCK (CARGO) KANATA CITY	161255	10/20/1998	10/20/1998		
			Incident Summary:	SCHOONER TRANSPORT-LIQUID ASPHALT TO MEDIAN FROM OVERTURNED TANKER & PUP.			
			Incident Cause:	TRUCK/TRAILER OVERTURN			
			Incident Reason:	UNKNOWN			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	POSSIBLE			
SPL-4	TRANSPORT TRUCK	QUEENSWAY W/B, AT TERRY FOX RD. MOTOR VEHICLE (OPERATING FLUID) KANATA CITY	121296	11/28/1995	11/28/1995		
			Incident Summary:	TRANSPORT TRUCK: 45 L OF DIESEL TO ROAD & DITCH, OPP, MTO, CONTAINED.			
			Incident Cause:	TRUCK/TRAILER OVERTURN			
			Incident Reason:	ERROR			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	POSSIBLE			
SPL-5	NORTHERN TELECOM	500 PALLADIUM DRIVE OTTAWA K2V 1C2	184101	7/26/2000	7/26/2000		
			Incident Summary:	NORTEL: SPILL OF 4 L OF DIESEL ON CONCRETE PAD PINHOLE IN TANK/CLEANED.			
			Incident Cause:	ABOVE-GROUND TANK LEAK			
			Incident Reason:	EQUIPMENT FAILURE			
			Nature of Impact:				
			Receiving Medium:	LAND			
			Environmental Impact:	NOT ANTICIPATED			

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality												
WWIS-1		lot 2 con 2	1512296	002	02	CON	OTTAWA-CARLETON	MARCH TOWNSHIP												
<p> Easting Nad83: 428244.6 Northing Nad83: 5017343 Zone: 18 Utm Reliability: margin of error : 30 m - 100 m Construction Date: 9/7/1972 Primary Water Use: Commerical Secondary Water Use: Well Depth: 85 ft Pump Rate: 10 GPM Static Water Level: 1 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Water Supply Construction Method: Rotary (Air) Flowing (y/n): N Elevation (m): 100.596694 Elevation Reliability: Depth to Bedrock: 0 Overburden/Bedrock: Bedrock Water Type: FRESH Casing Material: STEEL </p> <table border="1"> <thead> <tr> <th><u>Thickness</u></th> <th><u>Original Depth</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>3 ft</td> <td>3 ft</td> <td>GREY</td> <td>ROCK, SAND</td> </tr> <tr> <td>82 ft</td> <td>85 ft</td> <td>GREY</td> <td>SANDSTONE</td> </tr> </tbody> </table>									<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>	3 ft	3 ft	GREY	ROCK, SAND	82 ft	85 ft	GREY	SANDSTONE
<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>																	
3 ft	3 ft	GREY	ROCK, SAND																	
82 ft	85 ft	GREY	SANDSTONE																	

Appendix: Ontario Database Descriptions

EcoLog Environmental Risk Information Services Ltd 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 EcoLog ERIS at the time of update. **Note:** Databases denoted with "*" indicates that the database will no longer be updated. See the individual database descriptions for more information.

Provincial Government Source Databases:

Abandoned Aggregate Inventory Up to Sept 2002

AAGR

The MAAP Program maintains a database of all 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.

Aggregate Inventory Up to Jun 2010

AGR

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot\concession and city/town location. The database provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mines Information System 1800-2005

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.

Borehole 1875-Aug 2011

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.

Certificates of Approval 1985-Sept 2011

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.

TSSA Commercial Fuel Oil Tanks 1948-Aug 2011

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.

Coal Gasification Plants and Coal Tar Sites April 1987 and November 1988*

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.*

Compliance and Convictions 1989-Aug 2011

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.

Drill Holes 1886-2005

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”.

Environmental Registry 1994-Aug 2011

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, licence, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes things like; Approval for discharge into the natural environment other than water (i.e. Air), Permit to Take Water (PTTW), Certificate of Property Use (CPU), Approval for a waste disposal site, Order for preventative measures.(EPA s. 18), Order for conformity with Act for waste disposal sites.(EPA s. 44), Order for remedial work.(EPA s. 17) and many more.

TSSA Fuel Storage Tanks Current to Jun 2011

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.

Ontario Regulation 347 Waste Generators Summary 1986-Oct 2010

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.

Mineral Occurrences 1846-Nov 2010**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 planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Non-Compliance Reports 1992(water only), 1994-2009**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.

Ontario Oil and Gas Wells 1800-Jun 2011**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, well cap date, licence 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.

Ontario Inventory of PCB Storage Sites 1987-Oct 2004**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.

Pesticide Register 1988-Mar 2011**PES**

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

Private and Retail Fuel Storage Tanks 1989-1996***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).

Ontario Regulation 347 Waste Receivers Summary 1986-2008**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.

Record of Site Condition 1997-Sept 2001, Oct 2004-Aug 2011

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. Information available includes Registration Number, Filing Owner, Property Address, Filing Date and Municipality.

Ontario Spills 1988-Nov 2010

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.

Wastewater Discharger Registration Database 1990-2009

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).

Waste Disposal Sites - MOE CA Inventory 1970-Sept 2011

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. For more current information for Waste Disposal Sites please see the EBR database, which will include information such as 'Approval for a waste disposal site (EPA s.27)' and 'Approval for use of a former waste disposal site (EPA s.46)'.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory Up to Oct 1990*

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.

Water Well Information System 1955-Mar 2011

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.

Federal Government Source Databases:

Diagram Identifier:

Environmental Effects Monitoring 1992-2007*

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.

Environmental Issues Inventory System 1992-2001*

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.

Federal Convictions 1988-Jun 2007

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.

Contaminated Sites on Federal Land June 2000-Sept 2011

FCS

The Treasury Board of Canada Secretariat maintains an inventory of all known contaminated sites held by various Federal departments and agencies. This inventory does not include properties owned by Crown corporations, but does contain non-federal sites for which the Government of Canada has accepted some or all financial responsibility. All sites have been classified through a system developed by the Canadian Council of Ministers of the Environment. The database provides information on company name, location, site ID #, property use, classification, current status, contaminant type and plan of action for site remediation.

Fisheries & Oceans Fuel Tanks 1964-Sept 2003

FOFT

Fisheries & Oceans Canada maintains an inventory of all 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.

Indian & Northern Affairs Fuel Tanks 1950-Aug 2003

IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all 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.

National Analysis of Trends in Emergencies System (NATES) 1974-1994*

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.

National Defence & Canadian Forces Fuel Tanks Up to May 2001*

NDFT

The Department of National Defence 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.

National Defence & Canadian Forces Spills Mar 1999-Aug 2010

NDSP

The Department of National Defence 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.

National Defence & Canadian Forces Waste Disposal Sites 2001-April 2007

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.

National Environmental Emergencies System (NEES) 1974-2003

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 all 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.

National PCB Inventory 1988-2008

NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all 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.

National Pollutant Release Inventory 1993-2009

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.

Parks Canada Fuel Storage Tanks 1920-Jan 2005

PCFT

Canadian Heritage maintains an inventory of all 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.

Transport Canada Fuel Storage Tanks 1970-March 2007

TCFT

With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. This inventory will also include The Pickering Lands, which refers to the 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, falls under the Site Management Policy of Transport Canada, but administered by Public Works and Government Services Canada. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

Private Source Databases:

Anderson's Waste Disposal Sites 1860s-Present

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.*

Automobile Wrecking & Supplies 2001-Jun 2010

AUWR

This database provides an inventory of all 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.

Chemical Register 1992, 1999-Jun 2010

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.).

ERIS Historical Searches 1999-Apr 2011

EHS

EcoLog 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.

Canadian Mine Locations 1998-2009

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.

Oil and Gas Wells Oct 2001-Sept 2011

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 Nickles' database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Canadian Pulp and Paper 1999, 2002, 2004, 2005, 2009

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.

Retail Fuel Storage Tanks 2000-Jun 2010

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. Information is provided on company name, location and type of business.

Scott's Manufacturing Directory 1992-Mar 2011

SCT

Scott's Directories is a data bank containing information on over 70,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

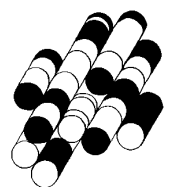
Anderson's Storage Tanks 1915-1953*

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.*

APPENDIX E

TERRAPROBE INC.



Freesia Waxman

From: Craig Cunningham <ccunningham@mvc.on.ca>
Sent: Thursday, October 27, 2011 2:47 PM
To: fwaxman@terraprobe.ca
Subject: FW: Regulated Area Information
Attachments: 20111027133824461.pdf

Hi Freesia,

I have attached a map that illustrates our Regulation Limit for the area. It appears that 770 Silver Sever is not subject to an area Regulated by MVC.

Hope this helps. Let me know if you have any questions.

Craig

Craig Cunningham
Environmental Planner
Mississippi Valley Conservation
Tel: (613) 259-2421 x229
Fax: (613) 259-3468
ccunningham@mvc.on.ca

From: Freesia Waxman [<mailto:fwaxman@terraprobe.ca>]
Sent: Thursday, October 27, 2011 11:09 AM
To: info@mvc.on.ca
Subject: Regulated Area Information

Hello,

I am conducting a Phase One Environmental Assessment on the Kanata Costco located at 770 Silver Seven Road in Kanata. I would like to know whether the site falls under any MVC regulated areas. A site map is attached for your reference.

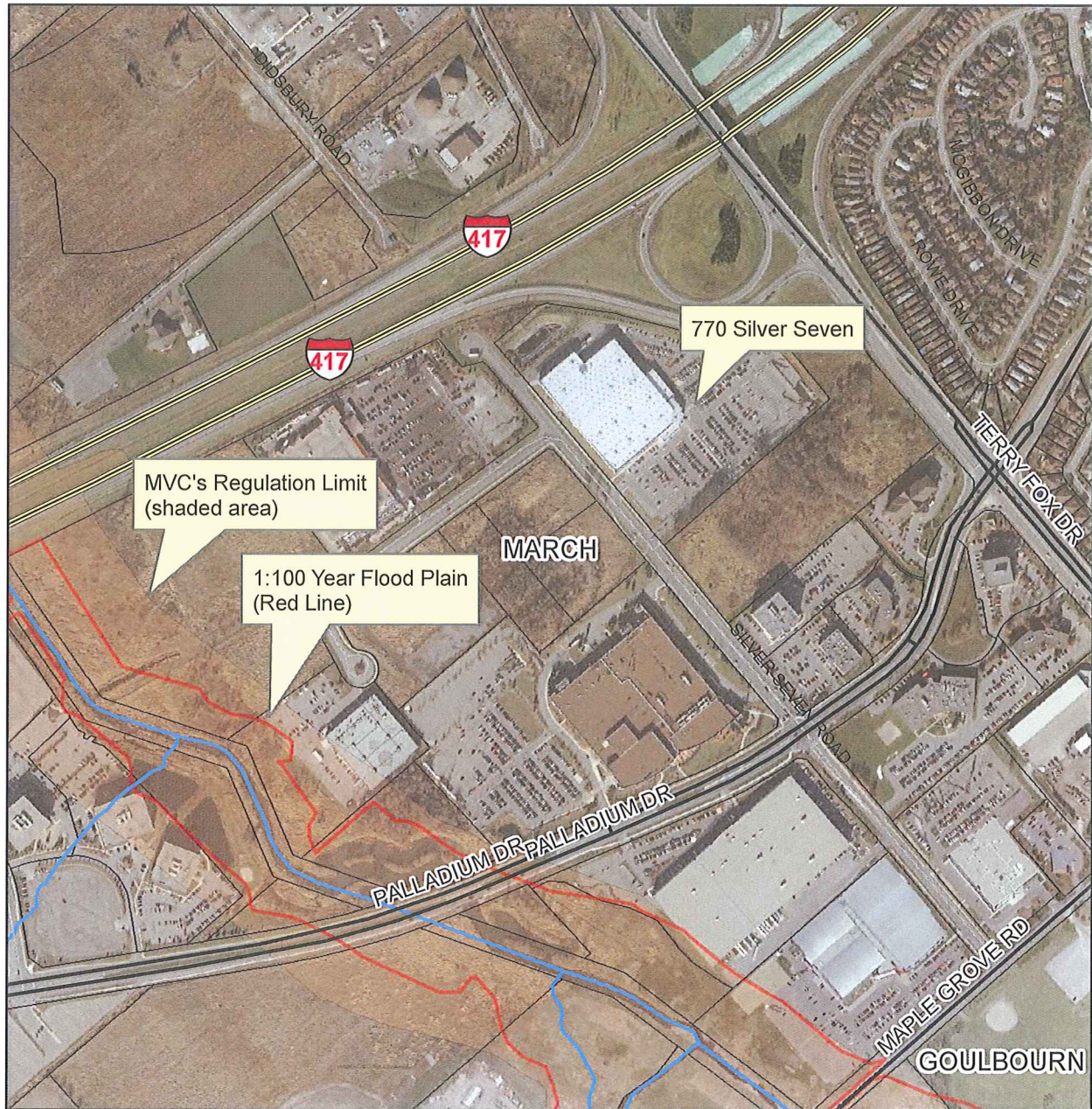
Your help is greatly appreciated.

Regards,

Freesia Waxman, B.Eng, M.A.Sc.

Terraprobe

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11 Indell Lane - **Brampton**, Ontario Canada L6T 3Y3
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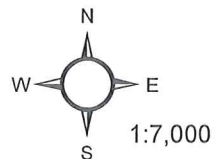
770 Silver Seven

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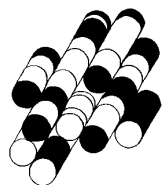
Legend

- Regulation_Limit
- Flood_Plain



APPENDIX F

TERRAPROBE INC.



770 SILVER SEVEN ROAD, CITY OF OTTAWA



Photograph #1

View looking west from the eastern property boundary at the storm water management pond (SWMP).



Photograph #2

View of inlet to SWMP on the eastern portion of the subject property.



Photograph #3

View of the gabion and erosion control on measures along the perimeter of the SWMP.

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Photograph #4

View looking east across the SWMP from the southwest property boundary.



Photograph #5

View looking east at Highway 417 from the eastern portion of the property.



Photograph #6

View looking south at the Costco Wholesale from the southern subject property boundary.

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Photograph #7

View looking west across Silver Seven Road at the Home Depot from the western property boundary.



Photograph #8

View north at the undeveloped area between the subject property and Highway 417.



Photograph #9

View of a storm sewer outlet to the storm water management ponds located on the western portion of the property.