Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Studies

patersongroup

Phase I - Environmental Site Assessment

2487 Innes Road
Ottawa, Ontario

Prepared For

10163074 CANADA INC.

December 17, 2019

Report: PE4800-1

Paterson Group Inc.

Consulting Engineers
154 Colonnade Road South
Ottawa (Nepean), Ontario
Canada K2E 7J5

Tel: (613) 226-7381
Fax: (613) 226-6344
www.patersongroup.ca

TABLE OF CONTENTS

List of Figures

List of Appendices

EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by 10163074 CANADA INC. to conduct a Phase I – Environmental Site Assessment (Phase I ESA) of the property located at 2487 Innes Road, in the City of Ottawa, 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.

According to the historical information reviewed, the Phase I Property was first developed with the existing residential dwelling circa 1956. No potentially contaminating activities were identified with respect to the historical use of the Phase I - Property

The neighbouring properties consist primarily of agricultural land, retail businesses and residential dwellings. Two (2) active service garages addressed 2506 and 2526 Innes Road and a historical gasoline service station on the property now addressed 1 Glen Park Drive were identified as PCAs. Based on their separation distances as well as their cross or down gradient orientation with respect to the subject property, the above mentioned PCAs are not considered APECs for the Phase I – Property.

Following the historical review, a site inspection was conducted on November 25, 2019. The subject property is currently occupied by a two (2) storey residential dwelling as well as a single - storey two stall garage. No PCAs were identified with respect to the current use of the subject property.

No PCAs aside from the previously discussed service garages were identified with respect to the current use of the surrounding lands.

Based on the results of this assessment, it is our opinion that **a Phase II - Environmental Site Assessment is not required for the property.**

1.0 INTRODUCTION

At the request of 10163074 CANADA INC, Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (Phase I ESA) for 2487 Innes Road, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the subject property and study area as well as to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Fernando Matos of Ottawa Carleton Construction. Mr. Matos can be reached by email at fernando@ottawacarletonconstruction.com.

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, under the 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, as well as 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 SUBJECT PROPERTY INFORMATION

Address:	2487 Innes Road, Ottawa, Ontario.
Legal Description:	Part of Lot 15, Concession 2; in the City of Ottawa.
Property Identification Number (PIN):	043970189
Location:	The subject property is located on the north side of Innes Road, approximately 40 m west of Pennington Lane, in the City of Ottawa, Ontario. For the purpose of this report Innes Road runs in an east-west direction.
Latitude and Longitude:	45° 25' 46.9" N, 75° 34' 15.5" W
Site Description:	
Configuration:	Rectangular
Site Area:	0.22 ha (approximate)
Zoning:	AM11 – Arterial Mainstreet Zone
Current Use:	The subject property is used for residential purposes and is occupied by a two - storey dwelling.
Services:	The existing residential dwelling is municipally serviced.

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 located outside the 250 m radius are not considered to have impacted the subject property, based on their significant distance from the site.

First Developed Use Determination

Based on information provided from the current property owner, the subject property has always been used for residential purposes.

For the purposes of this assessment, it is assumed that the subject property was first developed for residential purposes circa 1956.

Fire Insurance Plans

Fire insurance plans are not available for the area of the subject site and neighbouring properties

National Archives

City directories were available for the subject site and neighbouring lands from 1980 until 2011. The subject site was listed solely as a residential dwelling for this period and the neighbouring lands primarily consisted of residential dwellings with some commercial/retail use. Two service garages located at 2526 and 2506 Innes Road were identified through the city directories and represent potentially contaminating activities. The initial development date for both garages was 1990 and although their titles have changed, they remain in the same present-day orientation and location.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically as part of this assessment. No records of pollutant releases were listed in the database for the subject site or for any properties located within the Phase I study area.

PCB Waste Storage Site Inventory

A search of the national PCB waste storage site inventory was conducted as part of this assessment. No PCB waste storage sites are located within the Phase I study area.

Ontario Ministry of Environment, Conservation and Parks (MECP) Waste Disposal Site Inventory

The Ontario Ministry of Environment and Climate Change document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of this assessment. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants, and coal tar distillation plants situated in the Province of Ontario.

A review of this document did not identify any relevant records pertaining to the subject site or for properties located within the Phase I study area.

MECP Coal Gasification Plant Inventory

The Ontario Ministry of Environment, Conservation and Parks document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the subject property.

A review of this document did not identify any former coal gasification plants located on the subject property or within the Phase I study area.

MECP Instruments

A request was submitted to the MECP Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use, or any other similar MECP issued instruments for the subject property. At the time of issuing this report, a response from the MECP had not been received.

MECP Incident Reports

A request was submitted to the MECP Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants, or inspections maintained by the MECP for the subject or neighbouring properties. At the time of issuing this report, a response from the MECP had not been received.

MECP Waste Management Records

A request was submitted to the MECP Freedom of Information office for information with respect to waste management records for the subject property. At the time of issuing this report, a response from the MECP had not been received.

MECP Submissions

A request was submitted to the MECP Freedom of Information office for information with respect to reports related to environmental conditions for the subject property. At the time of issuing this report, a response from the MECP had not been received.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry was conducted electronically for the subject site and for properties located within the Phase I study area. No Records of Site Condition (RSCs) were filed for the subject property or for any properties located within the Phase I study area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted electronically via the Ontario Ministry of Natural Resources and Forestry (MNRF) website. No natural features or areas of natural significance were identified on the subject property or within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA Fuels Safety Branch in Toronto was contacted electronically to inquire about current and former underground storage tanks, spills, and incidents for the subject and neighbouring properties. The response from the TSSA indicated that no environmental records were identified as pertaining to the subject property.

A copy of the correspondence with the TSSA, and the properties of interest, are included in Appendix 2.

City of Ottawa Old Landfill Sites

The document entitled “Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa”, was reviewed to reference the location of former landfill sites with respect to the subject property.

A review of this document did not identify any closed landfill sites located on the subject property or within the Phase I study area.

City of Ottawa Historical Land Use Inventory

A search of the City of Ottawa’s Historical Land Use Inventory database was conducted as part of this assessment. The response provided by the City of Ottawa highlighted six historical activities. The activities listed for the properties currently addressed 2526, 2506 and 1 Glen Park Drive have been identified as PCAs for the subject property. The other documented activities are not associated with the potential to impact the Phase I Property.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals, commencing with the earliest available photograph. Based on the review, the following observations have been made:

1958 *(Poor Scale)* The residential dwelling can be seen in its present day configuration and neighbouring properties appear to be used for agricultural purposes at this time. Farmhouses and barns can be seen on the adjacent properties to the east and north of the target property.

1968 No significant changes are apparent with respect to the subject property. Residential development has increased to east and north of the subject property. Gravelle Crescent and Pennington Lane have been further developed and are in their current day configurations.

1976 (*Poor Scale*) No significant changes are apparent with respect to the subject property. Residential development has significantly increased south and east of the subject site.

1994 No significant changes are apparent with respect to the subject property. Residential development continues to increase in all directions surrounding the target property. The large agricultural building located further west of the site has experienced an increase in development. Commercial and retail development appears to have occurred immediately southeast of the subject site.

2005 No significant changes are apparent with respect to the subject or neighbouring properties.

2017 No significant changes are apparent with respect to the subject or neighbouring properties. The subject property appears as it does today.

Copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic information was obtained from Natural Resources Canada – The Atlas of Canada website. The topographic maps indicate that the elevation of the subject site is approximately 80 m above sea level. The regional topography in the general area of the subject property slopes down towards the south and west, in the general direction of Green's Creek. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website, as a part of this assessment. According to the publication and mapping, the subject property is situated within the St. Lawrence Lowlands. According to the 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 property is specifically located within the Central St. Lawrence Lowland area, which is rarely more than 150 m above sea level.

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, the bedrock within the area of the subject property consists of shale of the Queenston Formation.

Based on the available mapping data, the surficial geology within the area of the subject property consists of clay and silt. The overburden thickness throughout the subject property ranges from 25 to 50 metres.

MECP Water Well Records

A search of the MECPs website for all drilled well records within 250 m of the subject site was conducted as part of this assessment. The search identified six (10) well records within the Phase I study area. The records pertain to wells drilled in the area between 1960 and 2010 and that were used for domestic household or monitoring purposes with one abandoned well located at 2526 Innes Road. The monitoring wells are located at 2514 (3), 2532 (2) Innes Road, Gloucester Township (2) and 16 Tauvette Street.

Based on the well records, the stratigraphy in the general area of the subject property consists of a mixture of brown sand and grey clay underlain by shale bedrock. The water table was generally 4 to 6 m below the ground surface and the bedrock was encountered at an average depth of 28 m.

Water Bodies and Areas of Natural Significance

The nearest named water body with respect to the subject site is Green's Creek, located approximately 1.5 km west of the subject property. No areas of natural significance were identified within the Phase I study area.

5.0 SITE RECONNAISSANCE

5.1 General Requirements

The site inspection was conducted on Monday, November 25, 2019 by personnel from our environmental division. In addition to the subject property, the uses of neighbouring properties within the Phase I study area were also assessed at the time of the site inspection.

5.2 Personal Interviews

Mr. Peter Hume, the site contact was in communication with the current property owner and provided answers to an interview conducted via email. Mr. Hume stated that the residential dwelling was converted from oil to natural gas in 2010 at which point the tank was removed from the basement. The current owner acquired the property in October of 2019 and the land had previously been owned by the same owners since 1956. The current property owner was unaware of any environmental concerns as well as any spills or leaks associated with the previously existing oil tank. Mr. Peter Hume informed Paterson that the abandoned cast iron service pipe extruding from the elevated concrete slab in the northern portion of the basement had been utilized as connection from the previously existing well and pump system. The service was abandoned once Innes Road had become municipally serviced.

5.3 Specific Observations at the Phase I Property

Site Features

The subject property consists of a centrally located two-storey residential dwelling with an unfinished basement. Most of the property consists of maintained lawn with a small garden and a two-stall garage located in the northeastern and northwestern portions of the site respectively. The garage is used for vehicle and miscellaneous item storage.

The subject site and regional topography slope gradually down towards the north and west in the direction of Green's Creek. Water drainage on the subject property consists primarily of surface infiltration throughout the property, in addition to surface run-off towards manholes located along Innes Road. No ponded water was observed on the subject site. No signs of staining or indications of potential sub-surface contamination were observed at the time of the site visit.

A depiction of the subject property is presented on Drawing PE4800-1 – Site Plan, in the Figures section of this report.

Buildings and Structures

The two (2) storey residential dwelling with an unfinished basement is centrally located on the subject property. The residential dwelling appears to have a concrete foundation and is comprised of shingle roofing with a stucco exterior excepting sections of the south facing wall that consist of vinyl siding. The one (1) – storey, two stall garage consists of brick walls with shingle roofing.

Potential Environmental Concerns

- **Fuels and Chemical Storage**

  No above ground storage tanks (ASTs) or signs of underground storage tanks (USTs) were observed on the exterior of the subject property at the time of the site visit.

- **Hazardous Materials and Unidentified Substances**

  No hazardous materials, unidentified substances, surficial staining, abnormal odours, or indications of potential sub-surface contamination were observed on the subject property at the time of the site inspection.

- **Transformer Oil and Polychlorinated Biphenyls (PCBs)**

  No transformers or other sources of PCBs were observed on the subject property at the time of the site inspection.

- **Waste Management**

  Waste materials observed on the subject property at the time of the site inspection were noted to be limited to solid, non-hazardous domestic waste products and recyclables. All waste products were noted to be stored in plastic bins on the exterior of the subject building and collected by the municipality on a regular basis. No concerns were identified with respect to waste management practices on the subject property.

Interior Assessment

A general description of the interior of the subject building is as follows:

- The floors consist of hardwood.
- The walls consist of drywall.
- The ceilings consist of plaster.
- Lighting throughout the building consists of incandescent fixtures.

Potentially Hazardous Building Materials

- **Asbestos-Containing Materials (ACMs)**

  Based on the age of the residence (1956), asbestos may be potentially present within certain building materials. The potential ACMs identified at time of the site inspection include the drywall joint compound and plaster ceilings. These building materials were observed to be in good condition at the time of the site inspection and do not pose an immediate concern.

- **Lead-Based Paint**

  Based on the age of the subject building, lead-based paints may be potentially present on any original or older painted surfaces. The painted surfaces within the building were generally observed to be in good condition at the time of the site inspection.

❑ **Polychlorinated Biphenyls (PCBs)**

No concerns with respect to PCBs were identified at the time of the site inspection.

❑ **Urea Formaldehyde Foam Insulation (UFFI)**

UFFI was not observed within the subject building at the time of the site inspection, however, the wall cavities were not inspected at the time for insulation type.

Other Potential Environmental Concerns

❑ **Fuels and Chemical Storage**

No vent and fill pipes, or signs indicating the presence of an underground or above ground storage tank, were observed within the interior of the subject building. There was no staining or odours observed in the location of the reported former AST.

Chemical storage on the subject property was observed to be limited to domestically available cleaning products, stored in their original containers. No hazardous chemicals, spills, stains, or any unusual visual or olfactory observations were noted at the time of the site inspection.

No concerns with respect to fuels or chemical storage were identified during the site inspection.

❑ **Wastewater Discharges**

Wastewater is currently discharged from the subject property via municipal services but a private well and septic system had been utilized before servicing became available. Two (2) floor drains were located on the southwest side of the basement floor. One of the drains appeared to be a sewer clean out drain. No water was observed in the basement at the time of the investigation.

Roof drainage from the subject building is discharged into the landscaped areas surrounding the structure, which drains into the ground via infiltration. No environmental concerns were identified with respect to wastewater discharges on the subject property.

- **Ozone Depleting Substances (ODSs)**

  Potential sources of ODSs observed on the subject property include fire extinguishers, and one (1) refrigerator. These appliances appeared to be in good condition at the time of the site inspection and should be regularly serviced by a licensed contractor.

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 property was observed to be as follows:

North: Residential dwellings then Gravelle Crescent followed by residential Dwellings;

South: Innes Road followed by residential dwellings;

East: Pennington Lane followed by residential dwellings and Gravelle Crescent;

West: Residential dwellings followed by Gravelle Crescent and residential dwellings.

Two (2) Potentially Contaminating Activities (PCAs) were identified on properties within the Phase I study area. The PCAs result from two active automotive service garages located at 2506 and 2526 Innes Road. The neighbouring land use within the Phase I study area is illustrated on Drawing PE4800-2 – Surrounding Land Use Plan.

6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Land Use History

Based on aerial photos, personal interviews and observations made during the site visit, the subject property was first developed for residential purposes circa 1956.

Potentially Contaminating Activities (PCAs)

Three PCAs were identified on lands within the Phase I study area. Two (2) active service garages addressed 2506 and 2526 Innes Road are located 135 and 160 meters respectively, southeast of the subject site. The property addressed 1 Glen Park Drive had previously been used as a gasoline service station circa 1979 and is 219 meters southwest of the subject site. Based on their separation distances and their down or cross gradient orientation to the subject site, the above noted PCAs are not considered to be areas of potential environmental concern.

Areas of Potential Environmental Concern (APECs)

No areas of potential environmental concern were identified on the subject property or within the Phase I study area.

Contaminants of Potential Concern (CPCs)

No contaminants of potential concern were identified on the subject property.

6.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, the subject property is located in an area of shale, with an overburden ranging from 25 to 50 m in thickness and consisting of clay and silt marine deposits. Groundwater is anticipated to be encountered within the overburden and flow in a westerly direction towards Green's Creek.

Existing Buildings and Structures

The subject property is currently occupied by a two (2) storey residential dwelling with an unfinished basement and a two-stall garage located in the north western portion of the subject property.

Areas of Natural Significance

No areas of natural significance were identified on the subject property or within the Phase I study area.

Water Bodies

The nearest named water body with respect to the subject site is Green's Creek, located approximately 1.5 km west of the subject property. No areas of natural significance were identified within the Phase I study area.

Water Wells

A search of the MECPs website for all drilled well records within 250 m of the subject site was conducted as part of this assessment. The search identified eleven (11) well records within the Phase I study area. The records pertain to wells drilled in the area between 1960 and 2010 and used for domestic household or monitoring purposes with one (1) abandoned well located at 2526 Innes Road. The monitoring wells are located at 2514 (3), 2532 (2) Innes Road, Gloucester Township (3) and 16 Tauvette Street (2). Based on the well records, the stratigraphy in the general area of the subject property consists of a mixture of brown sand and grey clay underlain by shale bedrock. The water table was generally 4 to 6 m below the ground surface and rock was encountered at an average depth of 28m.

Neighbouring Land Use

Neighbouring land use in the Phase I study area consists mainly of residential properties with two service garages located approximately 135 and 160 meters to the southeast of the subject site.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

Two active service garages addressed 2506 and 2526 Innes Road are located to the southeast of the subject site. The property addressed 1 Glen Park Drive had been used as a gasoline service station circa 1979. Based on their separation distances and their cross or down gradient orientation to the subject site, the above noted PCAs are not considered to be areas of potential environmental concern.

Contaminants of Potential Concern

No contaminants of potential concern were identified on 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 associated with the subject site. The absence of PCAs was confirmed by a variety of independent sources, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

7.0 CONCLUSION

Assessment

Paterson Group was retained by 10163074 CANADA INC to conduct a Phase I – Environmental Site Assessment (Phase I ESA) of the property located at 2487 Innes Road, in the City of Ottawa, 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.

According to the historical information reviewed, the Phase I Property was first developed with the existing residential dwelling circa 1956. No potentially contaminating activities were identified with respect to the historical use of the Phase I - Property

The neighbouring properties consist primarily of agricultural land, retail businesses and residential dwellings. Two (2) active service garages addressed 2506 and 2526 Innes Road and a historical gasoline service station on the property now addressed 1 Glen Park Drive were identified as PCAs. Based on their separation distances as well as their cross or down gradient orientation with respect to the subject property, the above mentioned PCAs are not considered APECs for the Phase I – Property.

Following the historical review, a site inspection was conducted on November 25, 2019. The subject property is currently occupied by a two (2) storey residential dwelling as well as a single - storey two stall garage. No potentially contaminating activities were identified with respect to the current use of the subject property.

No PCAs aside from the previously discussed service garages were identified with respect to the current use of the surrounding lands.

Based on the results of this assessment, it is our opinion that **a Phase II - Environmental Site Assessment is not required for the property.**

Recommendations

Based on the age of the subject building, asbestos containing materials (ACMs) may be present within the structure. Potential ACMs identified include drywall joint compound and plaster located on the ceiling. This material was noted to be in good condition at the time of our inspection and does not represent an immediate concern. An asbestos survey of the building should be conducted in accordance with Ontario Regulation 278/05, under the Occupational Health and Safety Act, prior to demolition or renovation, if one has not already been conducted.

Lead-based paint may be present on any remaining original surfaces within the building. It is recommended that paint be tested for lead content prior to its disturbance. Major work involving lead-based paint or other lead containing products must be done in accordance with Ontario Regulation 843, under the Occupational Health and Safety Act

8.0 STATEMENT OF LIMITATIONS

This Phase I – Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04, as amended, 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 as well as 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 10163074 CANADA INC. Permission and notification from 10163074 CANADA INC and Paterson Group will be required to release this report to any other party.

Paterson Group Inc.

Samuel R. Berube, B Eng.

Mark S. D'Arcy, P.Eng., QP_{ESA}

Report Distribution:

- 10163074 CANADA INC
- Paterson Group Inc.

9.0 REFERENCES

Federal Records
Natural Resources Canada Air Photo Library.
Natural Resources Canada The Atlas of Canada.
Geological Survey of Canada Surficial and Subsurface Mapping.
Environment Canada, National Pollutant Release Inventory.
National PCB Waste Storage Site Inventory.
National Archives of Canada.

Provincial Records
MECP Freedom of Information and Privacy Office.
MECP Municipal Coal Gasification Plant Site Inventory, 1991.
MECP Waste Disposal Site Inventory, 1991.
MECP Brownfields Environmental Site Registry.
MECP Water Well Inventory.
Office of Technical Standards and Safety Authority, Fuels Safety Branch.
Ministry of Natural Resources and Forestry Areas of Natural Significance.
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 eMap website.

Local Information Sources
Personal Interviews.

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

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4800-1 – SITE PLAN

DRAWING PE4800-2 – SURROUNDING LAND USE PLAN

FIGURE 1

KEY PLAN

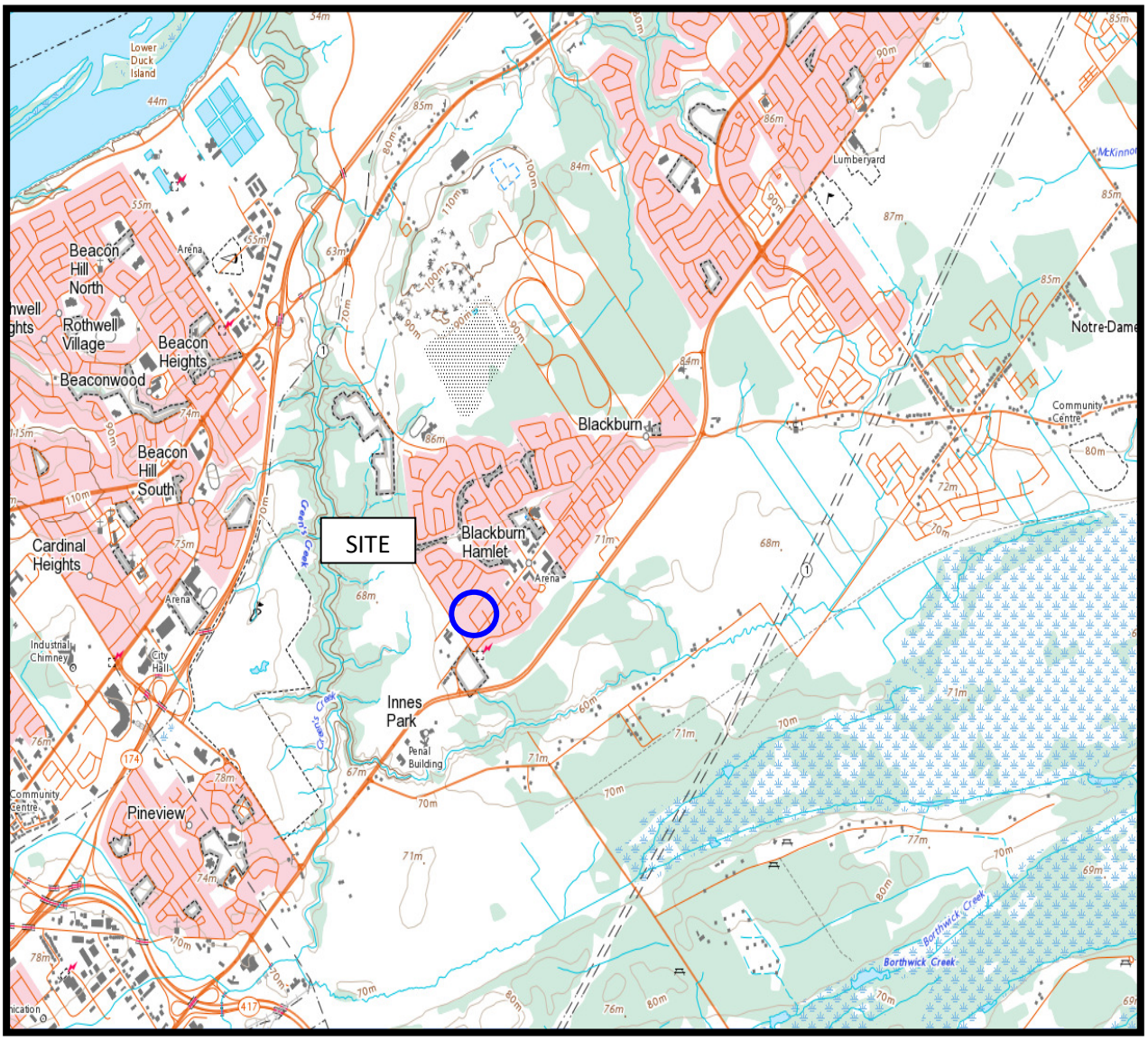


FIGURE 2

TOPOGRAPHIC MAP

#2512
GRAVELLE CRESCENT
RESIDENTIAL
DWELLING

#2 PENNINGTON LANE
RESIDENTIAL DWELLING

#203 SCOTLAND PRIVATE
RESIDENTIAL DWELLING

#205 SCOTLAND PRIVATE
RESIDENTIAL DWELLING

#207 SCOTLAND PRIVATE
RESIDENTIAL DWELLING

#209 SCOTLAND PRIVATE
RESIDENTIAL DWELLING

#211 SCOTLAND PRIVATE
RESIDENTIAL DWELLING

#31 GLEN PARK DRIVE
RESIDENTIAL DWELLING

#29 GLEN PARK DRIVE
RESIDENTIAL DWELLING

#27 GLEN PARK DRIVE
RESIDENTIAL DWELLING

#25
GLEN PARK DRIVE
RESIDENTIAL
DWELLING

INNES ROAD

GARAGE

ASPHALTIC CONCRETE

BINS

#2508 GRAVELLE CRESCENT
RESIDENTIAL DWELLING

**#2487 INNES ROAD
RESIDENTIAL
DWELLING**

FLOWER GARDEN

LANDSCAPED

PARKED
BOAT

TRAILER

VEGETABLE
GARDEN

TRAMPOLINE

PARKED
BOAT

#2502 GRAVELLE CRESCENT
RESIDENTIAL DWELLING

#2480 GRAVELLE CRESCENT
RESIDENTIAL DWELLING

#2476 GRAVELLE CRESCENT
RESIDENTIAL DWELLING

#2470 GRAVELLE CRESCENT
RESIDENTIAL DWELLING

#2469 GRAVELLE CRESCENT
RESIDENTIAL DWELLING

patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL

OTTAWA CARLETON CONSTRUCTION

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
2487 INNES ROAD

OTTAWA, **ONTARIO**

Title:

SITE PLAN

Scale: 1:250	**Date:** 12/2019
Drawn by: NFRV	**Report No.:** PE4800-1
Checked by: SB	**Dwg. No.:** PE4800-1
Approved by: MSD	**Revision No.:**

p:\autocad drawings\environmental\pe4800\pe4800-1 site plan.dwg

POTENTIALLY CONTAMINATING ACTIVITIES:

1. 2506 INNES ROAD - AUTO SERVICE GARAGE (1990-PRESENT)
2. 2526 INNES ROAD - AUTO SERVICE GARAGE (1990- PRESENT)
3. 1 GLEN PARK DRIVE - FORMER GASOLINE SERVICE STATION (1979)

patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL

OTTAWA CARLETON CONSTRUCTION

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
2487 INNES ROAD

OTTAWA, **ONTARIO**

Title:

SURROUNDING LAND USE PLAN

Scale: 1:3000	Date: 12/2019
Drawn by: NFRV	Report No.: PE4800-1
Checked by: SB	Dwg. No.: **PE4800-2**
Approved by: MSD	Revision No.:

p:\autocad drawings\environmental\pe48xx\pe4800\pe4800-2 surrounding land use plan.dwg

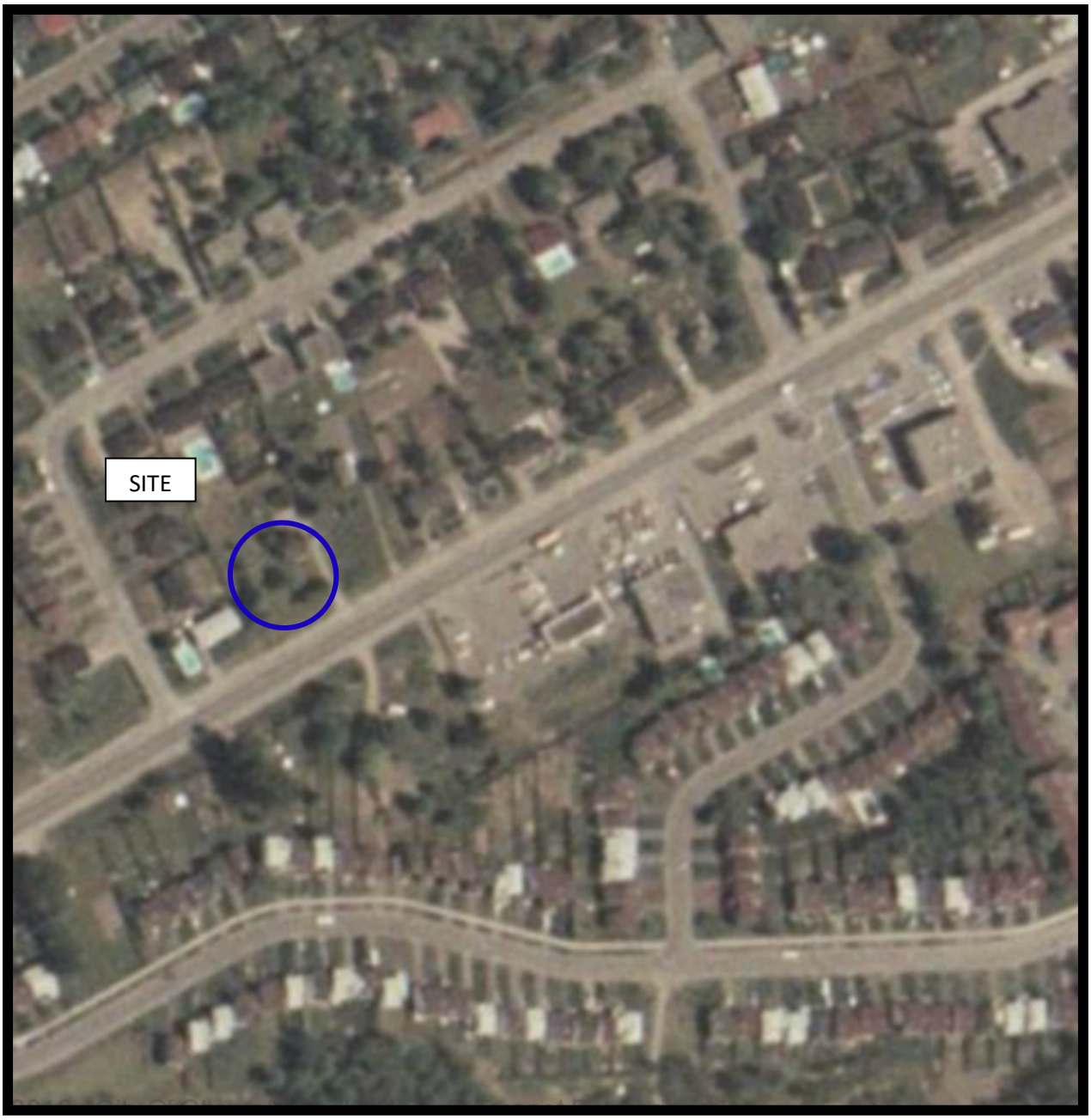
APPENDIX 1

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

AERIAL PHOTOGRAPH
1958

AERIAL PHOTOGRAPH
1968

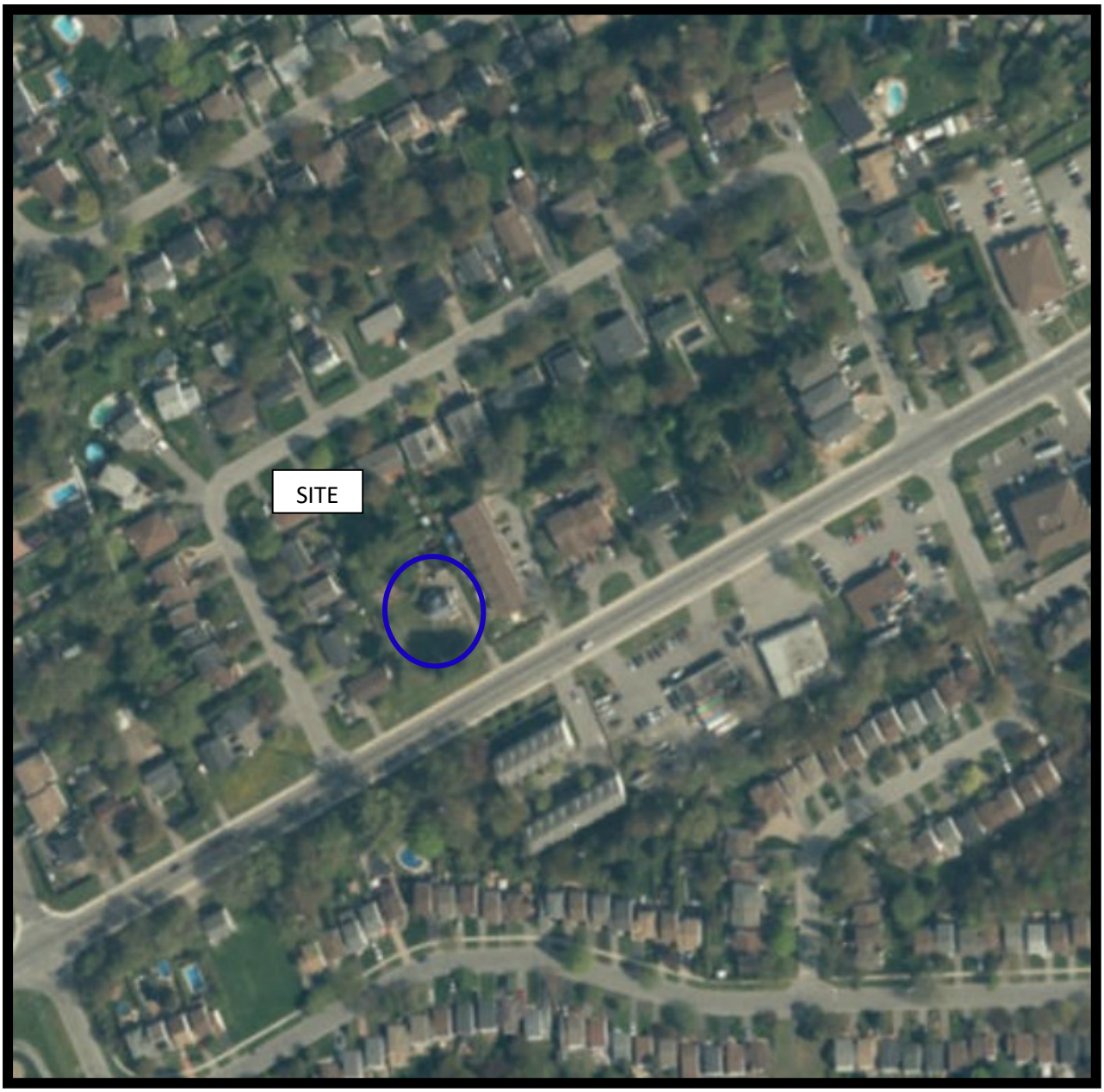


AERIAL PHOTOGRAPH

1976

AERIAL PHOTOGRAPH
1994

AERIAL PHOTOGRAPH
2005



AERIAL PHOTOGRAPH
2017

Site Photographs

PE4800 2487 Innes Road – Ottawa, ON December 13, 2019

Photograph 1: Front view of the subject property, looking north.

Photograph 2: Rear view of subject property, looking south.

APPENDIX 2

MECP FREEDOM OF INFORMATION SEARCH REQUEST

MECP WATER WELL RECORDS

TSSA CORRESPONDENCE

HLUI RESPONSE

Ontario Ministry of Environment and Energy

Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on completion and use of this form. Our fax no. is (416) 314-4285.

Requester Data			For Ministry Use Only	
Name, Company Name, Mailing Address and Email Address of Requester Samuel Berube Paterson Group Inc. 154 Colonnade Road Ottawa, ON K2E 7J5 **Email address:** sberube@patersongroup.ca			FOI Request No.	Date Request Received
			Fee Paid ☐ ACCT ☐ CHQ ☐ VISA/MC ☐ CASH	
Telephone/Fax Nos. Tel. 613-226-7381 Fax 613-226-6344	Your Project/Reference No. PE4800	Signature/Print /Name of Requester Samuel Berube	☐ CNR ☐ ER ☐ NOR ☐ SWR ☐ WCR ☐ SAC ☐ IEB ☐ EAA ☐ EMR ☐ SWA	

Request Parameters

Municipal Address / Lot, Concession, Geographic Township **(Municipal address essential for cities, towns or regions)**

2487 Innes Road, Ottawa, Ontario (One site)
Concession 2 Part of Lot 15, City of Ottawa.
PINs - 043970189

Present Property Owner(s) and Date(s) of Ownership

Fernando Matos

Previous Property Owner(s) and Date(s) of Ownership

N/A same owner 80 years

Present/Previous Tenant(s),(if applicable)

N/A

Search Parameters *Files older than 2 years may require $60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.*	**Specify Year(s) Requested**
Environmental concerns (General correspondence, occurrence reports, abatement)	all
Orders	all
Spills	all
Investigations/prosecutions ➤ Owner **AND** tenant information must be provided	all
Waste Generator number/classes	all

Certificates of Approval ➤ Proponent information must be provided

1985 and prior records are searched manually. **Search fees in excess of $300.00** could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). **If supporting documents are also required, mark SD box** and specify type e.g. maps, plans, reports, etc.

	SD	**Specify Year(s) Requested**
air - *emissions*		1986-present
water - *mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)*		1986-present
sewage - *sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations*		1986-present
waste water - *industrial discharges*		1986-present
waste sites - *disposal, landfill sites, transfer stations, processing sites, incinerator* sites		1986-present
waste systems - *PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste*		1986-present
pesticides - *licenses*		1986-present

A $5.00 non-refundable application fee, payable to the Minister of Finance, is mandatory. The cost of locating on-site and/or preparing any record is $30.00/hour and 20 cents/page for photocopying and you will be contacted for approval for fees in excess of $30.00.

UTM 18 Z 415520 E
19 R 5031061 10 N
Elev. 19 R 02410
Basin 25 - 11 - O.F.
Lot - 15

JIGSR

ONTARIO

15 No. 1480

RECEIVED
93 OCT 1[illegible]
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

County or District [redacted] Tp. Gloucester Con. III Lot 15 Pt. Lot 15
[redacted]ackburn Acres
[redacted]cluding pump)

Pipe and Casing Record

Casing diameter(s) 4 inch
Length(s) of casing(s) 139 feet
Length of screen
Type of screen
Type of pump
Capacity of pump
Depth of pump setting

Pumping Test

Date March 26/50
Developed Capacity
Duration of Test
Pumping Rate
Drawdown 20
Static level of completed well 210'
Is well a gravel-wall type? both rock & Gravel

Water Record

Kind (fresh or mineral) Sulphur
Quality (hard, soft, contains iron, sulphur etc.) Sulphur
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? House hold
How far is well from possible source of contamination? 48 feet
What is source of contamination? Seepage
Enclose a copy of any mineral analysis that has been made of water

Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
139	Sulphur	119

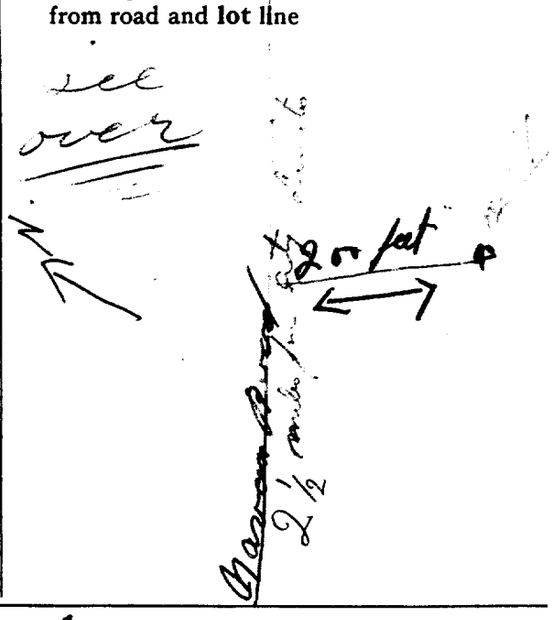
Well Log

Drift and Bedrock Record	From O ft.	To ..... ft.
Clay	0	98
Blue Rock	98	447
Slate & Limestone	447	95
	95	139

Location of Well

In diagram below show distances of well from road and lot line

see over



Situation: Is well on upland, in valley, or on hillside? low place
Drilling Firm Gordon Mulligan
Address Westboro Ontario
Recorded by James Rattles Address Ramsayville
Date March 25 Licence Number

UTM 1 8 Z 4 5 5 3 5 10 E 31G5h
5 5 0 1 3 0 1 5 6 10 N

Elev. 4 0 2 4 10

Basin 2 5 · 4 1

Lot 15

15 No 1481

GROUND WATER BRANCH
DEC 5 1960
ONTARIO WATER RESOURCES COMMISSION

The Ontario Water Resources Commission Act, 1957

WATER WELL RECORD

County or District Carleton — Township, Village, Town or City Gloucester

Con. 3 O F — Lot 15 — Date completed 21 (day) Nov (month) 60 (year)

Owner National Capital Commission (print in block letters) — Address 291 Carling Ave Ottawa

Casing and Screen Record

Inside diameter of casing 5"
Total length of casing 97'6"
Type of screen none
Length of screen none
Depth to top of screen
Diameter of finished hole 5"

Pumping Test

Static level 17'
Test-pumping rate 10 G.P.M.
Pumping level 65'
Duration of test pumping 1 hr
Water clear or cloudy at end of test cloudy
Recommended pumping rate 6 G.P.M.
with pumping level of 50'

Well Log

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)
brown sandy clay	0	8			
blue clay	8	92	92	121'	sulphur
coarse gravel	92	93	117		
black shale	93	145	139		

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

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

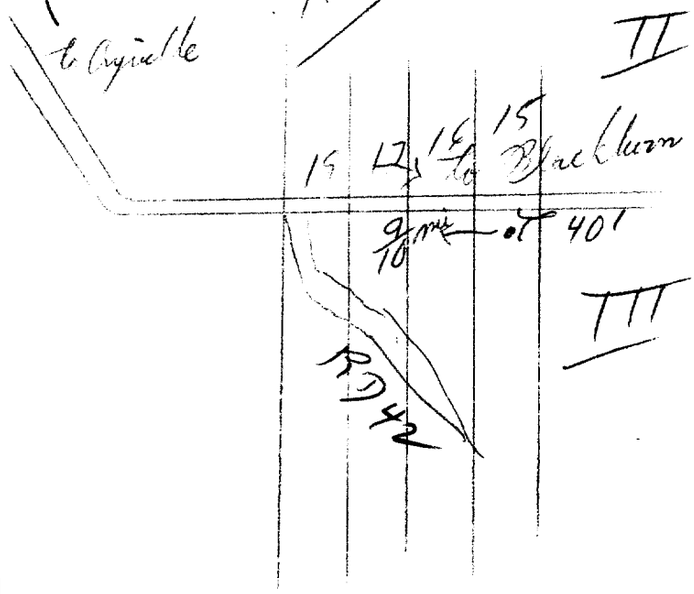
Drilling Firm W C Johnston Drilling Co Ltd
Address 1340 Bank
Ottawa

Licence Number 470
Name of Driller R W Renwick
Address Pakenham
Date Dec 21 60

W C Johnston Drilling Co Ltd
(Signature of Licensed Drilling Contractor)
Per Ray W Renwick

Location of Well

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



Form 5
15M-58-4149

Go Back to Map

Well ID

Well ID Number: 1535736
Well Audit Number: *Z31597*
Well Tag Number:

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	2526 OLD INNES ROAD
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455503.00 Northing: 5030861.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
				0 m	6 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	6 m	BENTONITE SLURRY	

Method of Construction & Well Use

Method of Construction	Well Use
Other Method	

Status of Well

Abandoned-Other

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth

Recommended pump rate	
Well Production	
Disinfected?	N

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	6 m	20 cm

Audit Number: Z31597

Date Well Completed: June 23, 2005

Go Back to Map

Well ID

Well ID Number: 7236428
Well Audit Number: *Z195913*
Well Tag Number: *A173883*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	2514 INNES RD
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455489.00 Northing: 5030833.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	SAND		SOFT	0 m	.61 m
BRWN	FSND		SOFT	.61 m	2.74 m

BRWN	FSND	SOFT	2.74 m	3.1 m
GREY	CLAY	SOFT	3.1 m	4.57 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE FLUSHMOUNT	
.31 m	1.22 m	BENTONITE	
1.22 m	4.57 m	SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	
	Monitoring and Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
4.03 cm	PLASTIC	0 m	1.5 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.82 cm	PLASTIC	1.5 m	4.57 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate

Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	4.57 m	8.25 cm

Go Back to Map

Well ID

Well ID Number: 7236429
Well Audit Number: *Z195912*
Well Tag Number: *A173882*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	2514 INNES RD
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455482.00 Northing: 5030862.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	SAND	GRVL	SOFT	0 m	.61 m
BRWN	FSND		SOFT	.61 m	2.74 m

BRWN	FSND	SOFT	2.74 m	3.1 m
GREY	CLAY	SOFT	3.1 m	4.57 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE FLUSHMOUNT	
.31 m	1.22 m	BENTONITE	
1.22 m	4.57 m	SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	
	Monitoring and Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
4.03 cm	PLASTIC	0 m	1.5 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.82 cm	PLASTIC	1.5 m	4.57 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate

Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	4.57 m	8.25 cm

Go Back to Map

Well ID

Well ID Number: 7236430
Well Audit Number: *Z195910*
Well Tag Number: *A173881*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	2514 INNES RD
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455473.00 Northing: 5030830.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	SAND	GRVL	SOFT	0 m	.61 m
BRWN	FSND		SOFT	.61 m	2.74 m

BRWN	FSND	SOFT	2.74 m	3.1 m
GREY	CLAY	SOFT	3.1 m	4.57 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE FLUSHMOUNT	
.31 m	1.22 m	BENTONITE	
1.22 m	4.57 m	SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	
	Monitoring and Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
4.03 cm	PLASTIC	0 m	1.5 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.82 cm	PLASTIC	1.5 m	4.57 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate

Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	4.57 m	8.25 cm

Go Back to Map

Well ID

Well ID Number: 7286574
Well Audit Number: *Z250783*
Well Tag Number: *A190071*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	2532 INNIS RD
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455515.00 Northing: 5030805.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	SAND		SOFT	0 m	2.13 m
GREY	CLAY	SILT	SOFT	2.13 m	4.27 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/ FLUSHMOUNT	
.31 m	.91 m	BENTONITE	
.91 m	4.27 m	SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
4.03 cm	PLASTIC	0 m	1.22 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.82 cm	PLASTIC	1.22 m	4.27 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level

If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	4.27 m	8.25 cm

Go Back to Map

Well ID

Well ID Number: 7286575
Well Audit Number: *Z250784*
Well Tag Number: *A190072*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	2532 INNES RD
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455523.00 Northing: 5030778.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	SAND		SOFT	0 m	2.13 m
GREY	CLAY	SILT	SOFT	2.13 m	4.27 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/ FLUSHMOUNT	
.31 m	.91 m	BENTONITE	
.91 m	4.27 m	SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
4.03 cm	PLASTIC	0 m	1.22 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.82 cm	PLASTIC	1.22 m	4.27 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level

If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	4.27 m	8.25 cm

Go Back to Map

Well ID

Well ID Number: 7289724
Well Audit Number: *Z250722*
Well Tag Number: *A190055*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	16 Tauvette St
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455073.00 Northing: 5030846.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	LOAM		SOFT	0 m	.31 m
BRWN	SILT	SAND	SOFT	.31 m	2.13 m

GREY	CLAY	SILT	SOFT	2.13 m	3.96 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	
.31 m	.61 m	BENTONITE	
.61 m	3.96 m	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring Test Hole

Status of Well

Observation Wells

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	.91 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	.91 m	3.96 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate

Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	3.96 m	11.43 cm

Go Back to Map

Well ID

Well ID Number: 7289740
Well Audit Number: *Z250809*
Well Tag Number: *A190047*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	16 TOUVETTE
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455102.00 Northing: 5030786.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	LOAM		SOFT	0 m	.31 m
BRWN	SILT	SAND	SOFT	.31 m	2.13 m

GREY	CLAY	SILT	SOFT	2.13 m	3.96 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/FLUSHMOUNT	
.31 m	.61 m	BENTONITE	
.61 m	3.96 m	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring Test Hole

Status of Well

Observation Wells

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	.91 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	.91 m	3.96 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate

Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	3.96 m	11.43 cm

Go Back to Map

Well ID

Well ID Number: 7291991
Well Audit Number: *C30062*
Well Tag Number: *A215226*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	
Township	GLOUCESTER TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 455190.00 Northing: 5030866.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed

Method of Construction & Well Use

Method of Construction	Well Use

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production

Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter

Audit Number: C30062

Date Well Completed: April 13, 2017

Date Well Record Received by MOE: August 08, 2017

Samuel Berube

From: Public Information Services <publicinformationservices@tssa.org>
Sent: November 20, 2019 9:01 AM
To: Samuel Berube
Subject: RE: PE4800 - 2487 Innes Road

NO RECORD FOUND (FUEL STORAGE TANKS ONLY)

Hello. Thank you for your request for confirmation of public information.

We confirm that there are no records in our database of any fuel storage tanks at the subject addresses.

For a further search in our archives please complete our release of public information form found at https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?_mid_=392 and email the completed form to publicinformationservices@tssa.org or through mail along with a fee of $56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

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

Kind regards,

Gaya

From: Samuel Berube <SBerube@Patersongroup.ca>
Sent: November 20, 2019 8:24 AM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: PE4800 - 2487 Innes Road

Could you please complete a search of your records for **underground/aboveground storage tanks, historical spills or other incidents/infractions** for the following addresses in Ottawa, ON:

Gravelle Crescent: 2470, 2476, 2480, 2498, 2502, 2505, 2508,
Innes Road: 2469
Pennington Lane: 2

Thank you,

Samuel Berube, B.Eng.

patersongroup
solution oriented engineering
over 60 years servicing our clients

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381
Cell: 613-558-0932

File Number: D06-03-19-0194

December 16, 2019

Samuel Berube
Paterson Group
154 Colonnade Road South
Ottawa, Ontario, K2E 7J5

Sent via email [sberube@patersongroup.ca]

Dear Mr. Berube,

Re: Information Request
<<2487 Innes Road>>, Ottawa, Ontario ("Subject Property")

Internal Department Circulation

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

- **Solid Waste Services:** The Solid Waste Services Database identifies properties that are located within 5 km of a Waste Management Facility. The Solid Waste Services Database has identified that the subject property is located within 4.5 km of the Metro2811 – Metro MRF (2811 Sheffield Road) and within 4.0 km of the Metro2475 – Metro MRF (2475 Sheffield Road).

Search of Historical Land Use Inventory

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

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

The HLUI database was also searched for activity associated with properties located within 250m of the Subject Property. The search revealed the following:

City of Ottawa
Planning, Infrastructure and Economic Development Department

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

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

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

- There are 9 unique activities associated with properties located within 250m of the Subject Property:

Please note that certain activities have been identified to have a PIN Certainty of "2". This identifier acknowledges that there is some uncertainty about the exact location of the land use activity and that the activity may or may not have been located on a Property. All database entries with a PIN Certainty of "2" require independent verification as to their precise location.

A **site map** and **table** have been included to show the location of the Subject Property as well as the location of all the activities noted above, including the HLUI database's location of the Activity Numbers with a PIN Certainty of "2".

Additional information may be obtained by contacting:

Ontario's Environmental Registry

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

The Ontario Land Registry Office

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

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

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

by the City with respect to the information's accuracy or exhaustiveness in responding to the request.

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

Please note that in responding to your request, the City of Ottawa does not guarantee or comment on the environmental condition of the Subject Property. You may wish to contact the Ontario Ministry of Environment and Climate Change for additional information.

If you have any further questions or comments, please contact Samantha Gatchene at 613-580-2424 ext. 14743 or HLUI@ottawa.ca

Sincerely,

Samantha Gatchene

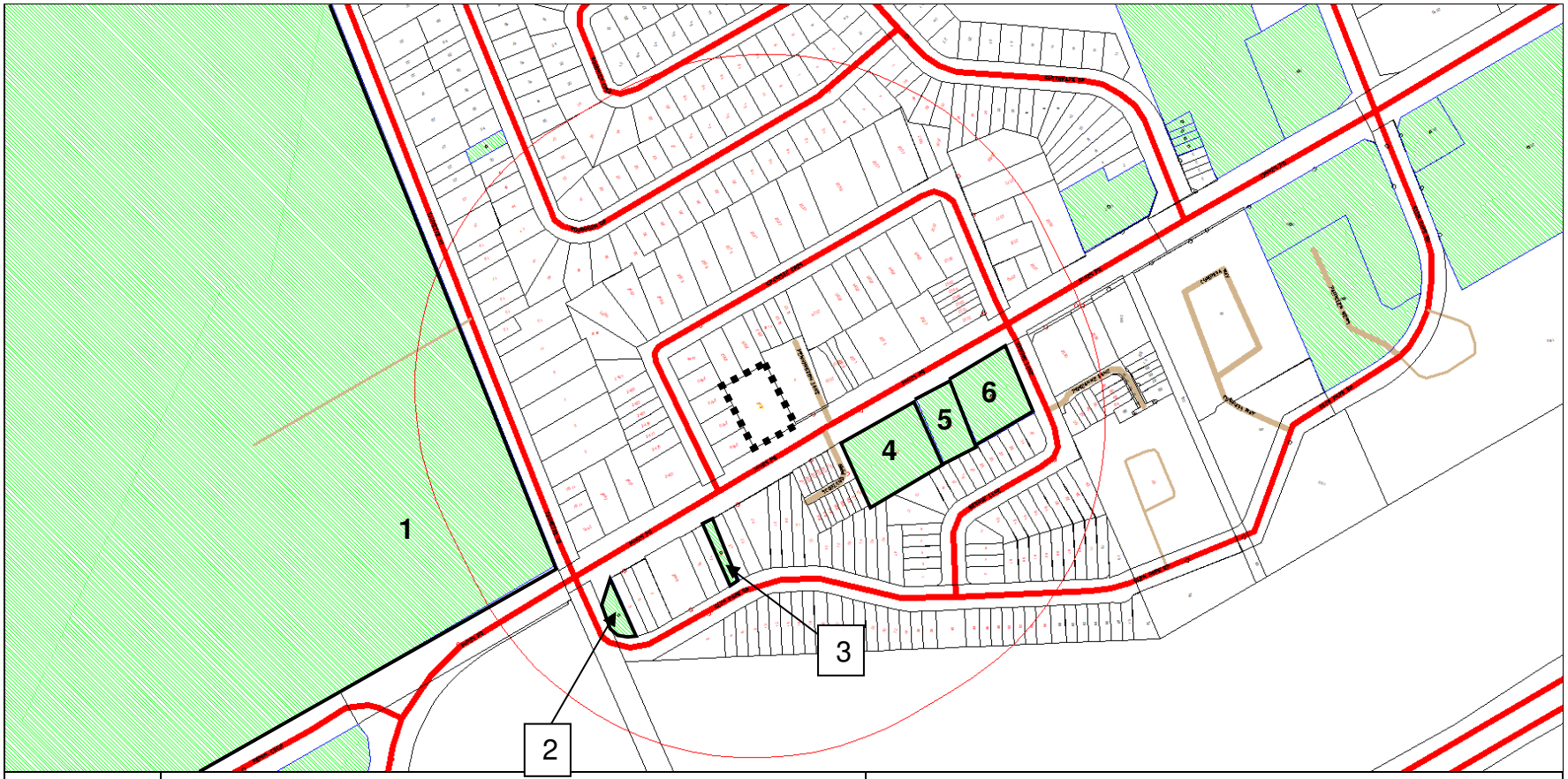
Per:

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

MB/ SG

Enclosures

cc: File no. D06-03-19-0194



Scale 1: n/a	2487 Innes Road Ottawa, ON File # D06-03-19-0194 Samantha Gatchene Ottawa	Overview = Subject Site = Area Number

HLUI Activity Table – D06-03-19-0194

Area Number	HLUI Activities Associated with Area	HLUI Activities with a PIN Certainty of 2*
Subject Property	No HLUI activities are associated with the subject property.	
1	2484	2484
2	13268	13268
3	2066	
4	10576, 1641, 7201	
5	2855	
6	1641, 1642, 43	

*This identifier acknowledges that there is some uncertainty about the exact location of the land use activity and that the activity may or may not have been located on a property. All database entries with a PIN Certainty of “2” require independent verification as to their precise location.

Historical Land Use Inventory

Activity Numbers –

Adjacent Properties

Historical Land Use Inventory

Area #1 Activity Numbers

CITY OF OTTAWA

HLUI ID: __670HY2

AREA (Square Metres): 3605852.683

Report: RPTC_OT_DEV0122

Run On: 12 Dec 2019 at: 14:45:11

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047460655	Y	N

Activity ID: 2484 **Multiple PINS:** N

PIN Certainty: 2 **Previous Activity ID(s) :** 6992

Related PINS: 047460655

Name: CANADIAN GOVERNMENT

Address: , GLOUCESTER

Facility Type: Other Chemical Products Industries

Comments 1: - property located Lot 17 & S. 1/2 of 16, Conn. 2, on the bank of Green's Creek - factory blew up in August 1901

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: Blackburn-Glen Ogilvie Centennial History-1867-1967-Mrs Anna Elliott

HL References 2:

HL References 3:

NAICS	SIC
325920	379
911110	811
325520	379
325910	379

Company Name	Year of Operation
Canadian Government	c. 1885-1901

Historical Land Use Inventory

Area #2 Activity Numbers

CITY OF OTTAWA

HLUI ID: __679EZF

AREA (Square Metres): 653.544

Report: RPTC_OT_DEV0122

Run On: 12 Dec 2019 at: 14:45:51

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030001	Y	N

Activity ID: 13268 **Multiple PINS:** N

PIN Certainty: 2 **Previous Activity ID(s) :** 6762

Related PINS: 044030001

Name: SUNOCO

Address: INNES ROAD, GLOUCESTER

Facility Type: Gasoline Service Stations

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: Township of Gloucester File #15-533-Subject:Sun Oil Co. Ltd.-Box 402

HL References 2:

HL References 3:

NAICS	SIC
811112	635
811121	635
447110	633
811119	635
447190	633
811199	633

Company Name	Year of Operation
Sunoco	c. 1979

Historical Land Use Inventory

Area #3 Activity Numbers

CITY OF OTTAWA

HLUI ID: __679943

AREA (Square Metres): 500.876

Report: RPTC_OT_DEV0122

Run On: 12 Dec 2019 at: 14:46:15

Study Year	PIN	Multi-NAIC	Multiple Activities
2005	044030009	N	N

Activity ID: 2066 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 044030009

Name: BROCK'S UNDERWATER POOL SERVICES

Address: 19 GLEN PARK DRIVE, OTTAWA

Facility Type: Recreational Vehicle Dealers (where servicing is present)

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2001 Employment Survey

NAICS	SIC
811490	0

Company Name	Year of Operation
BROCK'S UNDERWATER POOL SERVICES	c. 2001

Historical Land Use Inventory

Area #4 Activity Numbers

CITY OF OTTAWA

HLUI ID: __679FDM

AREA (Square Metres): 3948.850

Report: RPTC_OT_DEV0122

Run On: 12 Dec 2019 at: 14:47:00

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030349	Y	Y

Activity ID: 10576 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 044030349

Name: PETRO-CANADA INC.

Address: 2506 INNES ROAD, GLOUCESTER

Facility Type: Gasoline Service Stations

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2005 Property Assessment

NAICS	SIC
447110	0
447190	0

Company Name	Year of Operation
PETRO-CANADA INC.	c. 2005

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030349	Y	Y

Activity ID: 1641
Multiple PINS: Y
PIN Certainty: 1
Previous Activity ID(s) : 3343
Related PINS: 044030347

Name: BLACKBURN GULF STATION
Address: 2506 INNES ROAD, GLOUCESTER
Facility Type: Gasoline Service Stations
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1960, M.1970, M.1980; SC98
HL References 2:
HL References 3:

NAICS	SIC
447190	633
811121	635
447110	633
811199	633
811112	635
811119	635

Company Name	Year of Operation
Blackburn Gulf Station	c. 1980
J & S Service Station	c. 1998

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030349	Y	Y

Activity ID: 7201 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 044030349

Name: J & S SERVICE STATION
Address: 2506 INNES ROAD,
Facility Type: Motor Vehicles, Wholesale
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2005 Select Phone

NAICS	SIC
811111	0

Company Name	Year of Operation
J & S SERVICE STATION	c. 2005
J & S SERVICE STATION	c. 2001

Historical Land Use Inventory

Area #5 Activity Numbers

CITY OF OTTAWA

HLUI ID: __679FUO

AREA (Square Metres): 1755.698

Report: RPTC_OT_DEV0122

Run On: 12 Dec 2019 at: 14:47:26

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030348	Y	N

Activity ID: 2855 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :** 3983

Related PINS: 044030348

Name: CERAMICS BY LISE

Address: 2514 INNES ROAD, GLOUCESTER

Facility Type: Other Machinery and Equipment Industries

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: SC98

HL References 2:

HL References 3:

NAICS	SIC
332991	319
333291	319
336120	319
333220	319
333299	319
333120	319
333130	319
335990	319
333210	319
336510	319
327110	351
333110	319
333910	319
336211	319
327120	351
333611	319

Company Name	Year of Operation
Ceramics By Lise	c. 1998

Historical Land Use Inventory

Area #6 Activity Numbers

CITY OF OTTAWA

HLUI ID: __679F9V

AREA (Square Metres): 3072.063

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030347	Y	Y

Activity ID: 1641 **Multiple PINS:** Y

PIN Certainty: 1 **Previous Activity ID(s) :** 3343

Related PINS: 044030347

Name: BLACKBURN GULF STATION

Address: 2506 INNES ROAD, GLOUCESTER

Facility Type: Gasoline Service Stations

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1960, M.1970, M.1980; SC98

HL References 2:

HL References 3:

NAICS	SIC
447190	633
811121	635
447110	633
811199	633
811112	635
811119	635

Company Name	Year of Operation
Blackburn Gulf Station	c. 1980
J & S Service Station	c. 1998

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030347	Y	Y

Activity ID: 1642 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :** 6919

Related PINS: 044030347

Name: BLACKBURN HAMLET SHELL
Address: 2526 INNES ROAD, GLOUCESTER
Facility Type: Petroleum Products, Wholesale
Comments 1:
Comments 2:
Generator Number: ON0005189
Storage Tanks:
HL References 1: PID1994
HL References 2:
HL References 3: 2000 PID

NAICS	SIC
454310	0
454310	511
419120	511
412110	0
419120	0
447190	0
412110	511
447110	0

Company Name	Year of Operation
BLACKBURN HAMLET SHELL	c. 2005
BLACKBURN HAMLET SHELL	c. 2000
Blackburn Hamlet Shell	c. 1994

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	044030347	Y	Y

Activity ID: 43 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 044030347

Name: 1479227 ONTARIO INC.
Address: 2526 INNES ROAD, GLOUCESTER
Facility Type: Gasoline Service Stations
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2005 Property Assessment

NAICS	SIC
447110	0
447190	0

Company Name	Year of Operation
1479227 ONTARIO INC.	c. 2005

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Samuel Berube, B. Eng.

patersongroup

Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

POSITION

Junior Environmental Engineer

EDUCATION

University of Guelph, B.Eng., 2019
Environmental Engineering

EXPERIENCE

2019 – Present
Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Junior Environmental Engineer

2018
Health Canada FNIHB
Proposal and Final Design Review
Student Engineer

SELECT LIST OF PROJECTS

Subgrade Reviews – Various Sites – Ottawa
Density Testing – Residential and Commercial Sites – Ottawa
Bearing Surface Investigations – Various Sites - Ottawa
Density Testing – Various Sites - Ottawa
Phase I Environmental Site Assessments – Residential and Commercial Sites – Ottawa (CSA Z768-01)
Contaminated Soil and Groundwater Sampling – Various Sites – Ottawa

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