Geotechnical Engineering

Environmental Engineering

Hydrogeology

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Materials Testing

Building Science

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Phase I Environmental Site Assessment

Vacant Land – Eagleson Road
Ottawa (Richmond), Ontario

Prepared For

Taggart Group of Companies

August 28, 2017

Report: PE4079-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Taggart to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of a large parcel of vacant land, in the City of Ottawa (Richmond), Ontario. The purpose of this Phase I – Environmental Site Assessment was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

Based on historical searches, the land has been undeveloped since at least 1950 and has been vacant or used for agriculture. No environmental concerns were identified with respect to the historical use of the subject site.

Surrounding properties historically consisted of commercial and residential properties, agricultural fields and undeveloped treed lands. Potentially contaminating activities were identified for properties within the Phase I-ESA study area. None of these potentially contaminating activities were considered to represent an area of potential environmental concern for the subject site.

Following the historical review, a site visit was conducted. The site is currently vacant and partially used for agricultural purposes. Marlborough Creek was observed to flow southwest-northeast through the northern potion of the subject site. Neighbouring properties to the north and west were identified as commercial and residential properties. Neighbouring properties to the east were identified as residential dwellings and farm steads. Neighbouring properties to the south were identified as vacant lots or agricultural lands. Several PCAs were identified in the vicinity of the subject site, however, based on the separation distance and cross- or down-gradient locations to the subject site, these activities are not considered to have had the potential to have impacted the subject site.

Conclusion

Based on the results of the Phase I - Environmental Site Assessment, it is our opinion that **a Phase II - Environmental Site Assessment is not required for the subject site.**

1.0 INTRODUCTION

At the request of Taggart Group of Companies (Taggart), Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of 100 acres of vacant land near Ottawa Street and Eagleson Road, in the City of Ottawa (Richmond), Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Ted Phillips of Taggart. Taggart's offices are located at 225 Metcalfe Street, Suite 708. Mr. Phillips can be reached by phone at 613-521-3000.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all our findings and results of the environmental conditions at this site.

This Phase I-ESA report has been prepared in general accordance with the requirements of Ontario Regulation 153/04 as amended by O.Reg. 269/11 (Environmental Protection Act), and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

2.0 PHASE I PROPERTY INFORMATION

Address:	Not Available.
Legal Description:	Part of Lot 24 and 25, Concession 2, Township of Goulbourn, now in the City of Ottawa.
Property Identification Number:	03934-0023, 03934-0114, 03934-0031 and 03934-0036.
Location:	The subject site is located on the west side of Eagleson Road and south of Ottawa Street, in the Village of Richmond (Ottawa), Ontario.
Latitude and Longitude:	45° 11' 9.83" N, 75° 49' 3.59" W;
Site Description:	
Configuration:	Irregular (combined).
Site Area:	60 hectares (approximately).
Zoning:	RG3 [385r]-h, rural general industrial zone.
Current Use:	The subject site is currently undeveloped or used for agriculture.
Services:	The subject site is not located in a municipal water service area.

3.0 SCOPE OF INVESTIGATION

The scope of work for this Phase I – Environmental Site Assessment was as follows:

- Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases and regulatory agencies;
- Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
- Conduct interviews with persons knowledgeable of current and historic operations on the subject property, and if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

A radius of approximately 250 m was determined to be appropriate as a Phase I ESA study area for this assignment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

First Developed Use Determination

According to the city directories and aerial photos the land has never been developed. The property has remained vacant or used for agriculture since at least 1950.

Fire Insurance Plans

Fire insurance plans (FIPs) are not available for the area of the subject site.

City of Ottawa Street Directories

Suburban Ottawa city directories from 1980 to 2011 at the National Archives were reviewed in approximate 10 year intervals for the subject site and properties located within the Phase I ESA study area. Directories prior to these dates are not available. From 1980 to 2011, the subject site was not listed in the directories. It is possible that the property was formerly listed under a different address.

Several Potentially Contaminating Activities (PCA) were identified at properties within the Phase I-ESA. These PCAs are summarized in Table 1 below.

Table 1: City Directories Summary – PCAs in Phase I-ESA Study Area

Address	Listed Activity (years listed)	Distance / Orientation from site	Potential Environmental Concern (Y / N)
3835 McBean Street	Sheet metal facility (2000)	70 m west	N
3837 McBean Street	Haulage and equipment rental (2011)	70 m west	N
3839 McBean Street	Automotive service garage (2000)	70 m west	N
3855 McBean Street	Charterunys Transportation Ltd, bus parking (2000)	Adjacent to west	N
5949 Ottawa Street	Automotive Service Garage (2000-2011)	50 m north	N

Based on their cross- and down-gradient locations with respect to the subject site, none of the properties are considered to represent areas of potential environmental concern for the subject site.

Property Ownership

Paterson contacted Taggart, to determine the historical property owners. According to information provided by a Taggart representative, Amedeo Melone and Nathalie Gour, the estate of Alma R. Forster and Schouten Corner View Farms Ltd, currently own various parcels of the property.

4.2 Environmental Source Information

Environment and Climate Change Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on July 17, 2017. The subject site was not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

A search of national PCB waste storage sites was conducted. No PCB waste storage sites were identified in the Phase I study area.

Ontario Ministry of Environment (MOECC) Instruments

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOECC issued instruments for the site. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Coal Gasification Plant Inventory

The Ontario Ministry of Environment document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. No coal gasification plants were identified within the Phase I study area.

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Waste Management Records

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions have been submitted to the MOECC. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No Record of Site Conditions (RSCs) were found for the subject site or within the Phase I study area.

MOECC Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. No former waste disposal sites were identified within the Phase I study area.

Areas of Natural Significance Interest (ANSI)

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on July 17, 2017. The search did not reveal any natural features or areas of natural significance within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on July 17, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. One (1) record was found during the TSSA search.

An under-review private self-serve fuel outlet with 3 active underground liquid fuel tanks was identified on an adjacent property to the west (3855 McBean Street) associated with a Laidlaw Transit school bus parking lot. According to the TSSA, the single walled fiberglass USTs were installed in 1991 and have a combined fuel capacity of 59,000 L. Based on observations made during the site visit, aerial photos and the current occupant of the site (Ottawa Valley Kitchens), it is our opinion that the USTs have been removed and the private self-serve fuel outlet is no longer active. The full TSSA report for this record is included in Appendix 2.

City of Ottawa Landfill Document

The document entitled “Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa”, was reviewed. No former waste disposal sites were located within the Phase I study area.

Previous Environmental Reports

A review of environmental projects in the area of the subject land completed by Paterson Group not identify any issues considered to pose a risk to the subject land.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. The review period dates back to the first available air photos for the site. Based on the review, the following observations have been made:

1950 The subject property appears to be undeveloped and used for agriculture. North of the property, a rail line is visible. Farmsteads are visible along Ottawa Street to the north, Eagleson Road to the east and McBean Street to the west.

1959 No significant changes have been made to the subject site. Residential dwellings appear to have been developed northwest of the subject site along Ottawa Street.

1978 No significant changes have been made to the subject site. Residential dwellings appear to have been developed to the north and northwest of the subject site, along Ottawa Street and King Street.

1985 No significant changes appear to have been made to the subject property, which is still largely undeveloped and appears to be used for agriculture. Further northwest, past the railway line, residential dwellings and a school are visible.

1991 No significant changes have been made to the subject site. Neighbouring properties to the west, along McBean Street, appear to have been developed for residential or commercial purposes.

2005 (City of Ottawa Website) The western portion of the subject site no longer appears to be used for agriculture, with large treed areas throughout. No other significant changes have been made to the subject site or to neighbouring properties.

2014 (City of Ottawa Website) No significant changes have been made to the subject site. A neighbouring property to the west, along McBean Street, appears to be in the process of being developed for commercial or residential purposes. No other significant changes have been made to the subject site or adjacent properties.

Laser copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada - The Atlas of Canada website. The topographic maps indicate that the regional topography in the area of the subject site is generally flat. No environmental concerns were identified on the topographic mapping. An illustration of the referenced

topographic map is present on Figure 2 - Topographic Map following the body of this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada - The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." The subject site is located in the Central St. Lawrence Lowland, "where the land is rarely more than 150 m above sea level, except for the Monteregion Hills, which consist of intrusive igneous rocks.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on the information from NRCAN, bedrock in the area of the site consists primarily of dolostone of the Oxford Formation. Based on the maps, the thickness of overburden ranges from 3 to 5 m on the western portion of the site, 5-10 m on the central portion of the site and 10 to 15 m on the north-eastern portion of the site. Overburden consists of offshore marine sediments (clay and silt).

Water Well Records

A search of the MOECC's web site for all drilled well records within 250 m of the subject site was conducted on July 17, 2017. The search returned 90 well records within the Phase I study area. One (1) well record was found on the subject site for a 90.8 m drinking water well drilled in 1994 by Capital Water Supply Ltd. However, based on the information within the Water Well Record, it is unlikely that this well is located on the subject site, as the map depicts the well west of McBean Street and north of Ottawa Street. The MOECC search found several drinking water wells located to the west and north of the subject property. Based on the large number of well records, only a portion of the water well records within the search radius have been included as an appendix.

Water Bodies and Areas of Natural Significance

There are no areas of natural and scientific interest on the subject property or within the study area. Marlborough Creek runs southwest-northeast through the subject site and flows into the Jock River north of the subject site. The Jock River, located approximately 700 m north of the subject site.

5.0 INTERVIEWS

Property Purchaser

Ms. Michelle Taggart, a representative of Taggart, was contacted to inquire about the subject property. Ms. Taggart deferred to Mr. Robert McElligott of Brickland Timberlay Corporation for answers regarding the subject site. Mr. McElligott indicated that no geotechnical or environmental reports were available for the subject site. Mr. McElligott also indicated that the current owners of the property parcels were the estate of Alma R. Foster, Schouten Corner View Farms Ltd. and Mr. Amedeo Melone and Ms. Nathalie Gour. Mr. Amedeo indicated that he is not aware of any environmental issues related to the subject property.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on July 25, 2017. Weather conditions were overcast, with a temperature of approximately 22 °C. Mr. Marek Moroz from the Environmental Department of Paterson Group conducted the site visit. In addition to the site, the uses of neighbouring properties within the Phase I study area were also assessed at the time of the site assessment.

6.2 Specific Observations at the Phase I Property

Buildings and Structures

The subject site was undeveloped at the time of the site visit.

Below Ground Structures

No below ground structures were found at the time of the site visit.

Potable Water Source

The subject property is not currently serviced, as it is undeveloped, however, properties in the local area rely on private well water as a potable water source.

Underground Utilities

No underground utilities were noted during the site visit on the subject site.

Ground Surface

The ground surface across the eastern portion of the property consisted of corn fields, with minor treed areas along Eagleson Road. The central and western portions of the property were observed to be undeveloped tree and grass covered. Marlborough Creek runs through the northern portion of the property.

No areas of stained soil or stressed vegetation were observed on the property. No standing water was observed on the subject site.

Railway Lines

No railway lines were observed on the subject site. A railway line and equipment storage area were observed within the Phase I ESA study area, running southwest-northeast, 25 m north of the subject site and is considered to represent a potentially contaminating activity. However, at the time of the site visit, no garages or vehicle or equipment maintenance activities were observed in the vicinity of the equipment storage area. Based on the cross-gradient location with respect to the subject site and their current use, the railway line and equipment storage area do not represent areas of potential environmental concern (APECs) on the subject site.

Polychlorinated Biphenyls (PCBs) and Transformer Oil

Several pad mounted transformers and pole mounted transformers were observed to the north of the subject site along Ottawa Street and to the east along Eagleson Road. At the time of assessment, no leaks, staining/discolouration or dead grass beneath the poles was observed. The transformers are not considered to be an environmental concern at this time.

Site Features

The subject site is currently a large undeveloped lot. The eastern potion is covered by a corn field. The central and western potions of the lot are undeveloped, treed and grass covered. Adjacent properties to the subject site are approximately at grade with respect to the subject site. McBean Street is slightly elevated with respect to the subject site. Site drainage consists of natural runoff towards Marlborough Creek and towards draining ditches on the site or infiltration in grass, corn and tree covered areas.

One drinking water well was indicated on the subject site by the MOECC well record search although it was not identified during the site visit. However, based on the information within the Water Well Record, it is unlikely that this well is located on the subject site, as the map depicts the well west of McBean Street and

north of Ottawa Street. No private sewage systems were observed on the subject property, nor are any expected to be present, as the site has never been developed. No evidence of current or former railway or spur lines on the subject property was observed at the time of the site inspection. There were no unidentified substances observed on the subject site.

Neighbouring Properties

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection. Land use adjacent to the subject site was as follows:

- North - Ottawa Street and a rail line followed by institutional, residential and commercial properties;
- South - Undeveloped and agricultural properties followed by Dobson Lane;
- East - Eagleson Road followed by residential dwellings, farmsteads and agricultural land;
- West - Undeveloped land followed by commercial properties and then followed by McBean Street.

Several potentially contaminating activities were identified with the current use of the surrounding properties.

An automotive service garage was identified 70 m west of the subject site at 3835 McBean Street. Based on the cross-gradient location and separation distance of the automotive service garage with respect to the subject site, it is our opinion that this facility does not represent an area of environmental concern on the subject site.

A toxic and combustible gas detection equipment manufacturing facility was identified 50 m north of the subject site, located at 5935 Ottawa Street. An automotive service garage was identified 45 m north of the subject site, located at 5949 Ottawa Street. Based on the down-gradient location of these two facilities with respect to the subject site, it is our opinion that the manufacturing facility and the automotive service garage do not represent an area of environmental concern on the subject site.

A railway line and equipment storage area was identified 25 m north of the northwest portion of the subject property. Based on aerial photographs, the railway line has been present since at least 1950. Based on the cross-gradient location

with respect to the subject site, the railway line and equipment storage area are not considered to be an APEC.

Property use within the Phase I study area is shown on Drawing PE4079-2 - Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The following table indicates the current and past uses of the site as well as associated potentially contaminating activities dating back to the first developed use of the site.

Table 2 – Land Use History

Time Period	Land Use	Potentially Contaminating Activities	Areas of Potential Environmental Concern
1950 to Present	Agriculture / Undeveloped	None	None

Potentially Contaminating Activities (PCAs)

No potentially contaminating activities (PCAs) have been identified on the subject site.

Several PCAs were identified in the study area: An automotive service garage was identified 70 m west of the subject site at 3835 McBean Street. A toxic and combustible gas detection equipment manufacturing facility was identified 50m north of the subject site, located at 5935 Ottawa Street. An automotive service garage was identified 45m north of the subject site, located at 5949 Ottawa Street. A railway line and equipment storage area were observed 25m north of the subject site near the intersection of King Street and Ottawa Street.

As previously noted, the above noted PCAs do not pose a concern to the subject site based on their distance and down/cross-gradient locations from the Phase I property.

No other PCAs were noted in the Phase I study area.

Areas of Potential Environmental Concern (APEC)

As detailed above, the identified PCAs do not present APECs on the subject property.

Contaminants of Potential Concern (CPC)

No contaminants of potential concern were identified, since no APECs were identified on the subject site.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, bedrock beneath the site area consists of dolostone of the Oxford Formation. It was reported that surficial soils consist of Quaternary sediments, specifically offshore marine sediments, with a drift thickness of 3-5 m on the western portion of the site and 10-15 m on the eastern portion. Hydrogeological conditions are considered to mimic the topographic setting; as a result, groundwater is expected to flow towards Marlborough Creek, ultimately the Jock River.

Contaminants of Potential Concern

As per Section 7.1 of this report, no CPCs were identified on the subject site.

Existing Buildings and Structures

There are no buildings or structures on the subject site.

Water Bodies

There are no areas of natural and scientific interest on the subject property or within the study area. Marlborough Creek runs southwest-northeast through the subject site and flows into the Jock River north of the subject site. The Jock River, located approximately 700 m north of the subject site.

Areas of Natural Significance

No areas of natural significance were identified on the site or in the Phase I study area.

Drinking Water Wells

Based on the results of the well record search, one water well was identified on the subject site. This well was drilled to a depth of 90.8 meters in 1994 by Capital Water Supply. However, based on the information within the Water Well Record, it is unlikely that this well is located on the subject site, as the map depicts the well west of McBean Street and north of Ottawa Street. Eighty-nine drinking water wells were identified in the Phase I study area. Based on the large number

of drinking water wells, only the most proximal drinking water wells to the subject site have been included in Appendix 2.

Neighbouring Land Use

Neighbouring land use in the Phase I study area consists of commercial, agricultural, residential and institutional. Land use is shown on Drawing PE4079-2 Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, there were no Potentially Contaminating Activities or Areas of Potential Environmental Concern identified at the subject site. Potentially Contaminating Activities identified within the Phase I ESA study area are not considered to represent Areas of Potential Environmental Concern with respect to the subject site.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that there are no APECs on the subject site, and that the off-site PCAs identified within the Phase I study area do not constitute APECs with respect to the subject site. A variety of independent sources were consulted as part of this assessment, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSIONS

Assessment

Paterson Group was retained by Taggart to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of a large parcel of vacant land, in the City of Ottawa (Richmond), Ontario. The purpose of this Phase I – Environmental Site Assessment was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

Based on historical searches, the land has been undeveloped since at least 1950 and has been vacant or used for agriculture. No environmental concerns were identified with respect to the historical use of the subject site.

Surrounding properties historically consisted of commercial and residential properties, agricultural fields and undeveloped treed lands. Potentially contaminating activities were identified for properties within the Phase I-ESA study area. None of these potentially contaminating activities were considered to represent an area of potential environmental concern for the subject site.

Following the historical review, a site visit was conducted. The site is currently vacant and partially used for agricultural purposes. Marlborough Creek was observed to flow southwest-northeast through the northern potion of the subject site. Neighbouring properties to the north and west were identified as commercial and residential properties. Neighbouring properties to the east were identified as residential dwellings and farm steads. Neighbouring properties to the south were identified as vacant lots or agricultural lands. Several PCAs were identified in the vicinity of the subject site, however, based on the separation distance and cross- or down-gradient locations to the subject site, these activities are not considered to have had the potential to have impacted the subject site.

Conclusion

Based on the results of the Phase I - Environmental Site Assessment, it is our opinion that **a Phase II - Environmental Site Assessment is not required for the subject site.**

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04 as amended by O.Reg. 269/11, and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Taggart Group of Companies. Permission and notification from the above noted party and Paterson will be required to release this report to any other party.

Paterson Group Inc.

Marek Moroz, G.I.T.

Mark S. D'Arcy, P.Eng.

Report Distribution:

- Taggart Group of Companies (3 copies)
- Paterson Group (1 copy)

10.0 REFERENCES

Federal Records
Air photos at the Energy Mines and Resources Air Photo Library.
National Archives.
Maps and photographs (Geological Survey of Canada surficial and subsurface mapping).
Natural Resources Canada – The Atlas of Canada.
Environment Canada, National Pollutant Release Inventory.
PCB Waste Storage Site Inventory.

Provincial Records
MOECC Freedom of Information and Privacy Office.
MOECC Municipal Coal Gasification Plant Site Inventory, 1991.
MOECC document titled "Waste Disposal Site Inventory in Ontario".
MOECC Brownfields Environmental Site Registry.
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MNR Areas of Natural Significance.
MOECC Water Well Inventory.
Chapman, L.J., and Putnam, D.F., 1984: 'The Physiography of Southern Ontario, Third Edition', Ontario Geological Survey Special Volume 2.

Municipal Records
City of Ottawa Document "Old Landfill Management Strategy, Phase I - Identification of Sites.", prepared by Golder Associates, 2004.
The City of Ottawa Historical Land Use Inventory.
Intera Technologies Limited Report "Mapping and Assessment of Former Industrial Sites, City of Ottawa", 1988.
The City of Ottawa geoOttawa website.

Local Information Sources
Plan of Survey - Annis, O'Sullivan, Vollebekk Ltd., 2013.
'Phase I - Environmental Site Assessment, 5786 Fernbank Road, Ottawa, Ontario', prepared by Houle Chevrier Engineering, March 31, 2015
Personal Interviews.

Public Information Sources
Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4079-1 – SITE PLAN

DRAWING PE4079-2 – SURROUNDING LAND USE PLAN

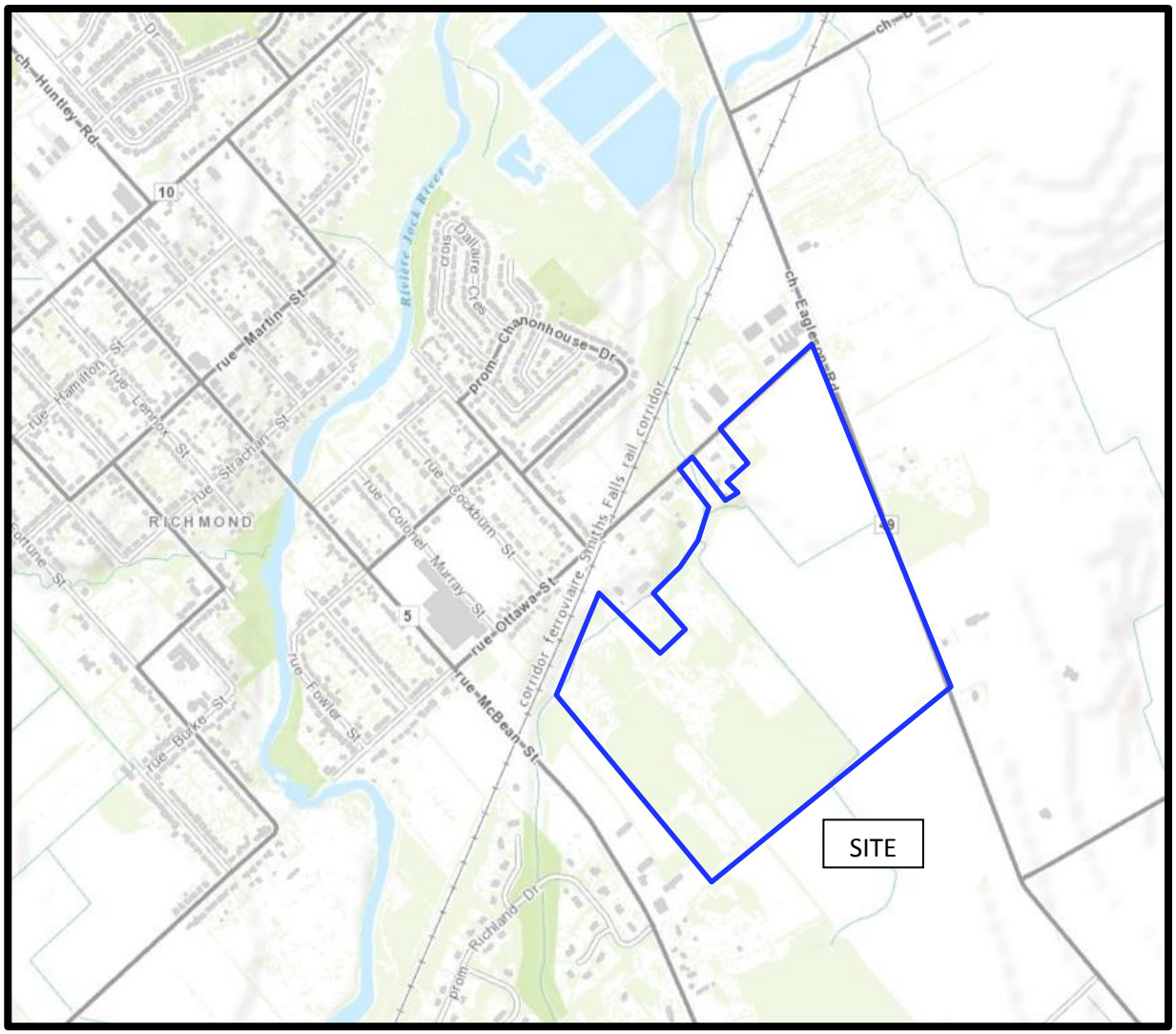


FIGURE 1

KEY PLAN

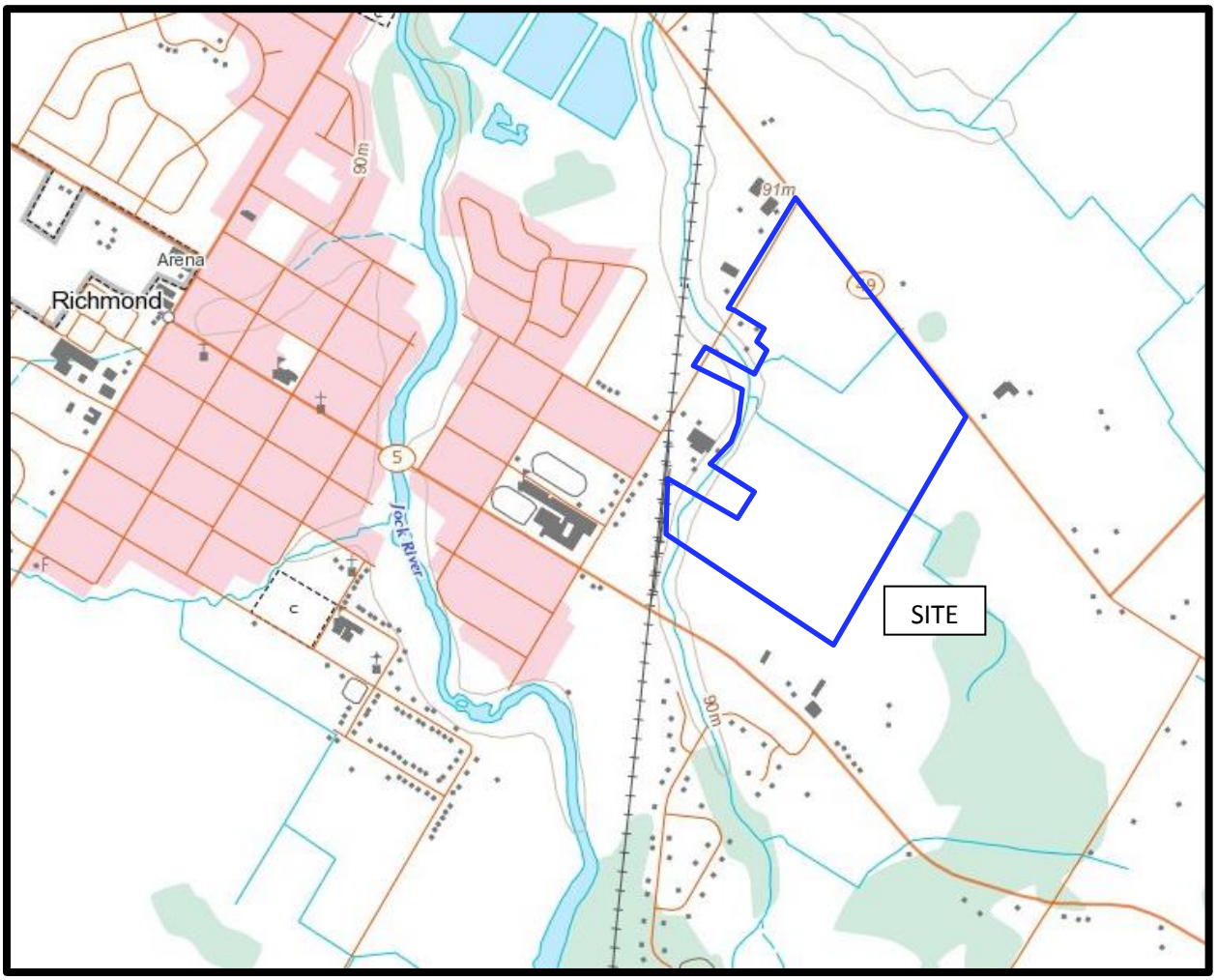
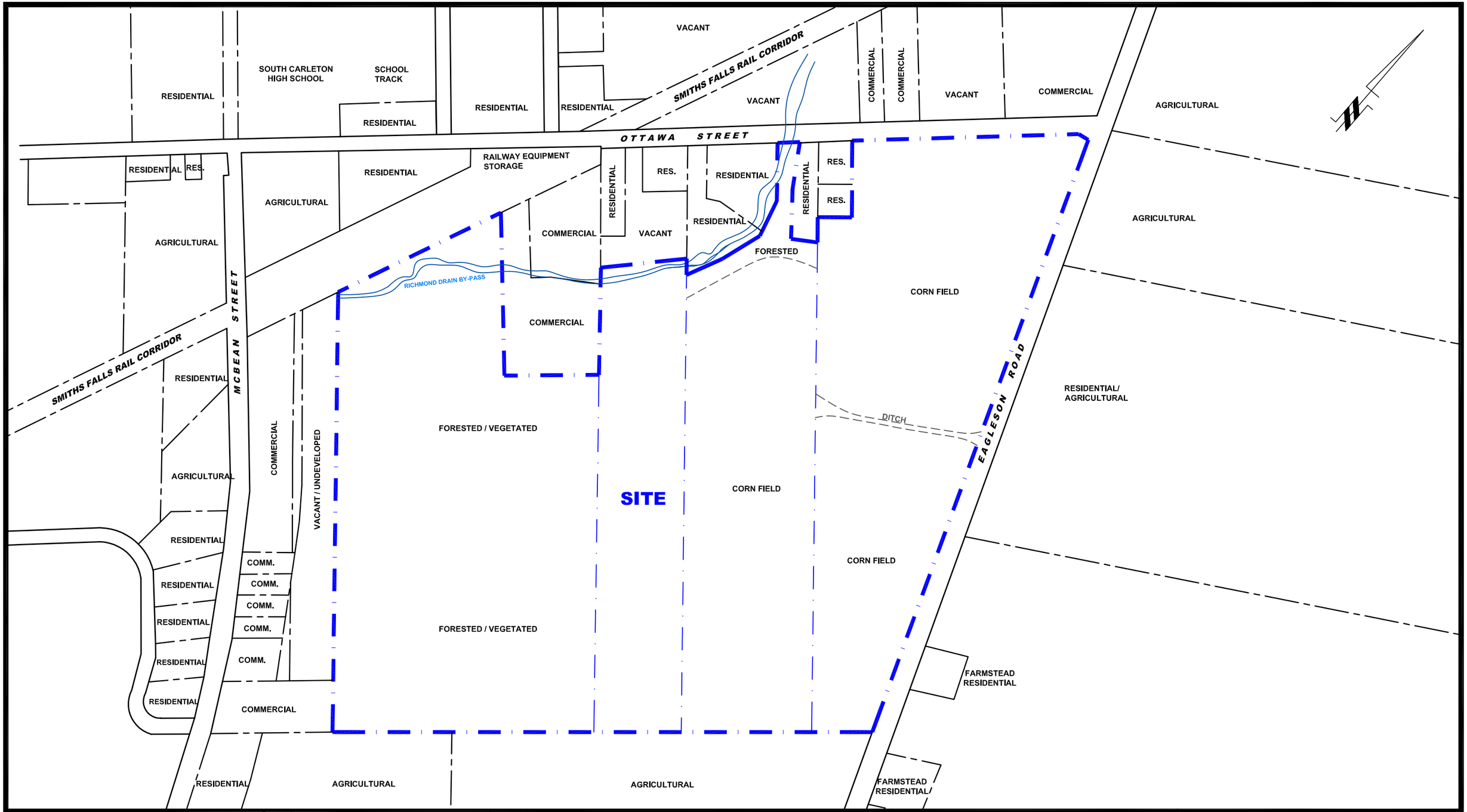


FIGURE 2

TOPOGRAPHIC MAP



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NO.	REVISIONS	DATE	INITIAL
0			

TAGGART GROUP

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
100 ACRES IN RICHMOND

OTTAWA, ONTARIO

Title:

SITE PLAN

Scale: 1:5000	Date: 08/2017
Drawn by: RCG	Report No.: PE4079-1
Checked by: MM	Dwg. No.: PE4079-1
Approved by: MSD	Revision No.: 0

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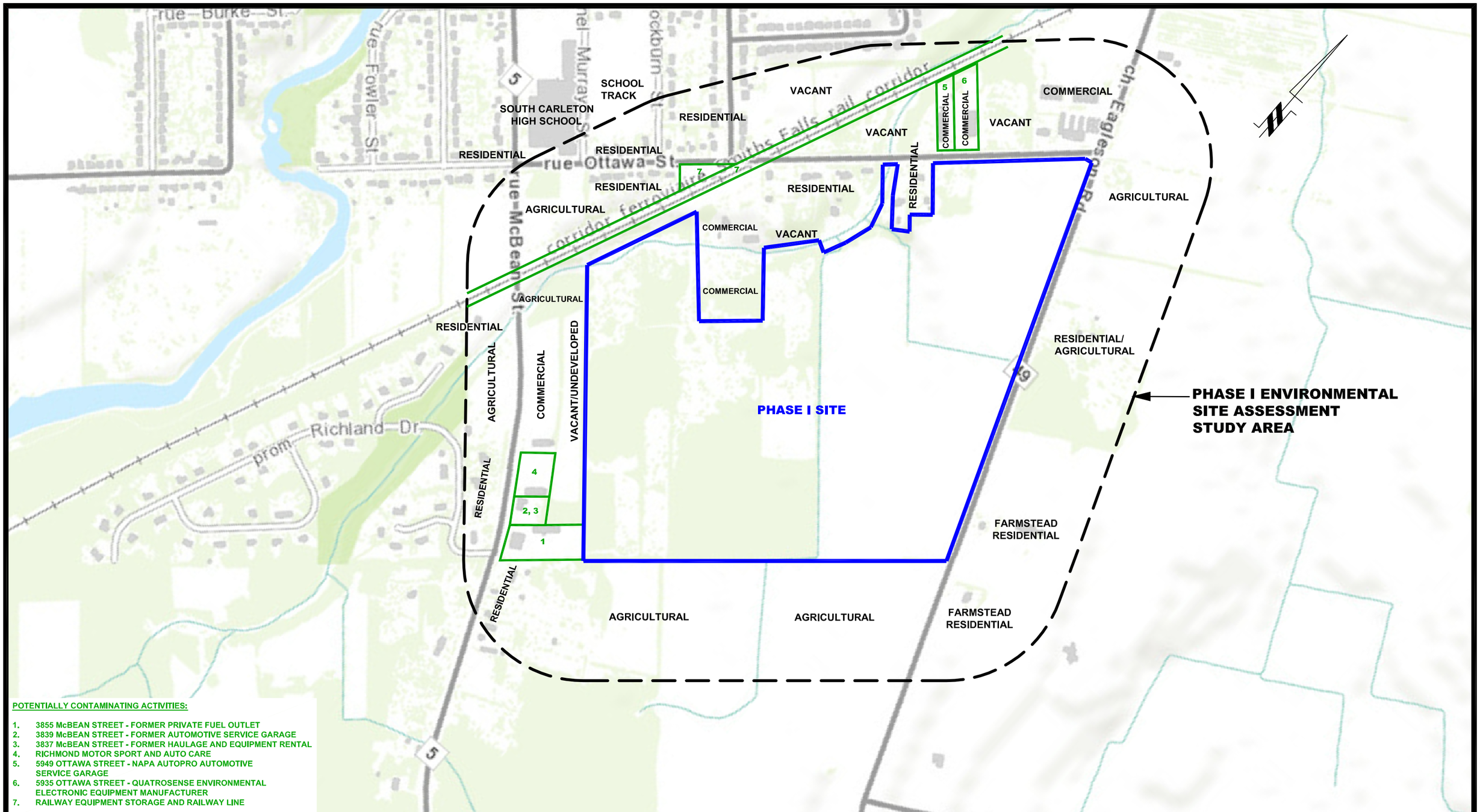


POTENTIALLY CONTAMINATING ACTIVITIES:

1. 3855 McBEAN STREET - FORMER PRIVATE FUEL OUTLET
2. 3839 McBEAN STREET - FORMER AUTOMOTIVE SERVICE GARAGE
3. 3837 McBEAN STREET - FORMER HAULAGE AND EQUIPMENT RENTAL
4. RICHMOND MOTOR SPORT AND AUTO CARE
5. 5949 OTTAWA STREET - NAPA AUTOPRO AUTOMOTIVE SERVICE GARAGE
6. 5935 OTTAWA STREET - QUATROSENSE ENVIRONMENTAL ELECTRONIC EQUIPMENT MANUFACTURER
7. RAILWAY EQUIPMENT STORAGE AND RAILWAY LINE

patersongroup
consulting engineers

154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL
0			

TAGGART GROUP

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
100 ACRES IN RICHMOND

OTTAWA, ONTARIO

Title:

SURROUNDING LAND USE PLAN

Scale: 1:7500	Date: 08/2017
Drawn by: RCG	Report No.: PE4079-1
Checked by: MM	Dwg. No.: PE4079-2
Approved by: MSD	Revision No.: 0

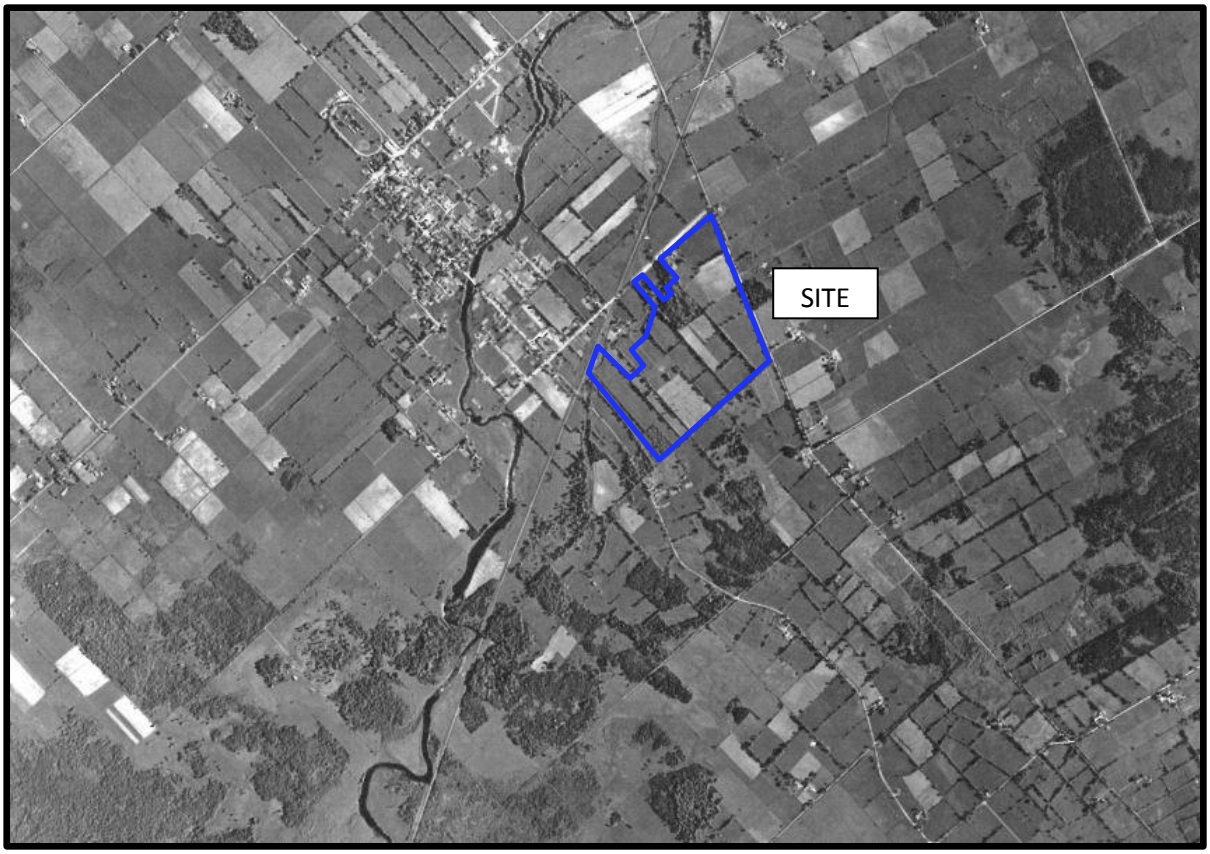
p:\autocad drawings\environmental\pe40xx\pe4079\pe4079-2 surrounding land.dwg

APPENDIX 1

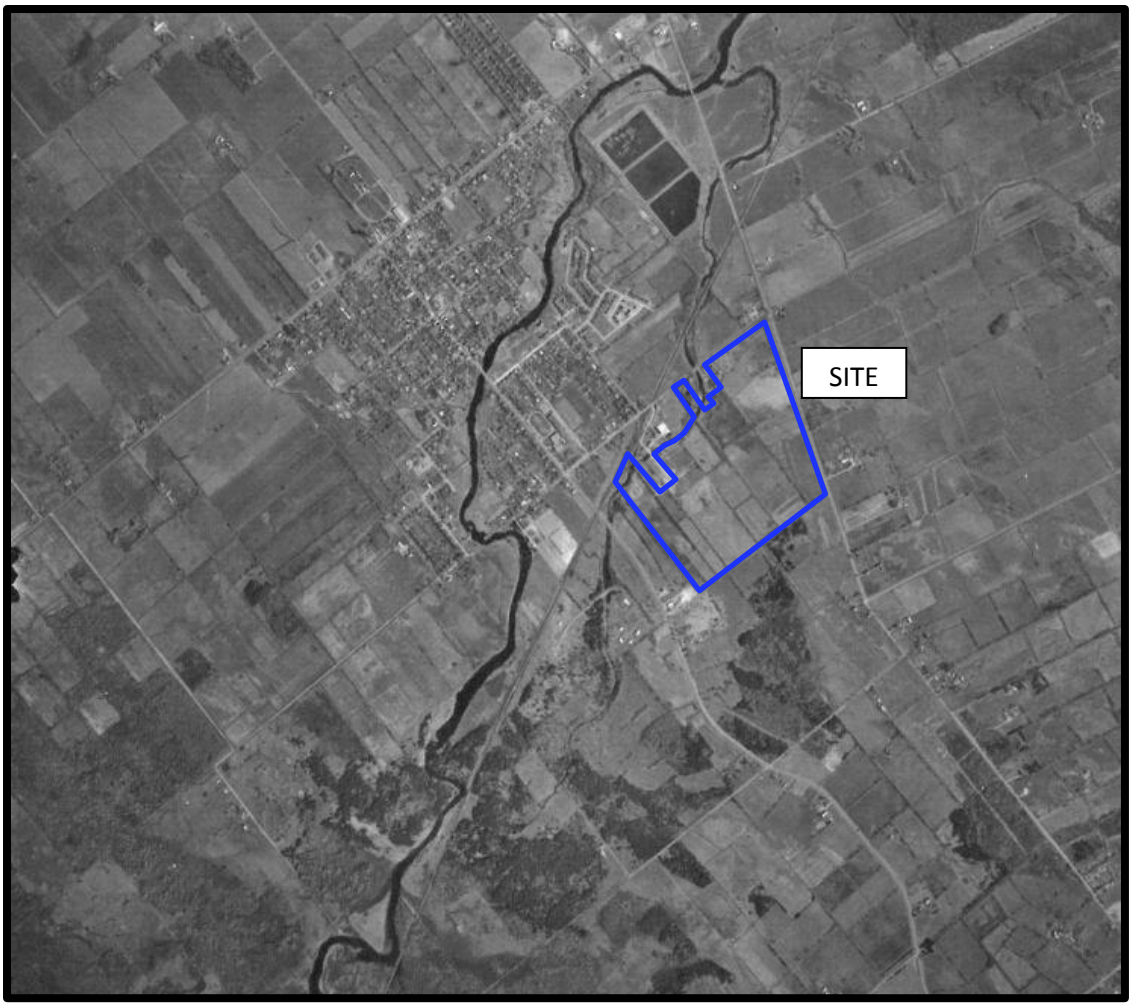
AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

AERIAL PHOTOGRAPH
1950

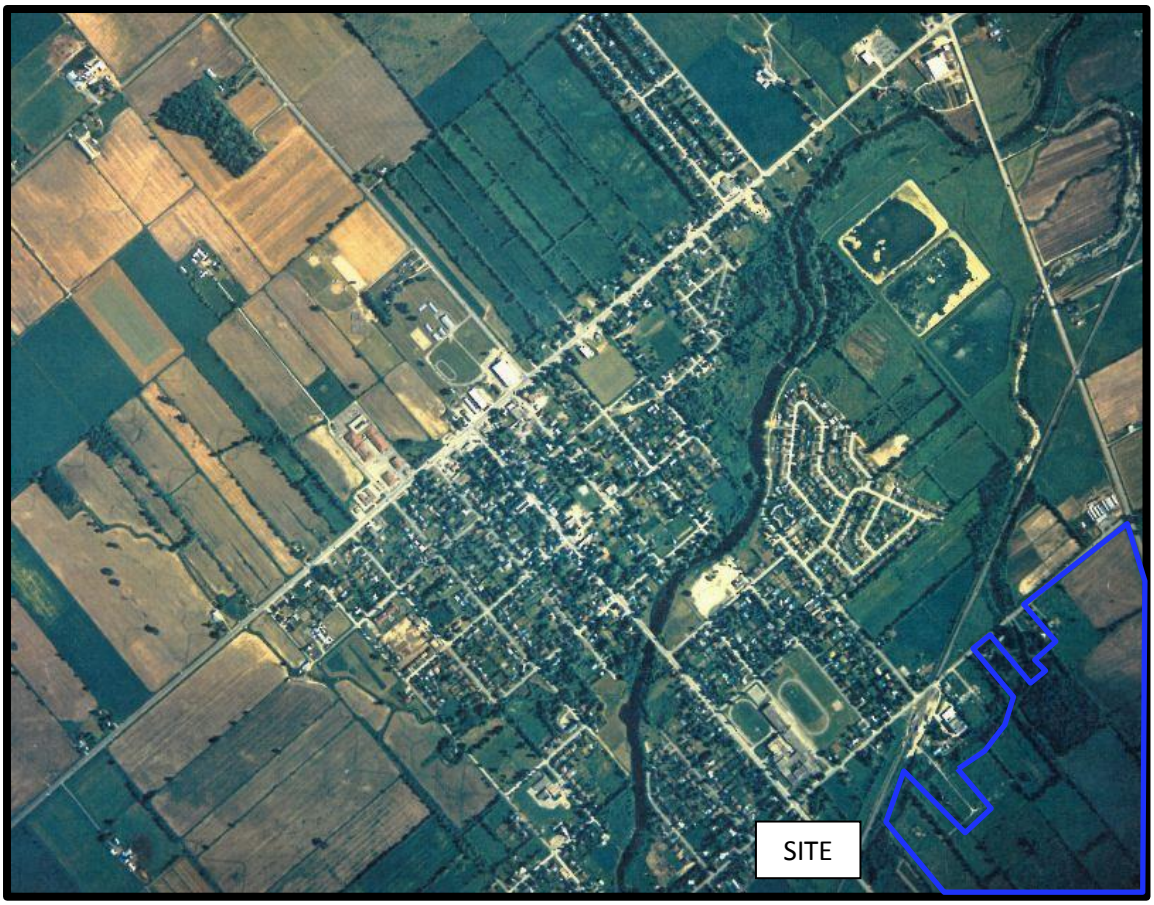


AERIAL PHOTOGRAPH
1959

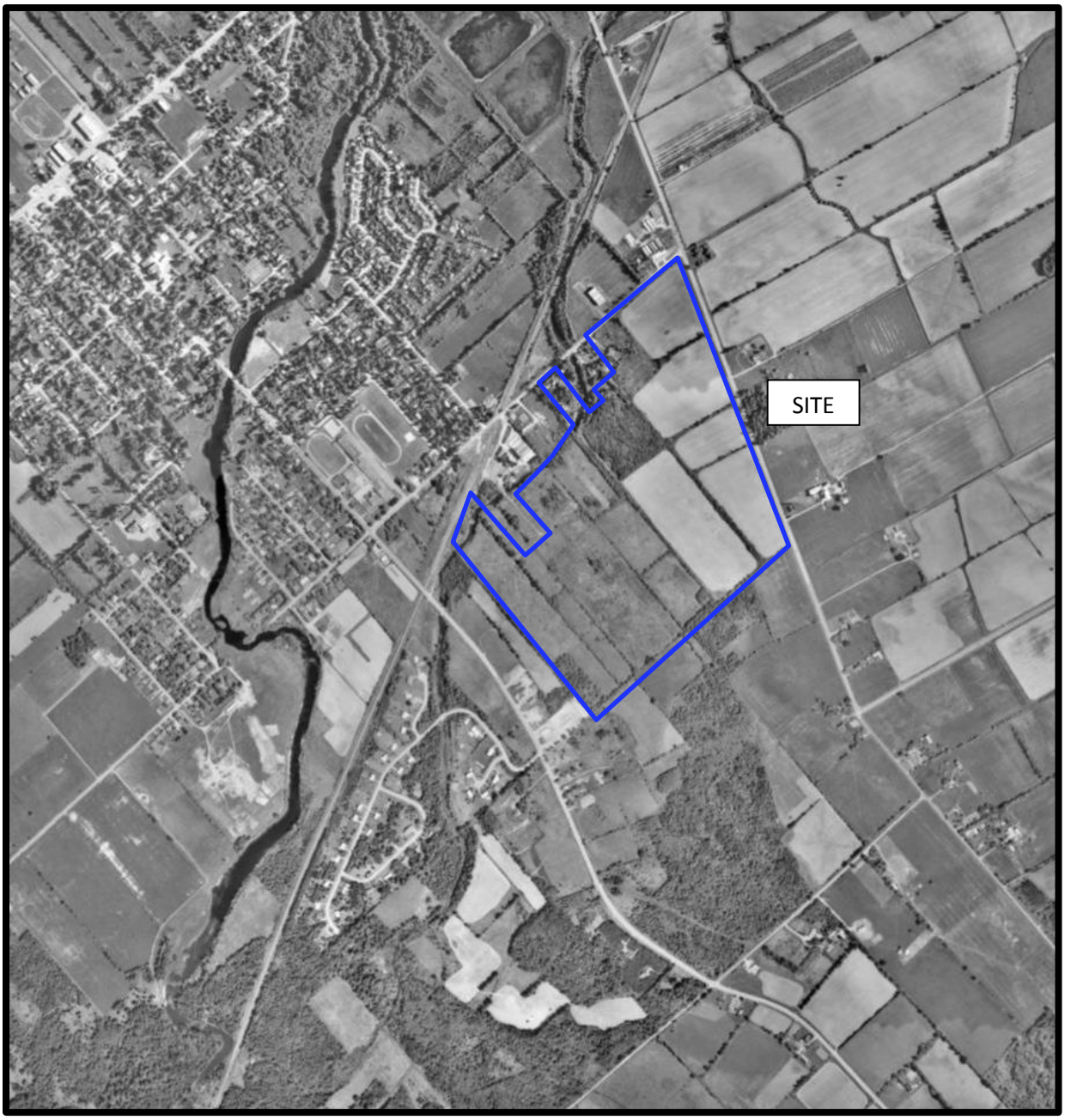


AERIAL PHOTOGRAPH
1978

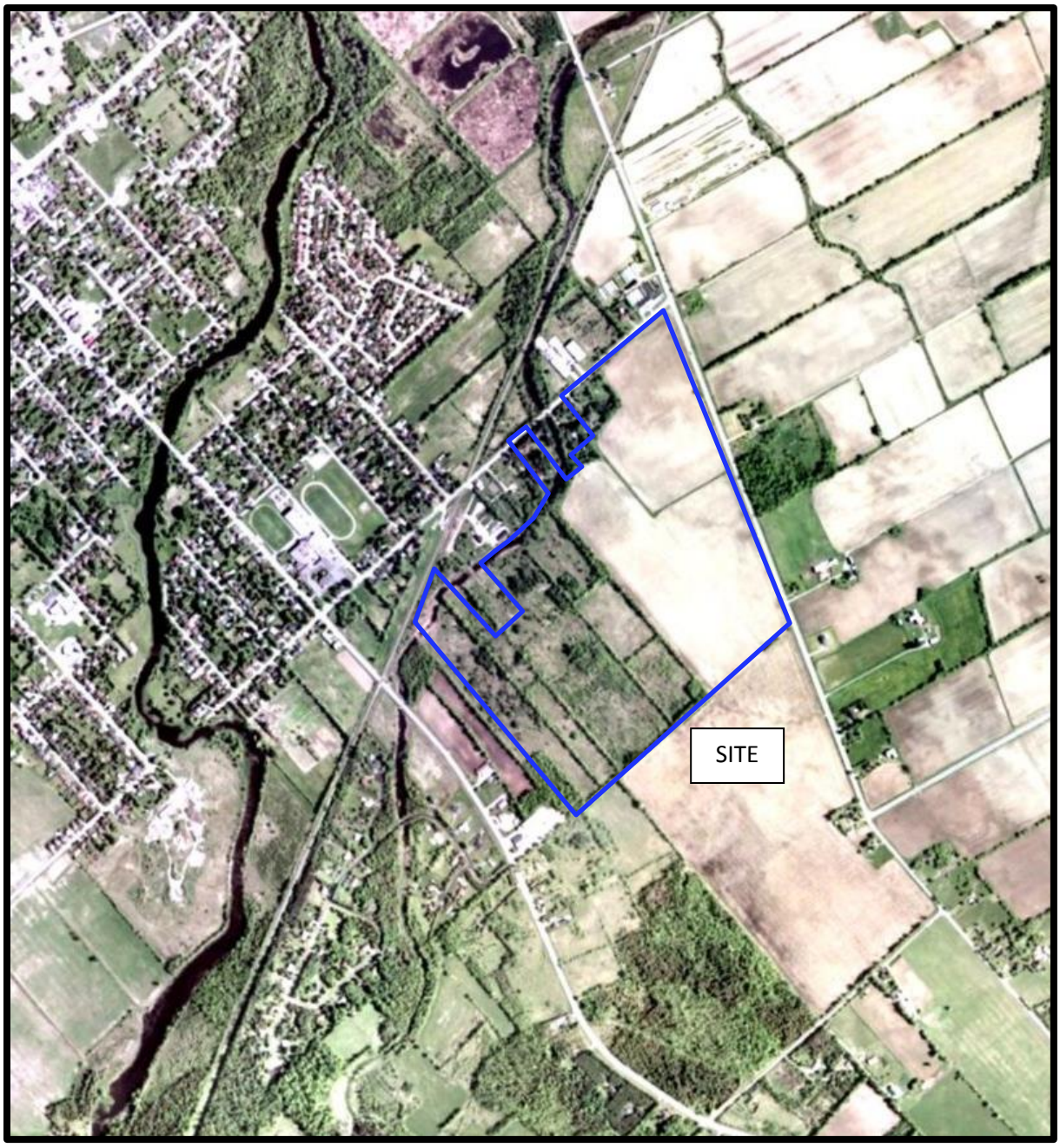
patersongroup



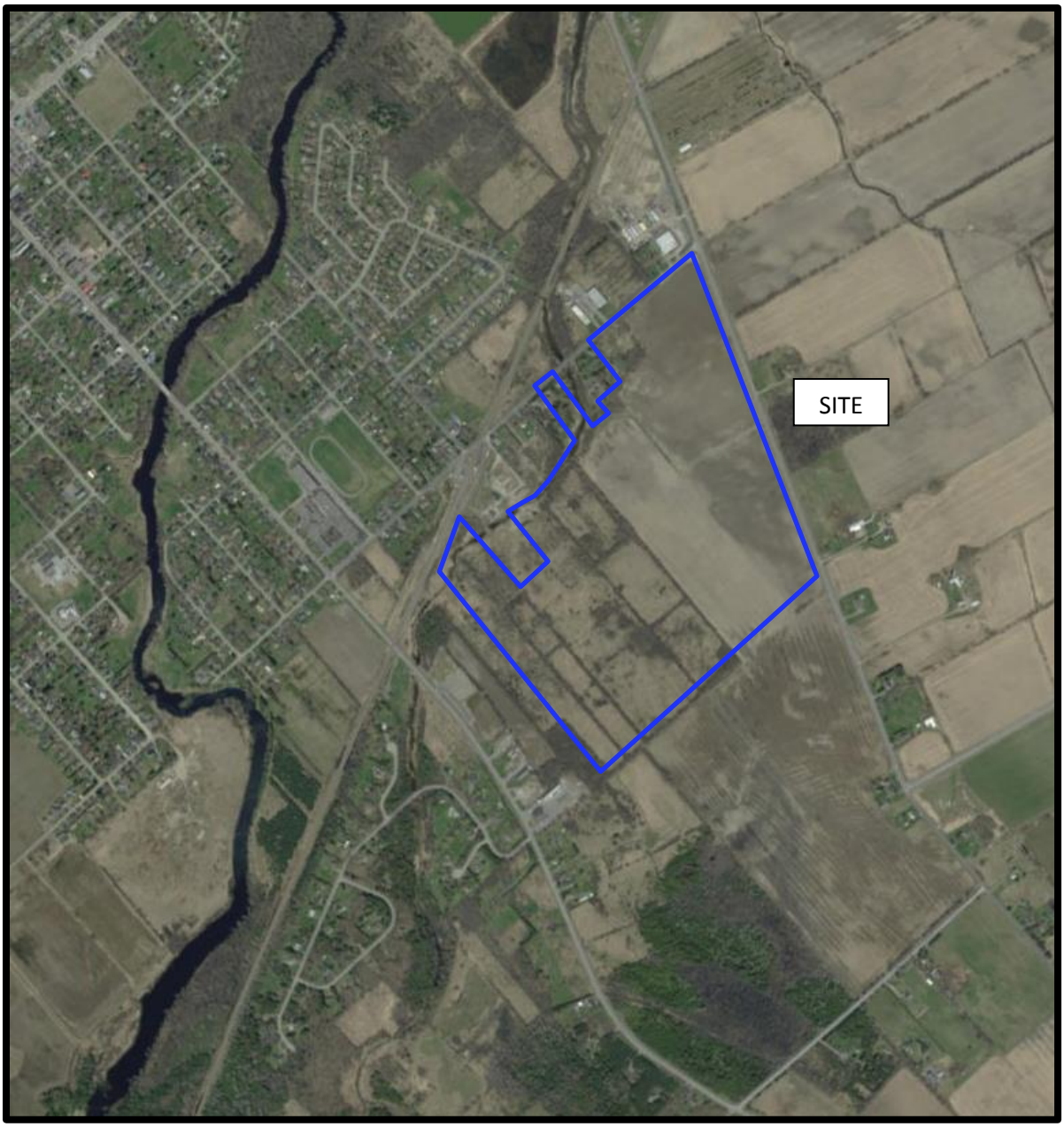
AERIAL PHOTOGRAPH
1985



AERIAL PHOTOGRAPH
1991



AERIAL PHOTOGRAPH
2005



AERIAL PHOTOGRAPH
2014

Site Photographs

PE4079 Vacant Land – Eagleson Road, Ottawa (Richmond), ON July 25, 2017

Photograph 1: View of the east side of the site, facing east. Photograph illustrates a corn field, the main land cover on the eastern portion of the site. No environmental concerns were identified.

Photograph 2: View from the central portion of the subject site, facing south. Photograph illustrates corn, grass, small vegetation and trees. No environmental concerns were identified.

Photograph 3: View of trees and small vegetation, the main land cover on the western portion of the property. Photograph taken facing north. No environmental concerns were identified.

Photograph 4: View of the southeastern most portion of the subject site. Photograph depicts a corn field. Photograph taken facing northwest. No environmental concerns were identified.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

WATER WELL RECORDS

TSSA SEARCH

Ministry of the Environment and Climate Change

Freedom of Information and Protection of Privacy Office

12th Floor
40 St. Clair Avenue West
Toronto ON M4V 1M2
Tel: (416) 314-4075
Fax: (416) 314-4285

Ministère de l'Environnement et de l'Action en matière de changement climatique

Bureau de l'accès à l'information et de la protection de la vie privée

12e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél. : (416) 314-4075
Téléc. : (416) 314-4285

Ontario

August 1, 2017

Marek Moroz
Paterson Group Inc
154 Colonnade Rd
Ottawa, ON K2E 7J5

Dear Marek Moroz:

RE: ***Freedom of Information and Protection of Privacy Act* Request**
Our File # A-2017-05434, Your Reference PE4079

The Ministry is in receipt of your request made pursuant to the *Freedom of Information and Protection of Privacy Act* and has received your payment in the amount of $5.00 (non-refundable application fee), along with your $30.00 deposit.

The search is being conducted on the following: Lots 24 and 25, Con 2, Twp of Goulburn, Ottawa. If there is any discrepancy please contact us immediately.

You may expect a reply or additional communication as your request is processed. For your information, the Ministry charges for search, copying and preparation time.

If you have any questions regarding this matter, please contact Jeneska Abano at jeneska.abano@ontario.ca.

Yours truly,

for Ja

Janet Dadufalza
FOI Manager

316,4f. A"

UTM 18 Z 4 3 5 5 3 5 E
5 R 5 0 0 4 1 0 0 N
Elev. 4 R 0 3 0 0
Basin 25

15 No 9235 C

The Ontario Water Resources Commission Act, 1957

WATER WELL RECORD

County or District Carleton   ~~Township~~, Village, ~~Town or City~~ Richmond

Con. — Lot — [redacted]e completed 5 Aug 60 (day month year)

[redacted]ress Richmond

Casing and Screen Record

Inside diameter of casing 4"
Total length of casing 26'
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 4"

Pumping Test

Static level 5'
Test-pumping rate 6 G.P.M.
Pumping level 6 ft.
Duration of test pumping 1/2 hr.
Water clear or cloudy at end of test clear
Recommended pumping rate 5 G.P.M.
with pumping level of Set pump at 30 ft.

Well Log / Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
clay	0	13			
broken limestone	13	20			
limestone	20	59	55	50	fresh

For what purpose(s) is the water to be used? house

Is well on upland, in valley, or on hillside? upland

Drilling Firm

Address

Licence Number 483

Name of Driller Ben E Sparks

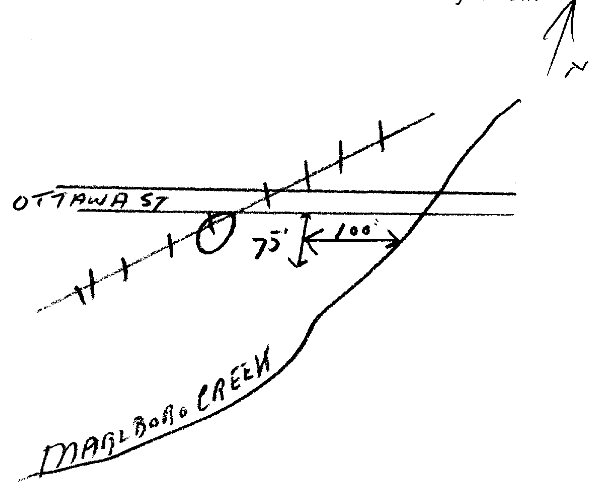
Address

Date Aug 23/60

Ben E Sparks
(Signature of Licensed Drilling Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5
15M-58-4149

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 — 1528204 — MUNICIP. 15003 — CON.

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC	LOT
[redacted]	Goulbourn	2	25

ADDRESS: 2 Ottawa Street Richmond, Ontario K0A 2Z0 — DATE COMPLETED: DAY 19 MO 08 YR 94

TWNG — RC. — ELEVATION — RC. — BASIN CODE — II — III — IV

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Sand			0	4
Brown	Clay	Stones		4	12
Gray	Hardpan	Boulders		12	23
Gray	Limestone			23	165
Gray & White	Sandstone			165	298

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
215	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
286	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
NOT TESTED	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	0	25
5 13/16	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC		25	298
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE — DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)
23'6"	0	Grouted - Cement (3)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	8-10 GPM	1 HOURS — MINS

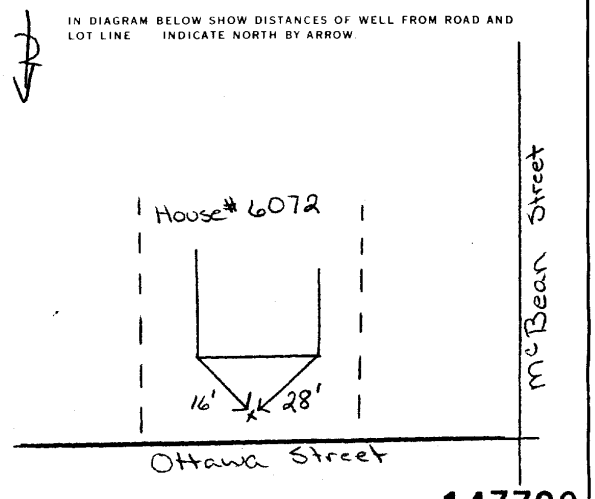
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☒ PUMPING 2 ☐ RECOVERY)	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
10'6" FEET	25 FEET		50 FEET	45 FEET	30 FEET	25 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☐ CLEAR 2 ☒ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☐ DEEP	30-35 FEET	5 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS: 147720

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED ☐ DEWATERING

WATER USE

1 ☐ DOMESTIC 2 ☒ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF CONSTRUCTION

1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☒ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: Capital Water Supply Ltd. — WELL CONTRACTOR'S LICENCE NUMBER: 1558

ADDRESS: P.O. Box 490 Stittsville, Ontario K2S 1A6

NAME OF WELL TECHNICIAN: S. Miller — WELL TECHNICIAN'S LICENCE NUMBER: T0097

SIGNATURE OF TECHNICIAN/CONTRACTOR — SUBMISSION DATE: DAY 23 MO 8 YR 94

OFFICE USE ONLY

DATA SOURCE — CONTRACTOR: 1558 — DATE RECEIVED: OCT 07 1994

DATE OF INSPECTION — INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

Ontario Ministry of the Environment

Well Ta A 023099 (nber below)
A023099

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only
MUN | CON | LOT

Well Owner's Information and Location of Well Information

[redacted]

OTTAWA - CARLETON | GOULBOURN | 03 | 2

RR#/Street Number/Name: #6004 OTTAWA STREET | City/Town/Village: RICHMOND | Site/Compartment/Block/Tract etc: PLAN R4R6987 9L2

GPS Reading | NAD: 83 | Zone: 18 | Easting: 435466 | Northing: 5004028 | Unit Make/Model: MAGELLAN | Mode of Operation: ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To (Metres)
	SANDY CLAY			0	3.66
	GREY LIMESTONE			3.66	29.56

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
0	29.56	15.23

Water Record

Water found at Metres	Kind of Water
24.38 m	☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other: NOT TESTED
27.43 m	☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
m	☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was ☐ Clear and sediment free ☐ Other, specify NOT TESTED

Chlorinated ☒ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
15.88	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.48	0	6.71
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
	☒ Open hole		6.10	29.56

Test of Well Yield

Pumping test method: SUB PUMP

Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level	2.98		3.63
1	3.31	1	3.30
2	3.36	2	3.25
3	3.38	3	3.21
4	3.40	4	3.21
5	3.41	5	3.20
10	3.46	10	3.17
15	3.49	15	3.14
20	3.52	20	3.13
25	3.54	25	3.12
30	3.56	30	3.12
40	3.59	40	3.12
50	3.61	50	3.12
60	3.63	60	3.12

Pump intake set at (metres): 24.38
Pumping rate (litres/min): 91
Duration of pumping: 1 hrs + 0 min
Final water level end of pumping: 3.63 metres
Recommended pump type: ☐ Shallow ☒ Deep
Recommended pump depth: 24.38 metres
Recommended pump rate: 91 (litres/min)
If flowing give rate - (litres/min):
If pumping discontinued, give reason:

Plugging and Sealing Record

☒ Annular space ☐ Abandonment

Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.10	0	NEAT CEMENT SLURRY	.2724

Method of Construction

☐ Cable Tool ☐ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☒ Air percussion ☐ Jetting ☐ Other
☐ Rotary (reverse) ☐ Boring ☐ Driving

Water Use

☒ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

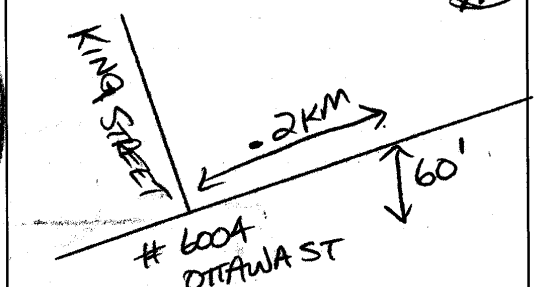
☒ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☐ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Well Contractor/Technician Information

Name of Well Contractor: AIR ROCK DRILLING CO LTD | Well Contractor's Licence No.: 1119
Business Address (street name, number, city etc.): RR#1 RICHMOND ONT K0A2Z0
Name of Well Technician (last name, first name): HOGAN DAN | Well Technician's Licence No.: 3058
Signature of Technician/Contractor: X [signature] | Date Submitted: 2005 11 04

Location of Well

In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.



Audit No. Z 30775 | Date Well Completed: 2005 10 04
Was the well owner's information package delivered? ☒ Yes ☐ No | Date Delivered: 2005 10 13

Ministry Use Only

Data Source | Contractor: 1119
Date Received: NOV 14 2005 | Date of Inspection
Remarks | Well Record Number

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☒ Well Owner's Copy ☐ *Cette formule est disponible en français*

Ontario — Ministry of the Environment

Measurements recorded in: ☐ Metric ☒ Imperial

Well T A 066513 (rint Below)

A066513

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

[redacted]

Address of Well Location (Street Number/Name): (No Civic) Huntley Road | Township: Goulbourn | Lot: 24 | Concession: 4

County/District/Municipality: Ottawa-Carleton | City/Town/Village: Richmond | Province: Ontario | Postal Code:

UTM Coordinates: Zone | Easting | Northing | Municipal Plan and Sublot Number | Other

NAD 8 3 | 18 | 435521 | 5004251

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
	- Grey Clay			0	56'
	- Grey Limestone			56'	176'
	- Grey Sandstone & Limestone Mix			176'	240'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
62'	52'	Neat Cement Slurry	9.36
52'	0	Bentonite Slurry	16.8

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☒ Air percussion ☐ Other, specify

Well Use

☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
6"	Steel	.188"	+2'	62'
6"	Open Hole		62'	240'

Status of Well

☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To

Water Details

Water found at Depth	Kind of Water	Gas	Other, specify
58 (m/ft)	☐ Fresh ☒ Untested	☐	
89 (m/ft)	☐ Fresh ☒ Untested	☐	
232 (m/ft)	☐ Fresh ☒ Untested	☐	

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0'	240'	5 15/16"

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify TESTED

If pumping discontinued, give reason:

Pump intake set at (m/ft): 220

Pumping rate (l/min / GPM): 20

Duration of pumping: 1 hrs + 0 min

Final water level end of pumping (m/ft): 16' 8"

If flowing give rate (l/min / GPM):

Recommended pump depth (m/ft): (1/2HP) 100'

Recommended pump rate (l/min / GPM): 20

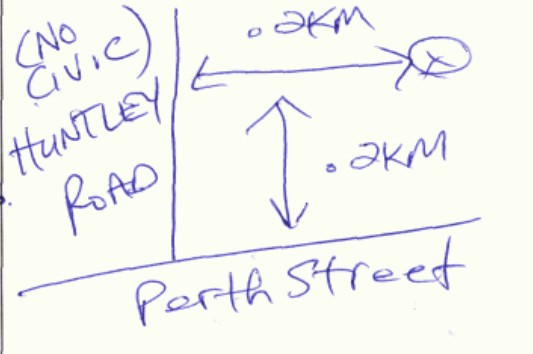
Well production (l/min / GPM): 60

Disinfected? ☒ Yes ☐ No

Draw Down Time (min)	Water Level (m/ft)	Recovery Time (min)	Water Level (m/ft)
Static Level	2'3"		16'8"
1	9'6"	1	7'
2	12'	2	5'
3	13'2"	3	4'
4	14'2"	4	3'
5	148"	5	2'
10	16'	10	
15	16'2"	15	
20	16'8"	20	
25	16'8"	25	
30	16'8"	30	
40		40	
50		50	
60		60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor: AIR ROCK DRILLING CO LTD | Well Contractor's Licence No.: 1119

Business Address (Street Number/Name): RR#1 | Municipality: RICHMOND

Province: ONT | Postal Code: K0A2Z0 | Business E-mail Address:

Bus. Telephone No. (inc. area code): 6138382170 | Name of Well Technician (Last Name, First Name): GRAHAM RYAN

Well Technician's Licence No.: T3484 | Signature of Technician and/or Contractor | Date Submitted: 20060603

Well owner's information package delivered: ☒ Yes ☐ No | Date Package Delivered: 20090519 | Date Work Completed: 20090515

Ministry Use Only

Audit No. Z [redacted]582

JUN 0 8 2009

Received JUN 0 8 2009

0506E (12/2007)

Ministry's Copy

Ontario — Ministry of the Environment

Measurements recorded in: ☐ Metric ☒ Imperial

Well Tag A 066511 (t Below) — A066511

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
#5990 Ottawa Street	Goulbourn	25	2

County/District/Municipality	City/Town/Village	Province	Postal Code
Ottawa-Carleton	Richmond	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	435522	5004251		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
	Clay			0	15'
	Grey limestone			15'	84'

* KEEP PUMP ABOVE 45 FT - Broken Rock

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
20'	0	Neat Cement Slurry	6.24

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☒ Air percussion
☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used
☒ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
6"	Steel	.188"	+2'	20'
6"	Open hole		20'	84'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To

Status of Well

☒ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth	Kind of Water	Hole Diameter Depth From	Hole Diameter Depth To	Hole Diameter (cm/in)
55 (m/ft) ☐ Gas	☐ Fresh ☒ Untested ☐ Other, specify	0'	84'	6"
69 (m/ft) ☐ Gas	☐ Fresh ☒ Untested ☐ Other, specify			
73 (m/ft) ☐ Gas	☐ Fresh ☒ Untested ☐ Other, specify			

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify NOT TESTED

If pumping discontinued, give reason: X

Pump intake set at (m/ft): 40

Pumping rate (l/min / GPM): 20

Duration of pumping: 1 hrs 0 min

Final water level end of pumping (m/ft): 16' 4"

If flowing give rate (l/min / GPM): X

Recommended pump depth (m/ft): 40 (bottom)

Recommended pump rate (l/min / GPM): 20

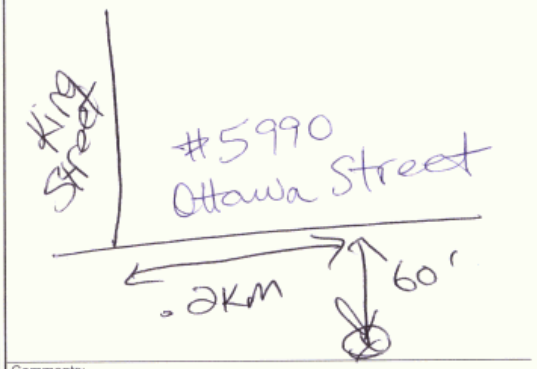
Well production (l/min / GPM): 40

Disinfected? ☒ Yes ☐ No

Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level	5'7"		16'4"
1	10'2"	1	7'8"
2	13'8"	2	7'3"
3	14'5"	3	6'9"
4	14'9"	4	6'5"
5	15'1"	5	6'3"
10	15'5"	10	6'
15	15'7"	15	5'8"
20	15'9"	20	5'7"
25	16'	25	
30	16'1"	30	
40	16'2"	40	
50	16'3"	50	
60	16'4"	60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Air Rock Drilling Co Ltd	1119

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
RR 1	Richmond	ONT	K0A2Z0	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
613 838 2170	Purcell Shannon	12122		20090603

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☒ Yes ☐ No	20090519	20090519

Ministry Use Only

Audit No. Z 94580

Received JUN 0 8 2009

0506E (12/2007)

Ministry's Copy

345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

Tel: (416) 734-3570
Fax: (416) 734-3568

22 August 2017
File No: FS 63064

Marek Moroz
PATERSON GROUP
154 Colonnade Road South
OTTAWA ON K2E 7J5

Dear Marek:

RE: 3855 McBean, Richmond, Ontario – Your Project No. PE4079

This is with reference to your request and fee of $50.00 + HST, for information on the above location.

Enclosed are computerised screen prints showing an under review self-serve fuel outlet along with equipment details showing underground fuel storage tank details. Copies of the inspection reports are also attached.

The *Technical Standards and Safety Act* and associated regulations do not require the registration of private fuel outlets. Nor does it require that any documentation on these facilities be submitted to, or reviewed or approved by TSSA. As a result TSSA has limited information on these facilities. TSSA cautions that any information provided may be inaccurate, incomplete or out of date.

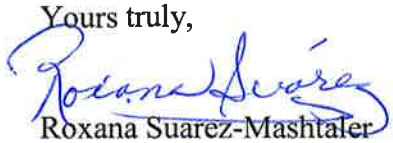
After a search of our files, TSSA has no record of any further outstanding instructions, incident reports, fuel oil spills, or contamination records respecting the above-mentioned property.

This is all the information the Fuels Safety Division has at this time regarding the above address.

It should be noted that the Fuels Safety Division did not register private fuel underground/aboveground storage tanks prior to January of 1990 or furnace oil tanks prior to May 1, 2002. Also note that the Fuels Safety Division does not register waste oil tanks in apartments, office buildings, residences etc. or ABOVEGROUND gas or diesel tanks.

TSSA does not make any representations or warranties with respect to the accuracy or completeness of any records released by TSSA, and the user assumes all risk in using or relying on released records.

Yours truly,



Roxana Suarez-Mashtaler
Public Information Services Agent

Oracle **Installed Base**

Navigator Favorites Home Profile Sign Out Help

Item Instances

Quick Find Item Instance Go Advanced Search

Logged In As RMASHTALER

- **General**
- Additional Attributes
- Assets
- Party Relationships
  - Owner
  - Parties
  - Accounts
  - Contacts
  - Summary
- Pricing
- Counters
- Contracts
- Notes
- Transactions
- Service Requests
- Repair Orders
- History
- Operating Units
- Configuration

Item Instance Details

Item Instance: 10206915
Item: FS PRIVATE FUEL OUTLET - SELF SERVE
Item Description: Fuels Safety Private Fuel Outlet - Self Serve

General Attributes

Organization Name	TSSA Item Master	Instance Name	
Last Version Label	1	Version Label Date	10-DEC-1997 0:00
Revision		New Version Label	
System	Go	External Reference	
Item Instance Type		Accounting Classification	Customer Product
Operational Status	Not Used	Lot Number	: not lot-controlled
Status	Under Review	Condition	
Quantity	1	UOM	Each
Start Date	10-DEC-1997	Start Time	0:00
Shipped On Date		Shipped On Time	
End Date		End Time	
Return By Date		Return By Time	
Actual Return Date		Actual Return Time	

* Indicates required field.
Time format is HH24:MM
Note: You do not have permission to make updates in this page.

☑ Creation Completed

Owner

Party Type Party

Party Name:	FIRSTCANADA ULC	Party Number:	223304
Account Number:	101931	Account Name	FIRSTCANADA ULC

Current Location

* Type	Party Site Go		
Party Name	FIRSTCANADA ULC Go	Party Number	223304 Go
*Line 1	3855 MCBEAN Go	Site Number	224231 Go

Address 3855 MCBEAN
RICHMOND, K0A 2Z0, CA

Installed At

Installed Date 10-DEC-1997 Installed Time 0:00

Time format is HH24:MM

Change in installed date does not change contract date.

Type [ ] Go

Order

Sales Order Number

Sales Order Date

Sales Order Line

Purchase Order Number

Agreement Name

Item Flags

- [x] BOM Enabled
- [x] IB Trackable
- [x] Inventory Trackable
- [x] Sellable
- [ ] Shippable

Item Views

- [ ] Merchant
- [x] Customer

Descriptive Flexfields

Context Value: FS Facility

Select Context Value and click 'Go' to show relevant fields.

Facility Type 2

Facility Type 3

Total Capacity - Liquid Fuel Tanks (L): 59000

Total Capacity - Propane Tank s (USWG)

* Previous Facility Type

Previous Instance Number

Item Instances Home Profile Sign Out Help

Installed Base

View : Item Instance : 11521745

Item	**FS LIQUID FUEL TANK**	System	
Item Description	**FS Liquid Fuel Tank**	Owner	**FIRSTCANADA ULC**
		Account Number	**101931**

Other Item Instance Details

Transaction History
Item Instance History
Operating Units
Contracts Orders
Service Requests
Orders and Directives
View Relationship Graphically
OMS Orders

General | Location | Associations | Configuration | Counters | Notes

External Reference		New Version Label	
Organization	**TSSA Item Master**	Last Version Label	**1**
Revision		Creation Date	**10-Dec-1997 00:00:00**
Instance Name		Status	**Active**
Quantity	**1**	Install Date	**10-Dec-1997 00:00:00**
UOM	**Each**	Expiration Date	
Item Instance Type		Shipped On Date	
Item Condition		Return By Date	
Accounting Classification	**Customer Product**	Actual Return Date	
Operational Status Code	**Not Used**		

Hide Instance Flex Fields

Fuel Type1	**Diesel** Diesel
Fuel Type2	
Fuel Type3	
Capacity (L)	**13600**
Tank Material	**Fiberglass (FRP)** Fiberglass (FRP)
Tank Type	**Single Wall UST** Single Wall UST
FS Corrosion Protection	**Fiberglass** Fiberglass
Overfill Protection Type	
Installation Year	**1991**
ULC Standard	
Manufacturer	
Model	
Serial Number	
Description	

Show Additional Attributes

Return to Instance Search

Installed Base

View : Item Instance : 11521723

Item	**FS LIQUID FUEL TANK**	System	
Item Description	**FS Liquid Fuel Tank**	Owner	**FIRSTCANADA ULC**
		Account Number	**101931**

General | Location | Associations | Configuration | Counters | Notes

External Reference		New Version Label	
Organization	**TSSA Item Master**	Last Version Label	**1**
Revision		Creation Date	**10-Dec-1997 00:00:00**
Instance Name		Status	**Active**
Quantity	**1**	Install Date	**10-Dec-1997 00:00:00**
UOM	**Each**	Expiration Date	
Item Instance Type		Shipped On Date	
Item Condition		Return By Date	
Accounting Classification	**Customer Product**	Actual Return Date	
Operational Status Code	**Not Used**		

Other Item Instance Details

Transaction History
Item Instance History
Operating Units
Contracts
Orders
Service Requests
Orders and Directives
View Relationship Graphically
OMS Orders

Hide Instance Flex Fields

Fuel Type1	**Diesel** Diesel
Fuel Type2	
Fuel Type3	
Capacity (L)	**22700**
Tank Material	**Fiberglass (FRP)** Fiberglass (FRP)
Tank Type	**Single Wall UST** Single Wall UST
FS Corrosion Protection	**Fiberglass** Fiberglass
Overfill Protection Type	
Installation Year	**1991**
ULC Standard	
Manufacturer	
Model	
Serial Number	
Description	

Show Additional Attributes

Return to Instance Search

Item Instance Counters Mass Update Close Window Preferences Help

Privacy Statement

Installed Base

View : Item Instance : 11521704

Item	**FS LIQUID FUEL TANK**	System	
Item Description	**FS Liquid Fuel Tank**	Owner	**FIRSTCANADA ULC**
		Account Number	**101931**

General | Location | Associations | Configuration | Counters | Notes

External Reference		New Version Label	
Organization	**TSSA Item Master**	Last Version Label	**1**
Revision		Creation Date	**10-Dec-1997 00:00:00**
Instance Name		Status	**Active**
Quantity	**1**	Install Date	**10-Dec-1997 00:00:00**
UOM	**Each**	Expiration Date	
Item Instance Type		Shipped On Date	
Item Condition		Return By Date	
Accounting Classification	**Customer Product**	Actual Return Date	
Operational Status Code	**Not Used**		

Other Item Instance Details

Transaction History
Item Instance History
Operating Units
Contracts
Orders
Service Requests
Orders and Directives
View Relationship Graphically
OMS Orders

Hide Instance Flex Fields

Fuel Type1	**Diesel** Diesel
Fuel Type2	
Fuel Type3	
Capacity (L)	**22700**
Tank Material	**Fiberglass (FRP)** Fiberglass (FRP)
Tank Type	**Single Wall UST** Single Wall UST
FS Corrosion Protection	**Fiberglass** Fiberglass
Overfill Protection Type	
Installation Year	**1991**
ULC Standard	
Manufacturer	
Model	
Serial Number	
Description	

Show Additional Attributes

Return to Instance Search

Item Instance Counters Mass Update Close Window Preferences Help

Privacy Statement

Perform Periodic Inspection (FS) for Job 010206918-002 (E006694)

Description: E006694 Private Fuel Ou 26

Assignments

Status: Complete by STRATUL

Assigned To: John Stratuik

Outcome: Inspection Complete

Schedule

Scheduled Start: mmm dd, yyyy

Scheduled Complete: mmm dd, yyyy

Actual Start: Jul 13, 1999 00:00

Actual Complete: Jul 13, 1999 00:00

Reports

Details | Deficiencies | Time | Documents | Comments | O/S Orders | Resolved/Orders | Create Def

Inspection Report Number: E006694

Date of Inspection: Jul 13, 1999

Re-Inspection Date: mmm dd, yyyy

Orders Issued To:

To insert general comments on the inspection report, click on the "Comments" Tab and Right Click Insert the comments.

Have you entered your time and saved your report ?: Yes No

Risk Factor:

Inspection Display Address: 3855 MCBEAN, RICHMOND, ON, CA K0A 2Z0

License Number: 0076509496-C

Tank Vehicle ' Serial-Unit ' Numbers:

Technical Standards and Safety Authority

Inspector's Report / Rapport de l'inspecteur(trice) Part A/Partie A

Issued under **Ontario's Energy Act** and/or **Gasoline Handling Act**
Délivré en vertu de **Loi sur les hydrocarbures** ou de la **Loi sur la manutention de l'essence** de l'Ontario

Report No / N° de rapport: E- 006694

Location Inspected / Lieu inspecté	Owner's Name / Nom du/de la propriétaire
Laidlaw Transit	Laidlaw Transit
Address / Adresse: 3855 McBean Street	Address / Adresse: 1010 Caldevco RD. P.O Box 159
City/town / Ville: Richmond ontario	City/town / Ville: Stittsville ONT
Postal Code / Code postal: K0A-2Z0 Tel. No. / N° de tél.: 613-836-7725	Postal Code / Code postal: K2S-1A0 Tel. No. / N° de tél.: 613-836-7725
Operator's Name / Nom de la personne responsable: Doug Herd Manager	Fuel Supplier / Fournisseur de combustible: Shell Canada City / Ville
Licence No / N° de permis: 0001039574.	

Contractor / Entrepreneur: | Registration # / N° d'inscription:

OPERATION/ACTIVITÉ	SUB TYPE/SOUS TYPE	LOC TYPE/ TYPE DE LIEU	POP DENS/ DENS. DE POP.	FUEL/COMBUSTIBLE	CLASS/CATÉGORIE	REASON/RAISON	TRIGGER/ MOTIVÉ PAR :
20	—	02	01	Diesel	03	26	01

ACTION / MESURES PRISES	ACT/LOI	REG/RÈGLEMENT	DURATION/DURÉE	BILLABLE/ À FACTURER	TRAVEL/VOYAGE	BILL FACTURER Y/N O/N	
01	C.H.A	52/93	2	Y	1	Y2	

DAMAGE /DOMMAGES	OCC RATE/ GRAV. DE L'ACC.	CAUSE/CAUSE	CON FACT/ FACT. CONTR.	OCC DATE/ DATE DE L'ACC.	OCC TIME/ HEURE DE L'ACC.	MANDATED MANDAT Y/N O/N	
						Y	

FIELD 1/DOMAINE 1	CALL/INTERVENTION	CONSULT Y/N CONSULT O/N	SITE REM Y/N REMÉDIER O/N				COMPLETED? Y/N TERMINÉE? O/N
	01						Y

Comments/Commentaires:
On Site To Audit Private Fuel Facility
Requires Name Change. New Application To Follow.

Equipment/Appliance/Component / Matériel/Appareil/Composant

Type/Type	Code/Code
Description/Description	
Manufacturer/Fabricant	
Model/Modèle	Serial No/ N° de serie
Material/Matériel	
Corrosion Protection/Protection contre la corrosion	
Fuel Input Rating/Débit de combustible	
Capacity/Capacité	
Installation Date/Date d'installation	
Manufacture Date/Date de fabrication	
Supply Pressure/ Pression d'alimentation	Manifold Pressure/ Pression d'admission

SEP 10 1999 DATA ENTERED

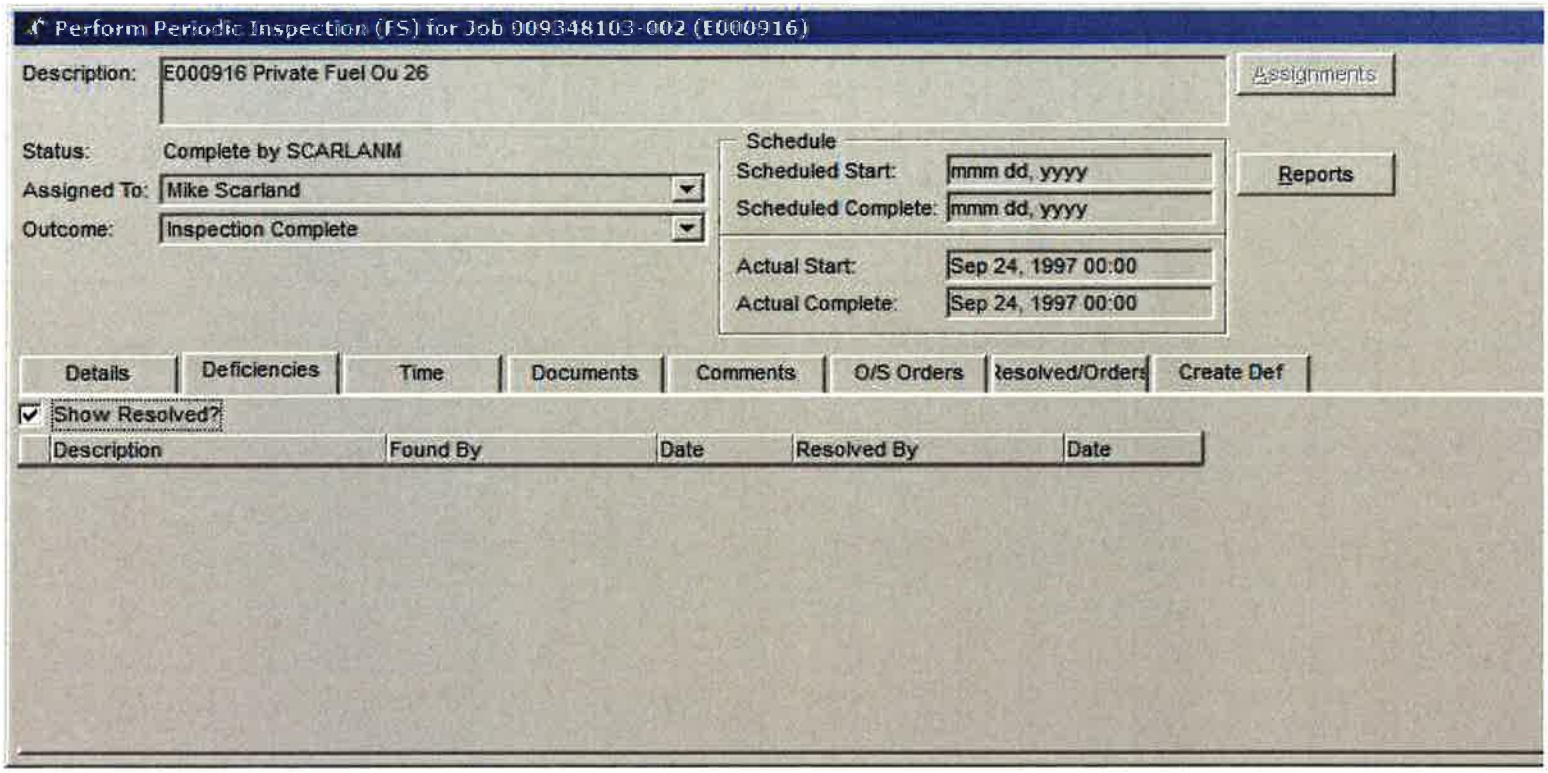
Equipment/Appliance/Component / Matériel/Appareil/Composant

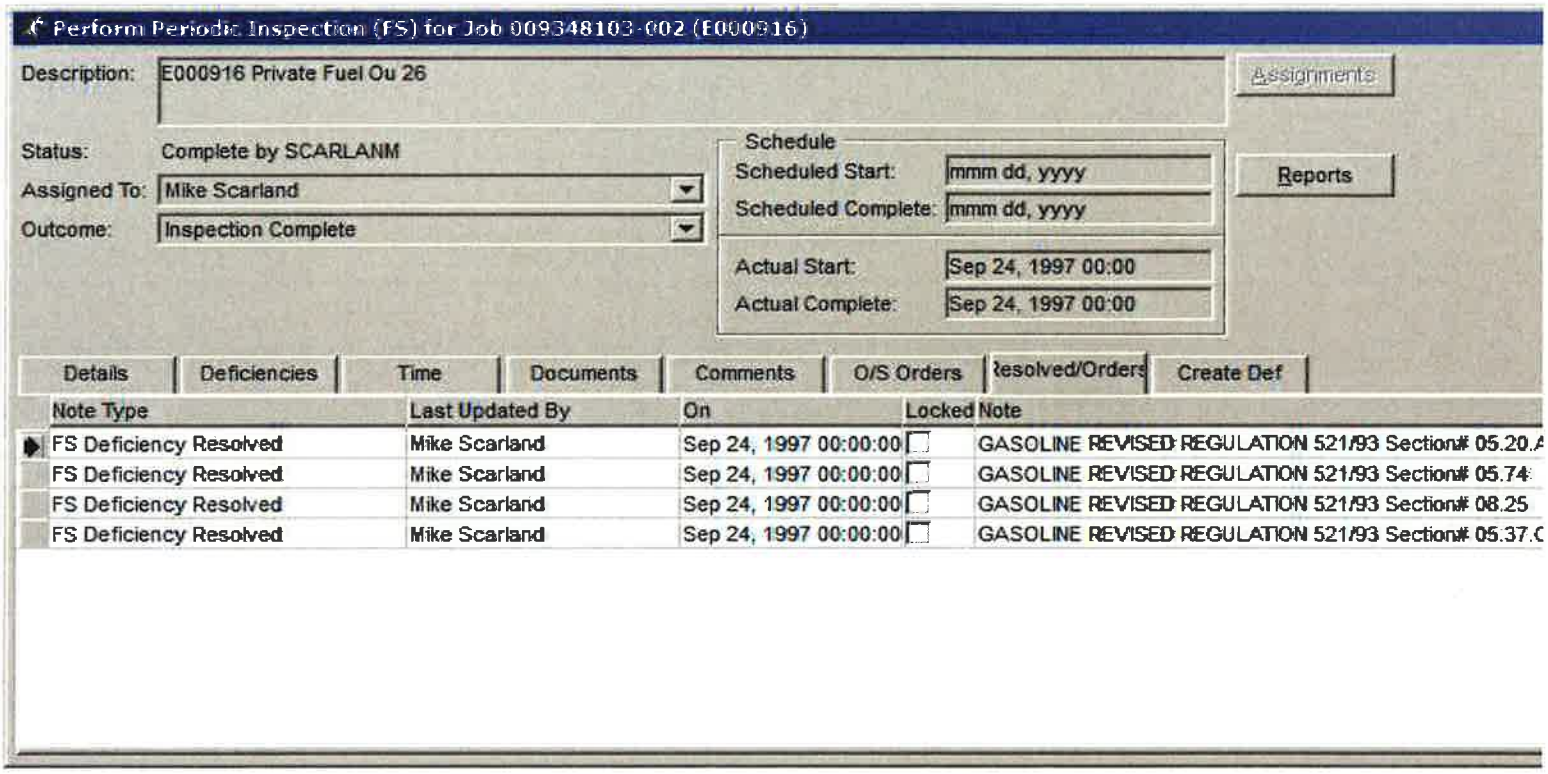
Type/Type	Code/Code
Description/Description	
Manufacturer/Fabricant	
Model/Modèle	Serial No/ N° de serie
Material/Matériel	
Corrosion Protection/Protection contre la corrosion	
Fuel Input Rating/Débit de combustible	
Capacity/Capacité	
Installation Date/Date d'installation	
Manufacture Date/Date de fabrication	
Supply Pressure/ Pression d'alimentation	Manifold Pressure/ Pression d'admission

TECHNICAL STANDARDS & SAFETY AUTHORITY RECEIVED JUL 21 1999 FUELS SAFETY CORPORATE SERVICES DIVISION

Client's Signature/Signature du client/de la cliente	Inspector's Name/Nom de l'inspecteur(trice)	Badge No / N° d'insigne: 192
		Date of Inspection/ Date d'inspection Y/A M/M D/J: 99-07-13

FS 09181 (05/97)


Perform Periodic Inspection (FS) for Job 009348103-002 (E000916)
Description:
E000916 Private Fuel Ou 26
Assignments
Status:
Complete by SCARLANM
Assigned To:
Mike Scarland
Outcome:
Inspection Complete
Schedule
Scheduled Start:
mmm dd, yyyy
Scheduled Complete:
mmm dd, yyyy
Actual Start:
Sep 24, 1997 00:00
Actual Complete:
Sep 24, 1997 00:00
Reports
Details
Deficiencies
Time
Documents
Comments
O/S Orders
Resolved/Orders
Create Def
Show Resolved?
Description
Found By
Date
Resolved By
Date


Perform Periodic Inspection (FS) for Job 009348103-002 (E000916)
Description:
E000916 Private Fuel Ou 26
Assignments
Status:
Complete by SCARLANM
Assigned To:
Mike Scarland
Outcome:
Inspection Complete
Schedule
Scheduled Start:
mmm dd, yyyy
Scheduled Complete:
mmm dd, yyyy
Actual Start:
Sep 24, 1997 00:00
Actual Complete:
Sep 24, 1997 00:00
Reports
Details
Deficiencies
Time
Documents
Comments
O/S Orders
Resolved/Orders
Create Def
Note Type
Last Updated By
On
Locked
Note
FS Deficiency Resolved
Mike Scarland
Sep 24, 1997 00:00:00
GASOLINE REVISED REGULATION 521/93 Section# 05.20.A
FS Deficiency Resolved
Mike Scarland
Sep 24, 1997 00:00:00
GASOLINE REVISED REGULATION 521/93 Section# 05.74
FS Deficiency Resolved
Mike Scarland
Sep 24, 1997 00:00:00
GASOLINE REVISED REGULATION 521/93 Section# 08.25
FS Deficiency Resolved
Mike Scarland
Sep 24, 1997 00:00:00
GASOLINE REVISED REGULATION 521/93 Section# 05.37.C

Technical Standards and Safety Authority

Inspector's Report / Rapport de l'inspecteur(trice) Part A/Partie A

Issued under **Ontario's Energy Act** and/or **Gasoline Handling Act**
Délivré en vertu de **Loi sur les hydrocarbures** ou de la **Loi sur la manutention de l'essence** de l'Ontario

Report No / N° de rapport: E- 000916

Location Inspected / Lieu inspecté
CHARTER WAYS TRANSPORTATION LTD
Address / Adresse: 3855 MCBEAN ST.
City/town / Ville: RICHMOND
Postal Code / Code postal: K0A 2Z0
Tel. No. / N° de tél.: 613-838-4106
OCT 17 1997 DATA ENTERED
Operator's Name / Nom de la personne responsable: DAVE
Licence No / N° de permis: 000 103 9574

Owner's Name / Nom du/de la propriétaire
CHARTER WAYS
Address / Adresse: 1027 17 OODIE DR.
City/town / Ville: NEPEAN
Postal Code / Code postal: K2H 7T8
Tel. No. / N° de tél.: 613-820-7446
Fuel Supplier / Fournisseur de combustible: SHELL
City / Ville: OTTAWA

Contractor / Entrepreneur

Registration # / N° d'inscription

OPERATION/ACTIVITÉ	SUB TYPE/SOUS TYPE	LOC TYPE/ TYPE DE LIEU	POP DENS/ DENS. DE POP.	FUEL/COMBUSTIBLE	CLASS/CATÉGORIE	REASON/RAISON	TRIGGER/ MOTIVÉ PAR
20		02	02	DIES	03	26	01

ACTION / MESURES PRISES	ACT/LOI	REG/RÈGLEMENT	DURATION/DURÉE	BILLABLE/ À FACTURER	TRAVEL/VOYAGE	BILL FACTURER Y/N O/N	
01	G.H.	5/1/93	2.0	1.0	1.0	Y	

DAMAGE /DOMMAGES	OCC RATE/ GRAV. DE L'ACC.	CAUSE/CAUSE	CON FACT/ FACT. CONTR.	OCC DATE/ DATE DE L'ACC.	OCC TIME/ HEURE DE L'ACC.	MANDATED MANDAT Y/N O/N	
						Y	

FIELD 1/DOMAINE 1	CALL/INTERVENTION	CONSULT Y/N CONSULT. O/N	SITE REM Y/N REMÉDIER O/N			COMPLETED? Y/N TERMINÉE? O/N
	01	N	N			Y

Comments/Commentaires

Equipment/Appliance/Component / Matériel/Appareil/Composant

Type/Type	Code/Code
Description/Description	
Manufacturer/Fabricant	
Model/Modèle	Serial No/ N° de serie
Material/Matériel	
Corrosion Protection/Protection contre la corrosion	
Fuel Input Rating/Débit de combustible	
Capacity/Capacité	
Installation Date/Date d'installation	
Manufacture Date/Date de fabrication	
Supply Pressure/ Pression d'alimentation	Manifold Pressure/ Pression d'admission

Equipment/Appliance/Component / Matériel/Appareil/Composant

Type/Type	Code/Code
Description/Description	
Manufacturer/Fabricant	
Model/Modèle	Serial No/ N° de serie
Material/Matériel	
Corrosion Protection/Protection contre la corrosion	
Fuel Input Rating/Débit de combustible	
Capacity/Capacité	
Installation Date/Date d'installation	
Manufacture Date/Date de fabrication	
Supply Pressure/ Pression d'alimentation	Manifold Pressure/ Pression d'admission

TECHNICAL STANDARDS & SAFETY AUTHORITY RECEIVED OCT 09 1997 FUELS SAFETY CORPORATE SERVICES DIVISION

Client's Signature/Signature du client/de la cliente	Inspector's Name/Nom de l'inspecteur(trice)	Badge No / N° d'insigne: 151
David A. [illegible]	LES [illegible]	Date of Inspection/ Date d'inspection Y/A M/M D/J: 97 09 24

FS 09181 (05/97)

Head Office

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Mark S. D'Arcy, P. Eng.

patersongroup

- Geotechnical Engineering
- Environmental Engineering
- Hydrogeology
- Geological Engineering
- Materials Testing
- Building Science
- Archaeological Services

POSITION

Associate and Supervisor of the Environmental Division
Senior Environmental/Geotechnical Engineer

EDUCATION

Queen's University, B.A.Sc.Eng, 1991
Geotechnical / Geological Engineering

MEMBERSHIPS

Ottawa Geotechnical Group
Professional Engineers of Ontario

EXPERIENCE

1991 to Present
Paterson Group Inc.
Associate and Senior Environmental/Geotechnical Engineer
Environmental and Geotechnical Division
Supervisor of the Environmental Division

SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island
Agricultural Supply Facilities - Eastern Ontario
Laboratory Facility – Edmonton (Alberta)
Ottawa International Airport - Contaminant Migration Study - Ottawa
Richmond Road Reconstruction - Ottawa
Billings Hurdman Interconnect - Ottawa
Bank Street Reconstruction - Ottawa
Environmental Review – Various Laboratories across Canada - CFIA
Dwyer Hill Training Centre – Ottawa
Nortel Networks Environmental Monitoring - Carling Campus – Ottawa
Remediation Program - Block D Lands – Kingston
Investigation of former landfill sites – City of Ottawa
Record of Site Condition for Railway Lands – North Bay
Commercial Properties – Guelph and Brampton
Brownfields Remediation – Alcan Site - Kingston
Montreal Road Reconstruction - Ottawa
Appleford Street Residential Development - Ottawa
Remediation Program - Ottawa Train Yards
Remediation Program - Bayshore and Heron Gate
Gladstone Avenue Reconstruction – Ottawa
Somerset Avenue West Reconstruction - Ottawa

Marek Moroz, B.Sc. G.I.T.

patersongroup

- Geotechnical Engineering
- Environmental Engineering
- Hydrogeology
- Geological Engineering
- Materials Testing
- Building Science
- Archaeological Services

POSITION

Environmental Consultant

EDUCATION

Algonquin College, Graduate Certificate, 2017
Environmental Management and Assessment

University of Ottawa, 2012
Specialization in Geology with Minor in Spanish

MEMBERSHIPS

Ottawa Geotechnical Group
Association of Professional Geoscientists of Ontario

EXPERIENCE

2017 to Present:
Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Environmental Consultant

2016 to 2017
Geological Survey of Canada
Federal Research Organization in Earth Sciences
Canada Groundwater Program
Physical Scientist

2012 to 2015
KGHM International
International Mining Company
Geologist and Project Manager

SELECT LIST OF PROJECTS

Contaminated Soil and Groundwater Sampling - Various sites - Eastern Ontario
Surcharge and Settlement Surveys - Ottawa, ON
Regional Groundwater Assessment and Research – Lake Simcoe Region
Geological Compilation and 3D Modelling – Franke Mine, Chile
Resource Investigation and Mineral Exploration - Rosita, Nicaragua