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**paterson**group

**Phase I - Environmental Site Assessment**

5431 & 5505 Fernbank Road  
Ottawa, Ontario

Prepared For

Mattamy Homes

March 30, 2017

Report: PE3996-1

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## **EXECUTIVE SUMMARY**

### **Assessment**

A Phase I – Environmental Site Assessment was carried out for the properties addressed 5431 and 5505 Fernbank Road, in the City of Ottawa, Ontario. The purpose of this environmental assessment was to research the past and current use of the subject site and neighbouring properties and identify any environmental concerns with the potential to have impacted the subject site.

Based on a review of historical sources, the subject site was agricultural fields with associated farmsteads from before 1945 until after 2011, when portions of the site were prepared for residential re-development. Surrounding properties have historically been agricultural but recent residential and commercial development has occurred on the properties to the north, east and west.

The historical review determined that private aboveground storage tanks (ASTs) were present on the subject site but no indications of surficial contamination were observed during associated site visits. Furthermore, investigative boreholes found no indication of sub-surface contamination. Historical potentially contaminating activities (PCAs) were not identified within the Phase I study area.

Following the historical review, two (2) site visits were conducted. The site is currently vacant agricultural land. At the time of the site visits, in an area to the west of the residential dwelling formerly listed as 5555 Fernbank, some heavy equipment, several empty oil, gas and anti-freeze containers, and other general debris were observed. All of the noted containers were empty. No staining on the ground surface or adverse odours were detected. It appears that these items were being stored at this location prior to disposal.

Surrounding land use consists of agricultural, residential and commercial properties. An automotive service garage is present to the east of the subject site but due to its recent construction date (2015), is not considered a concern. No other PCAs were identified within the Phase I study area.

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

### **Recommendations**

It is recommended that the identified waste items be properly disposed of and that future waste generated onsite be properly stored in preparation for disposal.

## **1.0 INTRODUCTION**

At the request of Mattamy Homes Ltd., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of 5431 and 5505 Fernbank Road, in the City of Ottawa, Ontario (hereby referred to as the subject site). Note that the property formerly listed as 5555 Fernbank Road, is now incorporated into the 5505 Fernbank Road property. The purpose of this Phase I ESA was to research the past and current use of the subject site and study area and identify any environmental concerns with the potential to have impacted the subject site.

Paterson was engaged to conduct this Phase I ESA by Mr. Connor Gallagher of Mattamy Homes Inc. Mattamy Homes' Ottawa Office is located at 50 Hines Road, Suite 100, Ontario. Mr. Gallagher can be reached by telephone at (613) 831-3520.

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

This Phase I-ESA report has been prepared in general accordance with 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:	5431 and 5505 Fernbank Road, Ottawa, Ontario.
Legal Description:	5431 Fernbank: Part of Lot 30, Concession 10, former Township of Goulbourn (City of Ottawa);  5505 Fernbank: Part of Lots 29 and 30, Concession 10, former Township of Goulbourn (City of Ottawa).
Property Identification Numbers:	04450-2427, 04450-2466 and 04450-2467.
Location:	The subject site is located on the north side of Fernbank Road, west of Terry Fox Drive, in the City of Ottawa, Ontario. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	5431 Fernbank: 45° 16' 23" N, 75° 52' 16" W;  5505 Fernbank: 45° 16' 15" N, 75° 52' 41" W;
<b>Site Description:</b>	
Configuration:	Irregular.
Site Area:	50 ha (approximate total).
Zoning:	5431 Fernbank: I1/R3 – Institutional/Residential Zone  5505 Fernbank: DR – Development Reserve Zone.
Current Use:	The subject site is part recent agricultural cultivation and vacant land. The vacant portions have stockpiled soil and pre-consolidation piles present.
Services:	The subject site is not serviced. Residential dwellings to the south are serviced by private wells and septic systems while newer residential dwellings to the north, east and west are 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 outside the 250 m radius are not considered to have the potential to impact the subject land, based on their significant distance from the site.

#### **First Developed Use Determination**

Based on a review of available historic information, the subject site has been used for agricultural (including several farmsteads) purposes since at least 1945.

#### **Fire Insurance Plans**

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

#### **City of Ottawa Street Directories**

City street directories from 1979 to 2010, were reviewed at approximate ten (10) year intervals. According to the directories, the subject site was not listed but surrounding properties were listed as residential.

#### **Other Engineering Reports**

Paterson and other firms have conducted various environmental assessments on and in the vicinity of the subject site. During a 2010 Phase I ESA, Paterson observed two (2) small aboveground storage tanks (ASTs) on the property addressed 5431 Fernbank Road. Both tanks were empty and not in use. One of the tanks had been brought in from another site and was reportedly never used on site. No staining or adverse odours were detected at the time of the assessments. Paterson advanced a borehole in the vicinity of the second AST to confirm our observations and found no signs of deleterious fill material or petroleum impacts. The presence of used vehicles and construction equipment storage, as well as random fill piles and occasional debris were noted in the other reports. Paterson and others determined that a Phase II ESA was not required at the time of their respective assessments (2010 and 2014).

## **Geotechnical Investigation**

Paterson conducted a geotechnical investigation in conjunction with the ESA completed in 2010. Nine (9) boreholes were advanced in selected locations throughout the subject property. The soil profile generally consisted of cultivated topsoil over approximately 2 m of brown silty sand, underlain by grey clayey silt or silty clay. Groundwater levels were determined to be approximately 2 to 3 m below the surface. No evidence of contaminants or deleterious fill was noted.

## **Plan of Survey**

Paterson was provided a Survey Plan, dated May 31, 2012, prepared by Annis, O'Sullivan, Vollebekk Ltd. The plan depicts the subject site in its current configuration. A copy of the plan is included in Appendix 1 of this report.

## **4.2 Environmental Source Information**

### **Environment Canada**

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on March 15, 2017. The subject site and surrounding properties are not listed in the NPRI database.

### **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 and Climate Change (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. Applicable information of current and historical waste storage locations, waste generators and waste receivers pursuant to Ontario Regulation 347 was considered in this review. 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 that 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 RSCs were filed for properties 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**

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

## **Technical Standards and Safety Authority (TSSA)**

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on March 15, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. The response from the TSSA indicated that 5357 Fernbank Road has a record of an active cylinder exchange facility. This is not considered an environmental concern to the subject site. A copy of the TSSA correspondence 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.

## **City of Ottawa Historical Land Use Inventory (HLUI) Database**

A request for information from the City’s Historical Land Use Inventory (HLUI 2005) database for the subject site was sent on March 30, 2017 to the City of Ottawa. 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.

## **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 subject site. Based on the review, the following observations have been made:

1945	The subject site is occupied by vacant agricultural fields and associated farmsteads. Surrounding lands are also agricultural fields.
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1955	No changes appear to have been made to the subject site or surrounding properties.
1976	(City of Ottawa website) No changes appear to have been made to the subject site or surrounding properties.
1985	No changes appear to have been made to the subject site or neighbouring properties.
1993	No changes appear to have been made to the subject site or neighbouring properties.
2002	No changes appear to have been made to the subject site or neighbouring properties.
2014	The majority of the building structures on the subject site have been removed, with the exception of the dwelling formerly listed as 5555 Fernbank Road. To the east of the subject site, a commercial complex has been constructed while to the northwest a storm water management pond is present. Properties further to the east and northwest have been developed with residential dwellings.

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 and from the City of Ottawa website. The topographic map depicts the subject site in a residential and agricultural area, with an approximate elevation of 100 m above sea level (asl). Regionally, the topographic maps indicate a downward slope to the southeast. According to the map, the nearest water body is the Carp River, approximately 1500 m to the north. An illustration of the referenced topographic map is presented in 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. 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.” Mapping shows the subject site as situated in an area of limestone plains.

## **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 this information, bedrock in the area of the site consists of limestone and dolomite of the Gull River Formation. The subject site is located in an area of offshore marine sediment of clay and silt, and drift thickness ranges from 3 to 25 m.

## **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 March 15, 2017. The search identified fifteen (15) drinking water wells in the Phase I study area. None of these wells are situated on the subject site.

## **Water Bodies and Areas of Natural Significance**

The Carp River is located approximately 1500 m to the north of the subject property. No areas of natural significance are located on the subject site or within the Phase I study area.

# **5.0 INTERVIEWS**

## **Property Owners and Representatives**

Mr. Connor Gallagher, of Mattamy Homes Ltd., was available to answer questions via email. Mr. Gallagher was not aware of any environmental concerns with respect to the subject site.

# **6.0 SITE RECONNAISSANCE**

## **6.1 General Requirements**

Visits to the subject site were conducted on March 13 and 29, 2017 by personnel from the Environmental Department of Paterson Group. In addition to the site, the uses of neighbouring properties were also assessed. The site was partially snow covered at the time of the visit.

## **6.2 Specific Observations at Phase I Property**

### **Buildings and Structures**

The property formerly listed as 5555 Fernbank Road still has a three-storey residential dwelling present. The dwelling was reportedly constructed in 1935



with the south addition completed in the 1970s. The dwelling's main floor is currently used for construction material storage while the 2nd floor, 3rd floor and basement are not used. The 2nd and 3rd floors were observed to be vacant while the basement contained unused water treatment tanks and freezers, along with garbage and debris. An active sump in the original basement was inspected and no indications of contamination were noted. The basement of the addition, its floor being approximately 45-60 cm lower than that of the original basement, had 30-45 cm of standing water present. The dwelling has a poured concrete foundation, wood frame with vinyl siding finish and a sloped shingled roof. Interior building materials included lathe and plaster walls and ceilings, and ceramic tile, vinyl tile, linoleum and hardwood flooring. Insulation was observed to be cellulose blown-in and wood shavings in the second floor ceiling, and pink batt style fibreglass in select locations. Heating for the dwelling was provided by a forced air furnace (currently not functional) that based on previous reports, used fuel oil. Electric baseboards were also observed within the dwelling.

Construction office trailers, storage containers and dumpsters were also present on site. No other buildings or structures were present on the subject site at the time of the site visits.

### **Site Features**

The majority of the site is vacant, cleared land. Stockpiled soil was present in various locations throughout the subject site (as a result of nearby construction activities) and a pre-consolidation pile is situated along the northwestern property boundary. A stormwater management pond borders the northwest corner of the subject site and is associated with the Monahan Drain; Branch B bordering the northern property perimeter and Branch 3 bordering the western property perimeter. Site topography is generally flat and regional topography slopes downward to the southeast. Site drainage consists primarily of infiltration.

No evidence of current or former railway or spur lines, nor unidentified substances were observed at the time of the site visits.

Some waste materials were observed to the west of the 5555 former dwelling. Waste materials consisted of used tires, a car battery, a propane tank and empty gasoline, oil and anti-freeze containers. No staining or adverse odours were noted around these items. It appears that they have just been stored at this location. This general area was also used for parking of onsite heavy equipment. The above-noted site features are shown on Drawing PE3996-1 - Site Plan.

## **Neighbouring Properties**

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

- North – Monahan Drain Branch C, followed by residential properties;
- South – Fernbank Road, followed by residential/agricultural properties;
- East – Commercial properties (Banking institutions, Bulk Barn, Dollarama, Jiffy Lube, restaurants and Walmart), followed by Terry Fox Drive;
- West – Monahan Drain Branch 3, followed by vacant/under residential re-development lands.

The Jiffy Lube establishment consistently handles used oil and other automotive chemicals and is considered a PCA, but since this is a newer establishment (2015 construction) and is located over 100 m from the site, is not considered to result in an APEC on the subject site. No other potentially contaminating activities (PCAs) were identified in the vicinity of the subject site.

## 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.

<b>Table 1 - Land Use History</b>					
<b>Year</b>	<b>Address</b>	<b>Name of Owner</b>	<b>Description of Property Use</b>	<b>Property Use</b>	<b>Other Observations from Aerial Photos, FIPs, etc.</b>
Prior to 2006	5431	Anthony and Glen van Doormaal	Agricultural fields and associated farmsteads	Agricultural	A barn and silos are present on site.
	5505	- SRI Ltd. - 891748 Ontario Ltd. - Margaret Watters	Agricultural fields and associated farmsteads	Agricultural	The dwelling at 5505 is present. A large barn and other structures are present around 5555.
2006 to 2010	5431	Anthony and Glen van Doormaal	Agricultural fields and associated farmsteads	Agricultural	No other significant observations.
	5505	Mattamy Homes	Agricultural fields and associated farmsteads	Agricultural	The dwelling at 5505 has been removed.
2010 to present	5431	Mattamy Homes	Agricultural fields	Agricultural	The barn and silos have been removed.
	5505	Mattamy Homes	Agricultural fields and associated farmsteads. The northwestern portion is an active construction area.	Agricultural	The large barn and other structures at 5555 have been removed. The soil surface in the northwestern portion appears recently disturbed.

### **Potentially Contaminating Activities (PCAs)**

The area west of the 5555 former dwelling was observed to have some waste materials present, however, no staining or adverse odours were detected in this area. Due to the small quantity of waste materials and absence of visible surface soil and water impacts, the waste storage area is not considered a PCA. No other PCAs were observed on the subject site at the time of the assessment.

The Jiffy Lube to the east of the subject site is considered a PCA but due to its newer construction date (2015) and distance from the subject site, it does not represent an area of potential environmental concern (APEC).

### **Areas of Potential Environmental Concern (APEC)**

No PCAs were identified on the subject site. As well, no PCAs with the potential to impact the subject property were identified on surrounding properties. Therefore, APECs are not considered to be present on the subject site.

### **Contaminants of Potential Concern (CPCs)**

No APECs were identified on the subject site. Therefore, CPCs are not anticipated to be present on the subject site.

## **7.2 Conceptual Site Model**

### **Geological and Hydrogeological Setting**

Based on information from the Geological Survey of Canada, drift thickness is in the range of 3 to 25 m throughout the subject site and overburden soils consist of offshore marine sediments of clay and silt. Bedrock consists of limestone and dolomite of the Gull River Formation. Hydrogeological conditions are anticipated to mimic the topographic setting; as a result, groundwater is expected to flow towards the south. Although, the storm water management pond to the northwest and the Monahan Drain branches to the north and west, may influence groundwater flow.

### **Contaminants of Potential Concern**

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

### **Existing Buildings and Structures**

The building at 5505 Fernbank (formerly 5555) is a three-storey former residential dwelling. Due to the age of the building, asbestos containing materials (ACMs) and other designated substances may be present. Also on site

are construction office and storage trailers. At the time of the site visits, no other buildings or structures were present on the subject site.

### **Water Bodies**

The Carp River is situated approximately 1500 m to the north of the subject site.

### **Areas of Natural Significance**

There are no areas of natural significance within the 250 m study area.

### **Drinking Water Wells**

A total of fifteen (15) drinking water well records were identified in the Phase I study area. None of these wells are located on the subject site.

### **Neighbouring Land Use**

Neighbouring land use in the Phase I study area consists of residential, commercial and agricultural. To the north and west are recently constructed, or currently under construction, residential properties; to the south are residential and agricultural properties and to the east are recently constructed (within last 5 years) commercial properties. Land use is shown on Drawing PE3996 - 2 - Surrounding Land Use Plan.

### **Potentially Contaminating Activities and Areas of Potential Environmental Concern**

As per section 7.1 of this report, no PCAs were identified on the subject property. One (1) PCA was identified within the phase I study area but due to its recent construction and distance from the subject site, is not considered an environmental concern. Therefore, no APECs are present on the subject site.

### **Assessment of Uncertainty and/or Absence of Information**

The limited number of PCAs within the Phase I study area and the lack thereof on the subject property was confirmed by a variety of independent sources. 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

A Phase I – Environmental Site Assessment was carried out for the properties addressed 5431 and 5505 Fernbank Road, in the City of Ottawa, Ontario. The purpose of this environmental assessment was to research the past and current use of the subject site and neighbouring properties and identify any environmental concerns with the potential to have impacted the subject site.

Based on a review of historical sources, the subject site was agricultural fields with associated farmsteads from before 1945 until after 2011, when portions of the site were prepared for residential re-development. Surrounding properties have historically been agricultural but recent residential and commercial development has occurred on the properties to the north, east and west.

The historical review determined that private aboveground storage tanks (ASTs) were present on the subject site but no indications of surficial contamination were observed during associated site visits. Furthermore, investigative boreholes found no indication of sub-surface contamination. Historical potentially contaminating activities (PCAs) were not identified within the Phase I study area.

Following the historical review, two (2) site visits were conducted. The site is currently vacant agricultural land. At the time of the site visits, in an area to the west of the residential dwelling formerly listed as 5555 Fernbank, some heavy equipment, several empty oil, gas and anti-freeze containers, and other general debris were observed. All of the noted containers were empty. No staining on the ground surface or adverse odours were detected. It appears that these items were being stored at this location prior to disposal.

Surrounding land use consists of agricultural, residential and commercial properties. An automotive service garage is present to the east of the subject site but due to its recent construction date (2015), is not considered a concern. No other PCAs were identified within the Phase I study area.

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

### Recommendations

It is recommended that the identified waste items be properly disposed of and that future waste generated onsite be properly stored in preparation for disposal.

## 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 Mattamy Homes Ltd. Permission and notification from Mattamy Homes and Paterson will be required to release this report to any other party.

**Paterson Group Inc.**

Greg van Loenen, B.Eng.

Mark S. D'Arcy, P.Eng.



### Report Distribution:

- Mattamy Homes Ltd.
- Paterson Group Inc.

## **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.  
Office of Technical Standards and Safety Authority, Fuels Safety Branch.  
MNRF Areas of Natural Significance.  
MOECC Water Well Inventory.

### **Municipal Records**

City of Ottawa Document “Old Landfill Management Strategy, Phase I - Identification of Sites.”, prepared by Golder Associates, 2004.  
City of Ottawa Historical Land Use Inventory (HLUI) database.  
The City of Ottawa eMap website.

### **Local Information Sources**

Plan of Survey, prepared by Stantec Geomatics, dated November 8, 2016.  
Personal Interviews.  
Previous Engineering Reports.

### **Public Information Sources**

Google Earth.  
Google Maps/Street View.



# **FIGURES**

**FIGURE 1 – KEY PLAN**

**FIGURE 2 – TOPOGRAPHIC MAP**

**DRAWING PE3996–1 – SITE PLAN**

**DRAWING PE3996–2 – SURROUNDING LAND USE PLAN**



FIGURE 1  
KEY PLAN

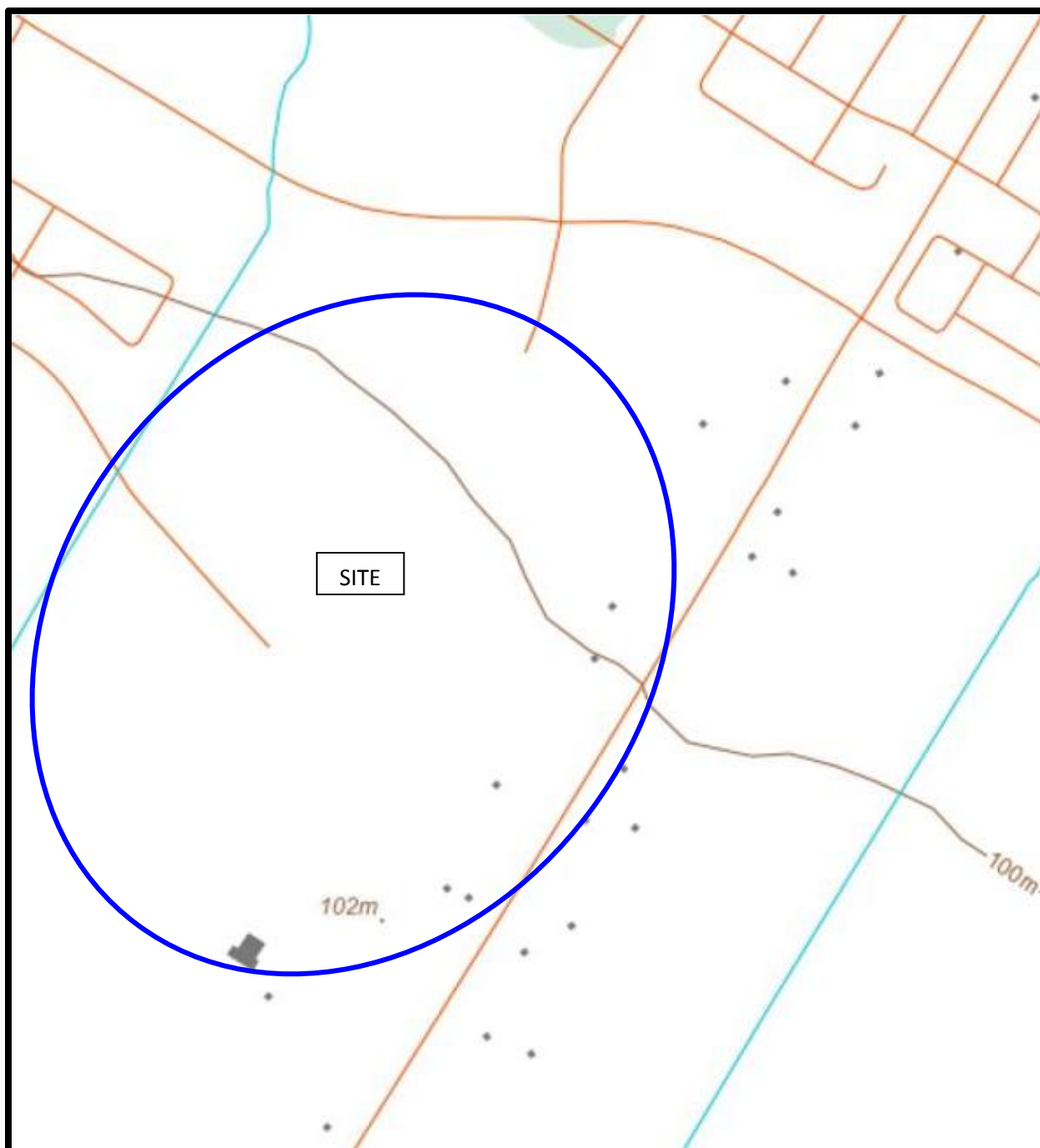
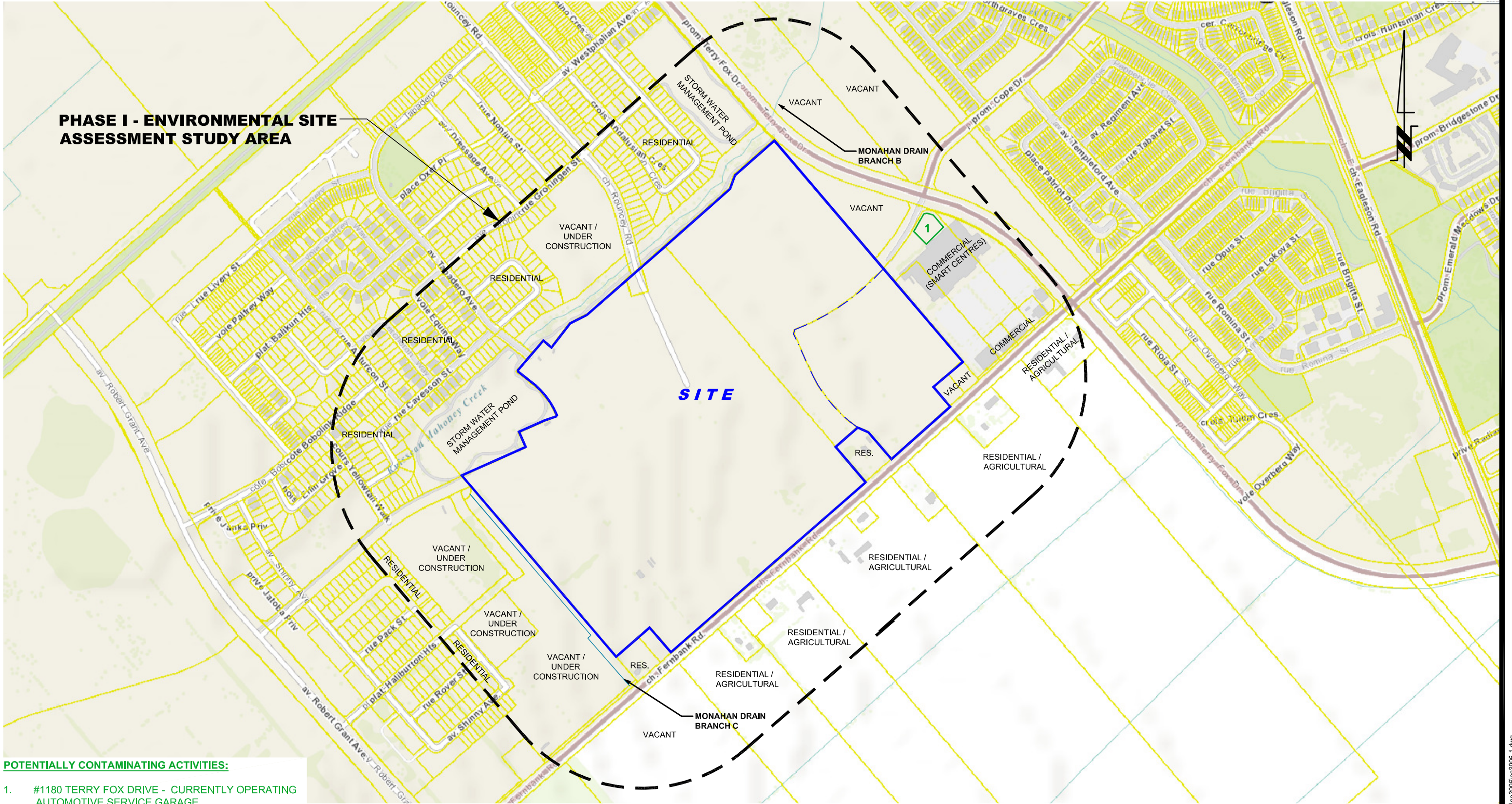


FIGURE 2  
TOPOGRAPHIC MAP







- POTENTIALLY CONTAMINATING ACTIVITIES:**
- #1180 TERRY FOX DRIVE - CURRENTLY OPERATING AUTOMOTIVE SERVICE GARAGE

**patersongroup**  
consulting engineers

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Ottawa, Ontario K2E 7J5  
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0			
NO.	REVISIONS	DATE	INITIAL

MATTAMY HOMES  
PHASE I - ENVIRONMENTAL SITE ASSESSMENT  
5431 & 5505 FERNBANK ROAD  
OTTAWA, ONTARIO  
Title: **SURROUNDING LAND USE PLAN**

Scale:	~1:7500	Date:	03/2017
Drawn by:	RCG	Report No.:	PE3996-1
Checked by:	GVL	Dwg. No.:	<b>PE3996-2</b>
Approved by:	MSD	Revision No.:	0

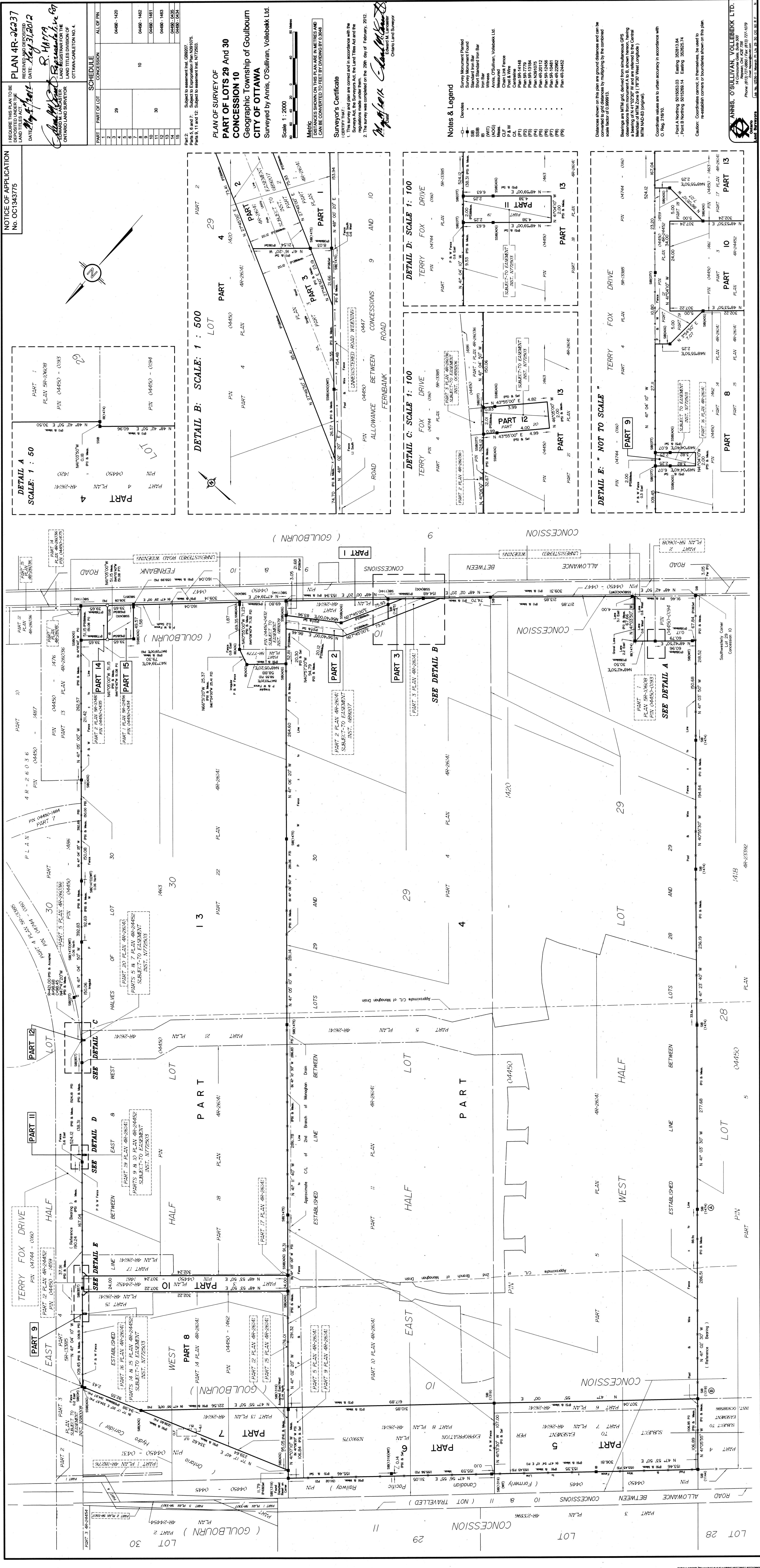


# **APPENDIX 1**

**PLAN OF SURVEY**

**AERIAL PHOTOGRAPHS**

**SITE PHOTOGRAPHS**



NOTICE OF APPLICATION  
No. OC134375

REQUIRE THIS PLAN TO BE  
DEPOSITED UNDER THE  
LAND REGISTRATION ACT  
DATE: *May 31, 2012*

PLAN 4R-26237  
RECEIVED AND DEPOSITED  
DATE: *May 31, 2012*

*R. H. H. H.*  
EDWARD M. LANGSTON  
LAND REGISTRATION ACT  
OTAWA-CARLETON NO. 4

RECEIVED AND DEPOSITED  
DATE: May 31, 2012  
DATE: May 5, 2011

EDWARD M. LANDMASTER  
LAND REGISTRAR FOR THE  
ONTARIO LAND SURVEYOR  
OTTAWA-CARLETON NO. 4.

*Edward M. Landmaster*  
R. 14119

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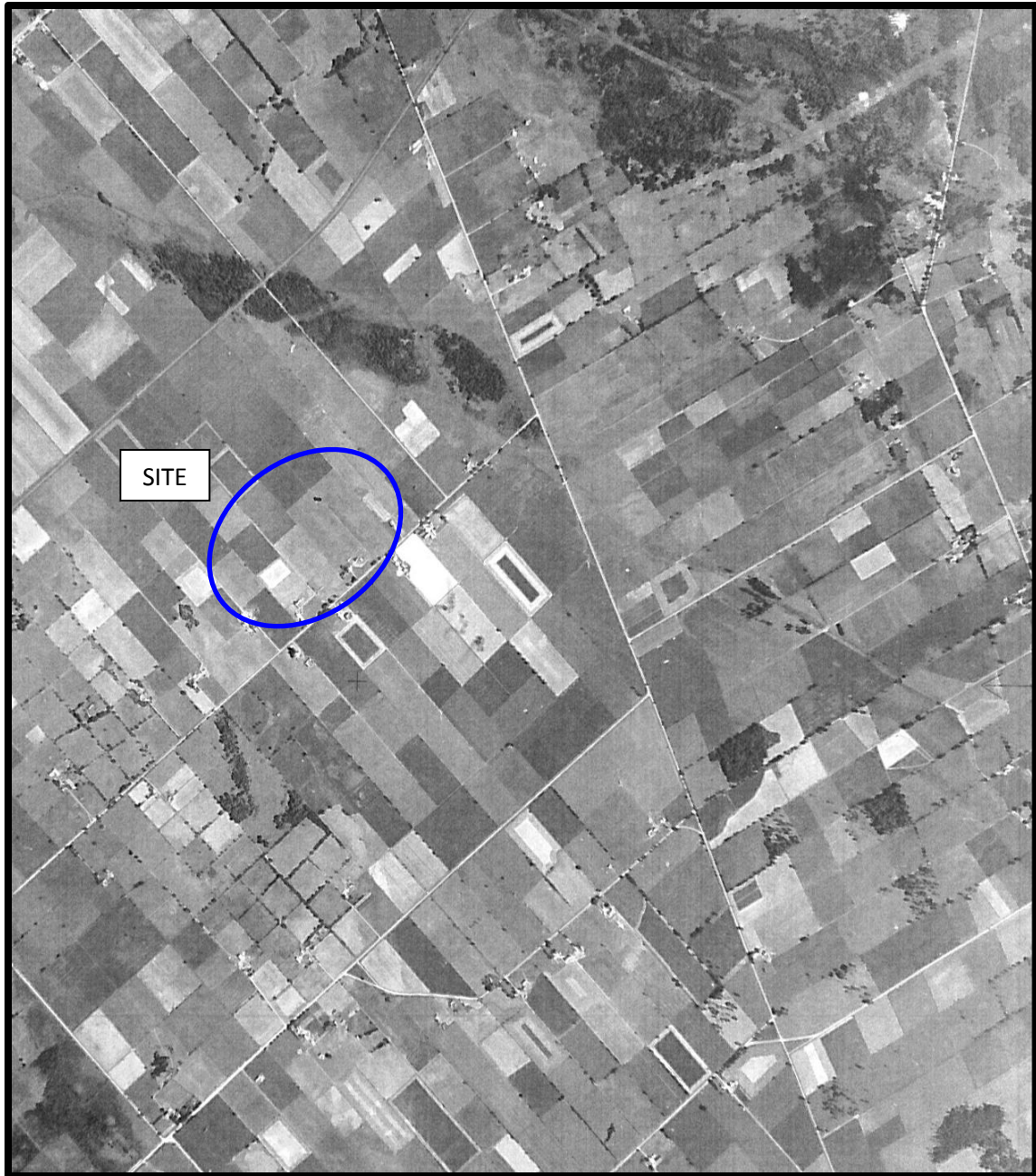
PLAN 4H-261





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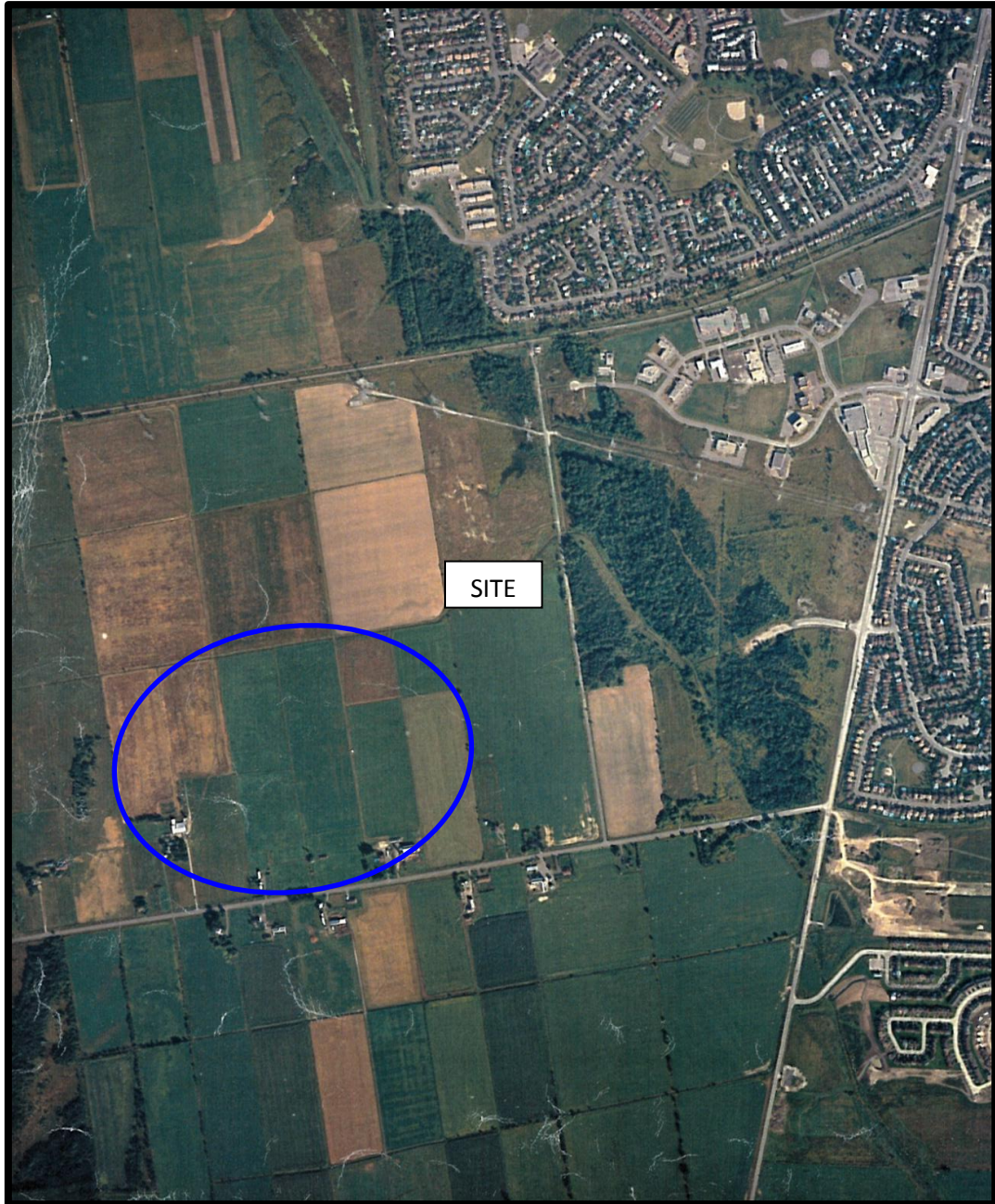


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1993





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2002

## Site Photographs

PE3996

5431 & 5505 Fernbank Road, Ottawa, Ontario

March 13 and 29, 2017



Photograph 1: View of the east property line of 5431 Fernbank Road, looking south from the west end of Cope Drive.



Photograph 2: View of 5431 and 5505 Fernbank Road, looking west from the west end of Cope Drive. The property boundary separating 5431 and 5505 is approximately in the center of the photograph.



## Site Photographs

PE3996

5431 & 5505 Fernbank Road, Ottawa, Ontario

March 13 and 29, 2017



Photograph 3: View of the east property line of 5505 Fernbank Road, looking north from the west end of Cope Drive. Terry Fox Drive can be seen on the right-hand side.



Photograph 4: View of the north property boundary of 5505 Fernbank Road, looking east from the south end of Tapadero Avenue. The Monahan Drain, Branch B, can be seen on the center-right side.

## Site Photographs

PE3996

5431 & 5505 Fernbank Road, Ottawa, Ontario

March 13 and 29, 2017



Photograph 5: View of 5505 Fernbank Road, looking south from the south end of Tapadero Avenue.



Photograph 6: View of the northwest corner of 5505 Fernbank Road, looking southwest from the south end of Tapadero Avenue. The Storm Water Management Pond associated with the Monahan Drain can be seen in the center of the photograph.

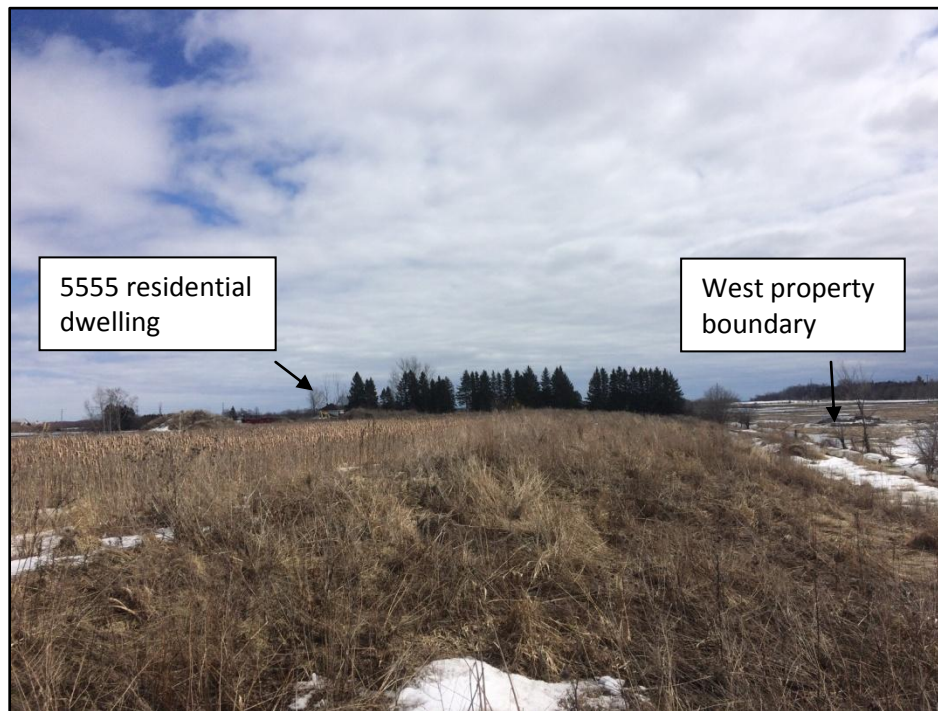


## Site Photographs

PE3996

5431 & 5505 Fernbank Road, Ottawa, Ontario

March 13 and 29, 2017



Photograph 7: View of the west property line of 5505 Fernbank Road, looking south from the northwest corner of the property. The photo was taken from the top of the earthen berm.



Picture 8: View of the southwest corner of the subject site. The residential dwelling formerly listed as 5555 Fernbank Road can be seen in the photo. Looking north from the south side of Fernbank Road.



## Site Photographs

PE3996

5431 & 5505 Fernbank Road, Ottawa, Ontario

March 13 and 29, 2017



Picture 9: View of the southwest corner of the subject site. The residential dwelling formerly listed as 5555 Fernbank Road can be seen on the right and used vehicles and equipment in and around the waste storage area can also be seen.



Picture 10: View of the waste storage area. The residential dwelling formerly listed as 5555 Fernbank Road can be seen in the background. No staining or adverse odours were detected in the waste storage area.

# **APPENDIX 2**

**MOECC FREEDOM OF INFORMATION REQUEST**

**TSSA CORRESPONDENCE**

**MOECC WELL RECORDS**



## 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 Greg van Loenen Paterson Group Inc. 154 Colonnade Road Ottawa, ON K2E 7J5 Email address: gvanloenen@patersongroup.ca			FOI Request No.	Date Request Received
Telephone/Fax Nos. Tel. 613-226-7381 Fax 613-226-6344			Fee Paid <input type="checkbox"/> ACCT <input type="checkbox"/> CHQ <input type="checkbox"/> VISA/MC <input type="checkbox"/> CASH  <input type="checkbox"/> CNR <input type="checkbox"/> ER <input type="checkbox"/> NOR <input type="checkbox"/> SWR <input type="checkbox"/> WCR <input type="checkbox"/> SAC <input type="checkbox"/> IEB <input type="checkbox"/> EAA <input type="checkbox"/> EMR <input type="checkbox"/> SWA	
Your Project/Reference No. PE3996	Signature/Print /Name of Requester Greg van Loenen			
Request Parameters				
Municipal Address / Lot, Concession, Geographic Township (Municipal address essential for cities, towns or regions) 5431 and 5505 Fernbank Road, City of Ottawa, Ontario (one site, one owner)				
Present Property Owner(s) and Date(s) of Ownership Mattamy Homes				
Previous Property Owners(s) and Date(s) of Ownership				
Present/Previous Tenant(s), (if applicable)				
Search Parameters			Specify Year(s) Requested	
Environmental concerns (General correspondence, occurrence reports, abatement)			all	
Orders			all	
Spills			all	
Investigations/prosecutions ➤ Owner <b>AND</b> 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. <b>Search fees in excess of \$300.00</b> could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). <b>If supporting documents are also required, mark SD box</b> 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.

# RE: Records search request for 5505 Fernbank Road, Ottawa

Ruchi Chohan <rchohan@tssa.org> on behalf of  
Public Information Services <publicinformationsservices@tssa.org>

Wed 3/22/2017 9:23 AM

To: Greg van Loenen <GvanLoenen@Patersongroup.ca>;

Hello Greg,

Thank you for your inquiry.

I have searched the below noted address (addresses) and I have located the following record:

5357 Ferbank Rd, Stittsville has record of an active cylinder exchange facility.

For a more detailed report including underground fuel storage tank details and copies of all inspection reports, please submit your request in writing to Public Information Services via e-mail ([publicinformationsservices@tssa.org](mailto:publicinformationsservices@tssa.org)) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a cheque made payable to TSSA.

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

Thank you and have a good day!

Ruchi

---

**From:** Greg van Loenen [mailto:[GvanLoenen@Patersongroup.ca](mailto:GvanLoenen@Patersongroup.ca)]  
**Sent:** Wednesday, March 15, 2017 12:55 PM  
**To:** Public Information Services <[publicinformationsservices@tssa.org](mailto:publicinformationsservices@tssa.org)>  
**Subject:** Records search request for 5505 Fernbank Road, Ottawa

Good afternoon,

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

5357 Fernbank Road  
5390 Fernbank Road  
5431 Fernbank Road  
5441 Fernbank Road  
5444 Fernbank Road  
5460 Fernbank Road  
5505 Fernbank Road  
5506 Fernbank Road  
5524 Fernbank Road

Regards,

Greg van Loenen, B.Eng.

**patersongroup**  
solution oriented engineering

**60 years serving our clients**

154 Colonnade Road South

Ottawa, Ontario, K2E 7J5

Tel: (613) 226-7381 Ext. 248

Fax: (613) 226-6344

Email: [GvanLoenen@patersongroup.ca](mailto:GvanLoenen@patersongroup.ca)

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



Measurements recorded in: ☒ Metric ☐ Imperial

Page of

## Well Owner's Information

First Name		Last Name / Organization		E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner	
Braebury Homes		c/o Novatech Engineering					
Mailing Address (Street Number/Name)		Municipality		Province	Postal Code	Telephone No. (inc. area code)	
240 Michael Coupland - Suit 200		Kanata		Ontario	K2M 1P6	613 254 9643	

### Well Location

Address of Well Location (Street Number/Name)				Township		Lot		Concession	
5611 Fernbank Rd.				Goulbourn		28		10	
County/District/Municipality				City/Town/Village				Province	
Ottawa Carleton				Stittsville				Ontario	
UTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number			
NAD 83		18	430681	5012974		Other			

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

[illegible]

### Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m <sup>3</sup> /ft <sup>3</sup> )
39.01	4.87	Grouted Bentonite-3/8"holeplug	
4.87		Grouted Bentonite - Quick Grout	
4.57	0	Clear pea stone gravel	

### Method of Construction

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

### Well Use

<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input type="checkbox"/> Industrial		
<input type="checkbox"/> 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	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

### Construction Record - Screen

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

### Water Details

Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____

## Hole Diameter

Depth (m/ft)		Diameter (cm/in)
From	To	

## Well Contractor and Well Technician Information

Business Name of Well Contractor				Well Contractor's Licence No.			
Capital Water Supply Ltd.				1   5   5   8			
Business Address (Street Number/Name)				Municipality			
Box 490				Stittsville			
Province		Postal Code		Business E-mail Address			
Ontario		K2S 1A6		office @ capitalwater.ca			
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)					
613 836 1766		Miller, Stephen					
Well Technician's Licence No.		Signature of Technician and/or Contractor				Date Submitted	
0   0   9   7						20080818	

### Results of Well Yield Testing

After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? <input type="checkbox"/> Yes <input type="checkbox"/> No	60		60	

### Map of Well Location

Please provide a map below following instructions on the back.

Fernbank Road

Comments:

Well owner's information package delivered

☐ Yes

☒ No

Date Package Delivered  
Y Y Y Y M M D D  
Date Work Completed  
2 0 0 8 0 8 1 8

## Ministry Use Only

Audit No. **Z 84380**  
OCT 14 2008  
Received

316/5d

UTM 182430940E

SR5012840N

Elev. 280335

Basin 25

15 No 2812

GROUND WATER BRANCH

112 SEP 3 1959

ONTARIO WATER RESOURCES COMMISSION

THE ONTARIO WATER RESOURCES COMMISSION ACT, 1957

WATER WELL RECORD

County or District Carleton

Township, Village, Town or City Goulbourn

completed 26 APR 59

Stittsville Ont.

Casing and Screen Record	Pumping Test
Inside diameter of casing 4"	Static level 15'
Total length of casing 25'	Test-pumping rate 5 G.P.M.
Type of screen none	Pumping level 20'
Length of screen	Duration of test pumping 2 hour
Depth to top of screen	Water clear or cloudy at end of test clear
Diameter of finished hole 4"	Recommended pumping rate 5 G.P.M.
	with pumping level of 20'

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)
Coarse gravel	0	25			
gray limestone	25	60	50-60	45	fresh

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

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

Drilling Firm F. P. Sparks

Address Stittsville Ont.

Licence Number

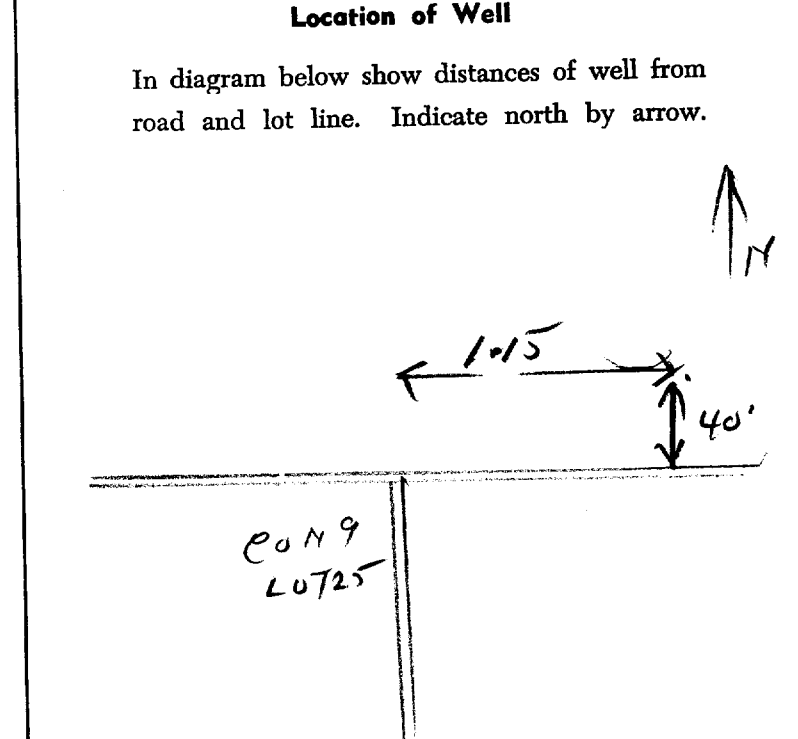
Name of Driller F. P. Sparks

Address Stittsville Ont.

Date AUG 24/59

F. P. Sparks

Signature of Licensed Drilling Contractor





Ministry of  
the Environment

Tag#: A135272

or Print Below)

A135272

Well Record

Regulation 903 Ontario Water Resources Act

Page \_\_\_\_\_ of \_\_\_\_\_

Measurements recorded in: ☐ Metric ☒ Imperial

### Well Owner's Information

First Name	Last Name / Organization <b>Monarch Corporation</b>	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) <b>3584 Jockvale Road</b>	Municipality <b>Nepean</b>	Province <b>ON</b>	Postal Code <b>K2C 3H2</b>
Telephone No. (inc. area code)			

### Well Location

Address of Well Location (Street Number/Name) <b>5555 Fernbank Road</b>		Township <b>Goulbourn</b>	Lot <b>P/L 29</b>	Concession <b>10</b>
County/District/Municipality <b>Ottawa-Carleton</b>		City/Town/Village <b>Stittsville</b>	Province <b>Ontario</b>	Postal Code
UTM Coordinates Zone <b>8 3</b>	Easting <b>18 431065</b>	Northings <b>5013186</b>	Municipal Plan and Sublot Number <b>RP5R13184</b>	Other <b>Parts 2,3,4</b>

### 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)
	Clay			From To
	Sand & Gravel			0' 15'
Grey	Limestone			15' 18'
Brown & Red	Limestone			18' 140'
Brown & Red	Limestone			140' 150'
Green	Limestone			150' 152'
Grey	Limestone			152' 163'
Grey	Limestone			163' 180'
Grey	Limestone			180' 200'

Annular Space			
Depth Set at (m)	Type of Sealant Used (Material and Type)	Volume Placed (m³)	
From To			
30' 20'	Neat cement	9.36	
20' 0'	Bentonite slurry	8.24	

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial	
<input type="checkbox"/> Other, specify		<input type="checkbox"/> Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
6 1/4"	Steel	.188"	+2'	30'	
6"	Open Hole		30'	200'	
				<input checked="" type="checkbox"/> Water Supply	
				<input type="checkbox"/> Replacement Well	
				<input type="checkbox"/> Test Hole	
				<input type="checkbox"/> Recharge Well	
				<input type="checkbox"/> Dewatering Well	
				<input type="checkbox"/> Observation and/or Monitoring Hole	
				<input type="checkbox"/> Alteration (Construction)	
				<input type="checkbox"/> Abandoned, Insufficient Supply	
				<input type="checkbox"/> Abandoned, Poor Water Quality	
				<input type="checkbox"/> Abandoned, other, specify	
				<input type="checkbox"/> Other, specify	

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

Water Details		Hole Diameter	
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft)	Diameter (cm/in)
150' (m)	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Other, specify	From To	
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	0' 30'	9 3/4"
180' (m)	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Other, specify	30' 200'	6"
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
(m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Well Contractor and Well Technician Information	
Business Name of Well Contractor <b>Air Rock Drilling Co. Ltd.</b>	Well Contractor's Licence No. <b>1119</b>
Business Address (Street Number/Name) <b>6659 Franktown Road, RR#1</b>	Municipality <b>Richmond</b>

Province <b>ON</b>	Postal Code <b>K0A 2Z0</b>	Business E-mail Address <b>air-rock@sympatico.ca</b>
Bus. Telephone No. (inc. area code) <b>6138382170</b>		Name of Well Technician (Last Name, First Name) <b>Purcell, Shannon</b>
Well Technician's Licence No. <b>T2122</b>	Signature of Technician and/or Contractor <i>[Signature]</i>	Date Submitted <b>2013 03 29</b>

Results of Well Yield Testing				
After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, <i>specify</i> <b>Not tested</b>	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason: <div>X</div>	Static Level	8'		46.4"
	1	16.3	1	27.6
Pump intake set at (m <del>ft</del> ) 100	2	19.9	2	24
Pumping rate (l/min / <del>GPM</del> ) 20	3	25	3	21.8
Duration of pumping 1 hrs + 0 min	4	26.7	4	19.7
Final water level end of pumping (m/ft) 46' 4"	5	29	5	16.9
If flowing give rate (l/min / GPM) <div>X</div>	10	35.2	10	15.4
	15	37.4	15	10.3
Recommended pump depth (m <del>ft</del> ) 100'	20	39.5	20	8.8
	25	40.8	25	8
Recommended pump rate (l/min / <del>GPM</del> ) 20	30	42.7	30	8
Well production (l/min <del>GPM</del> ) 20	40	44.6	40	8
	50	45.7	50	8
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	60	46.4"	60	8'

Map of Well Location	
Please provide a map below following instructions on the back.	

Comments: <b>3/4 HP - 15 GPM SET @ 100 FT</b>	
Well owner's information package delivered <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered <b>2013 02 28</b> Date Work Completed <b>2013 02 26</b>
Ministry Use Only Audit No. <b>2155041</b> Received <b>APR 15 2013</b>	





# The Ontario Water Resources Act

## WATER WELL RECORD

Print only in spaces provided.  
Mark correct box with a checkmark, where applicable.

11

1534103

Municipality

Con.

Municipality  
**15003**

CONF. CAN

09

W<sup>22</sup> Z<sup>23</sup> OF<sup>24</sup>

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
	OTTAWA	9	29
	Address of Well Location	Date completed	
	5524 FERNBANK RD STITTSVILLE ONT.	6 8 03 day month year	

21

Zone Easting Northing RC Elevation ~~30~~ 325136 iii iv








UTM

10 10 10 10 25 20 30 31 47

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
BROWN	CLAY	SAND	LOAM	0	3½
BROWN	CLAY		DENSE	3½	7
BLUE	CLAY			7	24
BROWN	SAND	GRAVEL	FINE	24	44½
BROWN	LIMESTONE			44½	65
GREY	LIMESTONE			65	195

31       

32       

41		10	14	15	21	WATER RECORD	
Water found at - feet		Kind of water					
123		1	<input checked="" type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur	14	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals		
				6	<input type="checkbox"/> Gas		
181		1	<input checked="" type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur	19	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals		
				6	<input type="checkbox"/> Gas		
20-23		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur	24	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals		
				6	<input type="checkbox"/> Gas		
25-28		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur	29	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals		
				6	<input type="checkbox"/> Gas		
30-33		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur	34	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals		
				6	<input type="checkbox"/> Gas		

CASING & OPEN HOLE RECORD				
Inside diam inches	Material	Wall thickness inches	Depth - feet	
			From	To
10-11 6 1/4	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	12 0.188	0 + 1/2	13-16 48 1/2
17-18 6	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Open hole <input type="checkbox"/> Plastic	19	48 1/2	20-23 195
24-25	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	26		27-30

<b>SCREEN</b>	Sizes of opening (Slot No.)	31-33	Diameter	34-38	Length	39-40
			inches		feet	
	Material and type			Depth at top of screen		
				41-44		
				feet		

61	<b>PLUGGING &amp; SEALING RECORD</b>			
<input checked="" type="checkbox"/> Annular space		<input type="checkbox"/> Abandonment		
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)		
From	To			
6 <sup>10-13</sup> 38 <sup>2-17</sup>		Cement grout BENTONITE		
38 <sup>18-21</sup> 48 <sup>22-25</sup>				
26-29	30-33	80		

PUMPING TEST	Pumping test method <sup>10</sup> 1 <input checked="" type="checkbox"/> Pump 2 <input type="checkbox"/> Bailer		Pumping rate <sup>11-14</sup> 8 GPM		Duration of pumping <sup>15-16</sup> 1 Hours 0 Mins	
	Static level	Water level end of pumping	Water levels during <sup>25</sup>		Pumping <sup>17-18</sup> <input checked="" type="checkbox"/> Recovery <input type="checkbox"/>	
	14 <sup>19-21</sup> feet	19 <sup>22-24</sup> feet	15 minutes <sup>25-26</sup> 22 feet	30 minutes <sup>27-28</sup> 22 feet	45 minutes <sup>29-31</sup> 23 feet	60 minutes <sup>32-34</sup> 19 feet
	If flowing give rate <sup>38-41</sup> GPM		Pump intake <sup>42</sup> 180 feet		Water at end of test <sup>43-45</sup> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Cloudy	
	Recommended pump type <sup>46-49</sup> <input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep		Recommended pump setting <sup>50-52</sup> 120 feet		Recommended pump rate <sup>53-55</sup> 7 GPM	

<b>FINAL STATUS OF WELL</b>			54
1 <input checked="" type="checkbox"/> Water supply	5 <input type="checkbox"/> Abandoned, insufficient supply	9 <input type="checkbox"/> Unfinished	
2 <input type="checkbox"/> Observation well	6 <input type="checkbox"/> Abandoned, poor quality	10 <input type="checkbox"/> Replacement well	
3 <input type="checkbox"/> Test hole	7 <input type="checkbox"/> Abandoned (Other)		
4 <input type="checkbox"/> Recharge well	8 <input type="checkbox"/> Dewatering		
<b>WATER USE</b>			
55-56			
1 <input checked="" type="checkbox"/> Domestic	5 <input type="checkbox"/> Commercial	9 <input type="checkbox"/> Not use	
2 <input type="checkbox"/> Stock	6 <input type="checkbox"/> Municipal	10 <input type="checkbox"/> Other .....	
3 <input type="checkbox"/> Irrigation	7 <input type="checkbox"/> Public supply		
4 <input type="checkbox"/> Industrial	8 <input type="checkbox"/> Cooling & air conditioning		
<b>METHOD OF CONSTRUCTION</b>			
57			
1 <input type="checkbox"/> Cable tool	5 <input checked="" type="checkbox"/> Air percussion	9 <input type="checkbox"/> Driving	
2 <input checked="" type="checkbox"/> Rotary (conventional)	6 <input type="checkbox"/> Boring	10 <input type="checkbox"/> Digging	
3 <input type="checkbox"/> Rotary (reverse)	7 <input type="checkbox"/> Diamond	11 <input type="checkbox"/> Other .....	
4 <input type="checkbox"/> Rotary (air)	8 <input type="checkbox"/> Jetting		

**LOCATION OF WELL**



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

164'

73'

45° 16' 09" N  
75° 52' 66" W

**255332**

Name of Well Contractor <b>TROY SAUNDERS DRILLING</b>	Well Contractor's Licence No. <b>4874</b>
Address <b>RR#1 BRASSIOT OUT. KOA 160</b>	
Name of Well Technician <b>TROY SAUNDERS</b>	Well Technician's Licence No. <b>T-517</b>
Signature of Technician/Contractor 	Submission date  <b>9</b> <b>03</b> yr

MINISTRY USE ONLY	Data source	58	Contractor	59-62	Date received	63-68	80
			4879	SEP 17 2003			
	Date of inspection			Inspector			
	Remarks						



# The Ontario Water Resources Act

## WATER WELL RECORD

Print only in spaces provided.  
Mark correct box with a checkmark, where applicable.

11

1534102

Municipality 15003 Con. CON 09  
10 14 15 20  
WED

County or District OTTAWA	Township/Borough/City/Town/Village OTTAWA	Con. block tract survey, etc. 9	Lot 29
Address of Well Location 5524 FERNBANK RD STITTVILLE ONT		Date completed 21 8 03 day month year	03

21      U      Zone      Easting      Northing      RC      Elevation      *KAS/156*      Code      ii      iii      iv

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

[illegible][illegible]

41		14 15		21	
WATER RECORD					
Water found at - feet		Kind of water			
10-13	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	14		
15-18	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	19		
20-23	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	24		
25-28	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	29		
30-33	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	34		

CASING & OPEN HOLE RECORD				
Inside diam inches	Material	Wall thickness inches	Depth - feet	
			From	To
10-11	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	188	4	18 1/2
17-18	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic			20-23
24-25	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic			27-30

SCREEN	Sizes of opening (Slot No.)	31-33	Diameter	34-38	Length	39-40
			inches		feet	
	Material and type			Depth at top of screen		
				feet		30

61				PLUGGING & SEALING RECORD			
<input type="checkbox"/> Annular space				<input checked="" type="checkbox"/> Abandonment			
Depth set at - feet			Material and type (Cement grout, bentonite, etc.)				
From		To					
0-13		4-14-17	CLAY BENTONITE				
4-14-17		18-25					
26-29		30-33	80				

PUMPING TEST	71 Pumping test method <sup>10</sup> 1 <input type="checkbox"/> Pump 2 <input type="checkbox"/> Bailer		Pumping rate <sup>11-14</sup> GPM		Duration of pumping <sup>15-16</sup> Hours <sup>17-18</sup> Mins	
	Static level	Water level end of pumping <sup>25</sup>	Water levels during		1 <input type="checkbox"/> Pumping 2 <input type="checkbox"/> Recovery	
	19-21	22-24	15 minutes <sup>26-28</sup>	30 minutes <sup>29-31</sup>	45 minutes <sup>32-34</sup>	60 minutes <sup>35-37</sup>
	feet	feet	feet	feet	feet	feet
	If flowing give rate <sup>38-41</sup> GPM		Pump intake set at feet		Water at end of test <sup>42</sup> <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy	
	Recommended pump type <input type="checkbox"/> Shallow <input type="checkbox"/> Deep		Recommended pump setting <sup>43-45</sup> feet		Recommended pump rate <sup>46-49</sup> GPM	

<b>FINAL STATUS OF WELL</b>		54
1 <input type="checkbox"/> Water supply	5 <input checked="" type="checkbox"/> Abandoned, insufficient supply	9 <input type="checkbox"/> Unfinished
2 <input type="checkbox"/> Observation well	6 <input type="checkbox"/> Abandoned, poor quality	10 <input type="checkbox"/> Replacement well
3 <input type="checkbox"/> Test hole	7 <input type="checkbox"/> Abandoned (Other)	
4 <input type="checkbox"/> Recharge well	8 <input type="checkbox"/> Dewatering	

<b>WATER USE</b>		55-56
1 <input checked="" type="checkbox"/> Domestic	5 <input type="checkbox"/> Commercial	9 <input type="checkbox"/> Not use
2 <input type="checkbox"/> Stock	6 <input type="checkbox"/> Municipal	10 <input type="checkbox"/> Other .....
3 <input type="checkbox"/> Irrigation	7 <input type="checkbox"/> Public supply	
4 <input type="checkbox"/> Industrial	8 <input type="checkbox"/> Cooling & air conditioning	

<b>METHOD OF CONSTRUCTION</b>		57
1 <input checked="" type="checkbox"/> Cable tool	5 <input type="checkbox"/> Air percussion	9 <input type="checkbox"/> Driving
2 <input type="checkbox"/> Rotary (conventional)	6 <input type="checkbox"/> Boring	10 <input type="checkbox"/> Digging
3 <input type="checkbox"/> Rotary (reverse)	7 <input type="checkbox"/> Diamond	11 <input type="checkbox"/> Other .....
4 <input type="checkbox"/> Rotary (air)	8 <input type="checkbox"/> Jetting	

LOCATION OF WELL

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

FERNBANK RD.

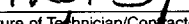
153'

69'

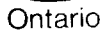
45° 16, 10 N

75° 52 66 W

255320

Name of Well Contractor <b>T. SAUNDERS DRILLING LTD</b>	Well Contractor's Licence No. <b>4879</b>
Address <b>RR#1 BRAESIDE CMT.</b>	<b>K0N 1B0</b>
Name of Well Technician <b>TROY SAUNDERS</b>	Well Technician's Licence No. <b>T-517</b>
Signature of Technician/Contractor 	Submission date <b>20</b> day <b>9</b> mo <b>03</b> yr

MINISTRY USE ONLY	Data source	58 Contractor <b>4879</b>	59-62	Date received	53-68 <b>SEP 17 2003</b>	80
	Date of inspection		Inspector			
Remarks						



## The Ontario Water Resources Act

# WATER WELL RECORD

3165d

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

11

1518636

MUNICIP. 15003

CON.  
CON  
15

0.9

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON. BLOCK TRACT. SURVEY. ETC

LOT 25-27

## Goulbourn

Conc. 9

DATE COMPLETED	
----------------	--

48-53

Arnoot Rd.; Ottawa, Ontario

DAY 08 MO 09 YR. 83

NG 2899

RC.  
4

ELEVATION  
0330

RC.  
4

BASIN CODE  
26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31	001060577	008230585	009722811/13	015031578					
32									

1	2	10	14	15	21
<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;"> <div style="border: 1px solid black; padding: 2px;">41</div> </div>		WATER RECORD			
WATER FOUND AT - FEET		KIND OF WATER			
0146'		10-13	1 <input checked="" type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	14
			2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
		15-18	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	19
			2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
		20-23	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	24
			2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
		25-28	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	29
			2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
		30-33	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	34
			2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	

51 CASING & OPEN HOLE RECORD		DEPTH - FEET	
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	FROM TO
06 10-11 6 7	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input type="checkbox"/> 4 OPEN HOLE	12  188	13-14  0 101
06 17-18	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input checked="" type="checkbox"/> 4 OPEN HOLE	19  101	20-21  0 150
24-25	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input type="checkbox"/> 4 OPEN HOLE	26	27-30

SCREEN	SIZE OF OPENING (SLOT NO.)		DIAMETER	LENGTH
	31-33	34-38	39-40	
	INCHES		FEET	
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN	
			41-44	45
			FEET	

61 PLUGGING & SEALING RECORD			
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)	
FROM	TO		
10-13	14-17		
18-21	22-25		
26-29	30-33	80	

<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;"> 71 </div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 2px; font-weight: bold; margin-top: 5px;">PUMPING TEST</div>	PUMPING TEST METHOD		10	PUMPING RATE	11-14	DURATION OF PUMPING	
	1 <input checked="" type="checkbox"/> PUMP 2 <input type="checkbox"/> BAILER			0010	GPM	01	15-16 HOURS 00 17-18 MINS
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING		1 <input type="checkbox"/> PUMPING 2 <input checked="" type="checkbox"/> RECOVERY	
	19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES	
			26-28	29-31	32-34	35-37	
012 FEET 050 FEET		050 FEET	050 FEET	050 FEET	050 FEET	050 FEET	
IF FLOWING GIVE RATE		38-41	PUMP INTAKE SET AT		WATER AT END OF TEST		42
		GPM	FEET		1 <input checked="" type="checkbox"/> CLEAR 2 <input type="checkbox"/> CLOUDY		
RECOMMENDED PUMP TYPE		RECOMMENDED PUMP SETTING		43-45	RECOMMENDED PUMPING RATE		46-49
<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP		075 FEET				0005 GPM	
50-53							

<p><b>FINAL STATUS OF WELL</b></p>	<p>54</p> <p>1 <input checked="" type="checkbox"/> WATER SUPPLY</p> <p>2 <input checked="" type="checkbox"/> OBSERVATION WELL</p> <p>3 <input type="checkbox"/> TEST HOLE</p> <p>4 <input type="checkbox"/> RECHARGE WELL</p>	<p>5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY</p> <p>6 <input type="checkbox"/> ABANDONED POOR QUALITY</p> <p>7 <input type="checkbox"/> UNFINISHED</p>
<p><b>WATER USE</b></p>	<p>55-56</p> <p>1 <input checked="" type="checkbox"/> DOMESTIC</p> <p>2 <input checked="" type="checkbox"/> STOCK</p> <p>3 <input type="checkbox"/> IRRIGATION</p> <p>4 <input type="checkbox"/> INDUSTRIAL</p> <p><input type="checkbox"/> OTHER _____</p>	<p>5 <input type="checkbox"/> COMMERCIAL</p> <p>6 <input type="checkbox"/> MUNICIPAL</p> <p>7 <input type="checkbox"/> PUBLIC SUPPLY</p> <p>8 <input type="checkbox"/> COOLING OR AIR CONDITIONING</p> <p>9 <input type="checkbox"/> NOT USED</p>
<p><b>METHOD OF DRILLING</b></p>	<p>57</p> <p>1 <input type="checkbox"/> CABLE TOOL</p> <p>2 <input type="checkbox"/> ROTARY (CONVENTIONAL)</p> <p>3 <input type="checkbox"/> ROTARY (REVERSE)</p> <p>4 <input type="checkbox"/> ROTARY (AIR)</p> <p>5 <input checked="" type="checkbox"/> AIR PERCUSSION</p>	<p>6 <input type="checkbox"/> BORING</p> <p>7 <input type="checkbox"/> DIAMOND</p> <p>8 <input type="checkbox"/> JETTING</p> <p>9 <input type="checkbox"/> DRIVING</p>

LOCATION OF WELL

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

Conc. 10

Goulbourn.

Conc. 9

Eagleson Side Road

Nepean.

3'11"

27'8"

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER
	Capital Water Supply Ltd.		1558
	ADDRESS		
	Box 490; Stittsville, Ont. K0A 3G0		
	NAME OF DRILLER OR BORER		LICENCE NUMBER
	W. Kavanagh		
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE	
	<i>W. Kavanagh</i>	DAY 09 MO 09 YEAR 83	

OFFICE USE ONLY	DRILLERS REMARKS						
	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	53-68	80
		1	1538		24 11 83		
	DATE OF INSPECTION		INSPECTOR				
	REMARKS						





A059590

Address of Well Location (Street Number/Name, R.R.) #5440 Fernbank Road Township Boulbourn Lot 29 Concession 9  
 County/District/Municipality Ottawa-Carleton City/Town/Village Stittsville Province Ontario Postal Code  
 UTM Coordinates Zone Easting Northing GPS Unit Make Model Mode of Operation: ☐ Undifferentiated ☒ Averaged  
 NAD 83 184315515013404 Magellan 200 ☐ Differentiated, specify

Overburden and Bedrock Materials (see instructions on the back of this form)					Depth (Metres)	
General Colour	Most Common Material	Other Materials	General Description		From	To
	Blue Clay				0	24.38
	Clay gravel	Boulders			24.38	34.74
	Green+grey	limestone			34.74	45.71

Annular Space/Abandonment Sealing Record		
Depth Set at (Metres)	Type of Sealant Used (Material and Type)	Volume Placed (Cubic Metres)
37.79-34.74	Neat Cement slurry	4086
34.74-0	Bentonite slurry	1.72

**Method of Construction**  
☐ Cable Tool ☐ Diamond ☐ Public ☐ Commercial ☐ Not used  
☐ Rotary (Conventional) ☐ Jetting ☒ Domestic ☐ Municipal ☐ Dewatering  
☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☐ Test Hole ☐ Monitoring  
☐ Rotary (Air) ☐ Digging ☐ Irrigation ☐ Cooling & Air Conditioning  
☒ Air percussion ☐ Boring ☐ Industrial  
☐ Other, specify

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

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

**Location of Well**  
 Please provide a map below showing:  
 - all property boundaries, and measurements sufficient to locate the well in relation to fixed points,  
 - an arrow indicating the North direction  
 - detailed drawings can be provided as attachments no larger than legal size (8.5" by 14")  
 - digital pictures of inside of well can also be provided

#5440 Fernbank Road  
 300' ← 5km  
 Eagleson Road

Date Well Completed (yyyy/mm/dd) 2007-10-30  
 Was the well owner's information package delivered? ☒ Yes ☐ No  
 Date the Well Record and Package Delivered to Well Owner (yyyy/mm/dd) 2007-10-31

**Well Contractor and Well Technician Information**  
 Business Name of Well Contractor Air Rock Drilling Co LTD Well Contractor's Licence No. 11119  
 Business Address (Street No./Name, number, R.R.) 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) Desautniers, Ken  
 Well Technician's Licence No. T4 Signature of Technician Date Submitted (yyyy/mm/dd) 2007-12-03

Results of Well Yield Testing			
Draw Down		Recovery	
Time (Min)	Water Level (Metres)	Time (Min)	Water Level (Metres)
Static Level	3.28	Static Level	4.30
1	4.07	1	3.40
2	4.13	2	3.35
3	4.15	3	3.30
4	4.15	4	3.28
5	4.15	5	
10	4.17	10	
15	4.20	15	
20	4.22	20	
25	4.25	25	
30	4.26	30	
40	4.27	40	
50	4.29	50	
60	4.30	60	

Check box if after test of well yield, water was:  
☐ Clear and sand free  
☒ Cannot develop to sand free state  
 If pumping discontinued, give reason:  
 Pumping test method: Sup pump.  
 Pump intake set at (Metres): 36.57  
 Pumping rate (Litres/min): 91.00  
 Duration of pumping: 1 hrs + 0 min  
 Final water level end of pumping (Metres): 4.30  
 Recommended pump type: ☐ Shallow ☒ Deep  
 Recommended pump depth: 36.57 Metres  
 Recommended pump rate (Litres/min): 91.00  
 If flowing give rate (Litres/min):

**Water Details**  
 Water found at Depth 42.97 Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals  
 Water found at Depth Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals  
 Water found at Depth Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

**Casing Used**  
☐ Galvanized ☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete

**Screen Used**  
☐ Galvanized ☒ Steel ☐ Fibreglass ☐ Plastic ☒ Concrete

**Casing and Well Details**  
 Diameter of the Hole (Centimetres) 15.87  
 Depth of the Hole (Metres) 45.71  
 Wall Thickness (Metres) 4.8 cm  
 Inside Diameter of the Casing (Metres) 15.86  
 Depth of the Casing (Metres) 38.40

**No Casing and Screen Used**  
☒ Open Hole 37.79-45.71  
 Disinfected? ☒ Yes ☐ No

**Ministry Use Only**  
 Audit No. z61137 Well Contractor No.  
 Date Received (yyyy/mm/dd) DEC 14 2007 Date of Inspection (yyyy/mm/dd)  
 Remarks



# The Ontario Water Resources Act

## WATER WELL RECORD

Print only in spaces provided.

Mark correct box with a checkmark, where applicable.

11

1533651

Municipality **15003** Con. **CON** **10**

County or District <b>GOULBURN</b>	Township/Borough/City/Town/Village <b>GOULBURN</b>	Con block tract survey, etc. <b>10</b>	Lot <b>30</b>
Address of Well Location <b>5355 FERNBANK Rd</b>		Date completed <b>20</b> day	<b>12</b> month <b>02</b> year

Figure 1 is an aerial photograph of the study area. Overlaid on the photograph are several data fields and a grid. The grid consists of 21 numbered cells, arranged in a 3x7 pattern. The cells are numbered 1 through 21, with 21 in the top-left cell. The grid is divided into four sections labeled ii, iii, and iv. The fields include Zone, Easting, Northing, RC, Elevation, RC, and Basin Code. The map shows a river network and surrounding land use.

**LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)**

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
			THIS IS TO INFORM THAT THE WELL CASING HAS BEEN EXTENDED ABOVE THE GROUND SURFACE. THIS DOCUMENT IS AN ATTACHMENT TO THE ORIGINAL WELL RECORD WHICH MAY OR MAY NOT EXIST		
			OVERALL WELL DEPTH = 20'		

31     

32     

41	<b>WATER RECORD</b>			21
<b>Water found at - feet</b>	<b>Kind of water</b>			
10-13	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	14	
15-18	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	19	
20-23	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	24	
25-28	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	29	
30-33	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	34	

51		32		43	
CASING & OPEN HOLE RECORD					
Inside diam inches	Material	Wall thickness inches	Depth - feet		
			From	To	
10-11 <b>6"</b>	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	12			13-16
17-18	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	19			20-23
24-25	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	26			27-30

<b>SCREEN</b>	Sizes of opening (Slot No.)	31-33	Diameter	34-38	Length	39-40
			inches		feet	
	Material and type			Depth at top of screen		30
				feet		

<b>61 PLUGGING &amp; SEALING RECORD</b>			
<input type="checkbox"/> Annular space		<input type="checkbox"/> Abandonment	
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)	
From	To		
10-13	14-17		
18-21	22-25		
26-29	30-33		
		80	

PUMPING TEST	Pumping test method <sup>10</sup> 1 <input type="checkbox"/> Pump 2 <input type="checkbox"/> Bailer		Pumping rate <sup>11-14</sup> GPM		Duration of pumping <sup>15-16</sup> Hours _____ Mins <sup>17-18</sup>	
	Static level	Water level end of pumping <sup>25</sup>	Water levels during 1 <input type="checkbox"/> Pumping 2 <input type="checkbox"/> Recovery			
	<sup>19-21</sup> 8' feet	<sup>22-24</sup> feet	<sup>26-28</sup> 15 minutes feet	<sup>29-31</sup> 30 minutes feet	<sup>32-34</sup> 45 minutes feet	<sup>35-37</sup> 60 minutes feet
	If flowing give rate <sup>38-41</sup> GPM	Pump intake set at <sup>42</sup> 50' feet		Water at end of test <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy		
	Recommended pump type <input type="checkbox"/> Shallow <input type="checkbox"/> Deep	Recommended pump setting <sup>43-45</sup> feet		Recommended pump rate <sup>46-49</sup> GPM		
	<sup>50-53</sup>					

<b>FINAL STATUS OF WELL</b>		54
1 <input type="checkbox"/> Water supply	5 <input type="checkbox"/> Abandoned, insufficient supply	9 <input type="checkbox"/> Unfinished
2 <input type="checkbox"/> Observation well	6 <input type="checkbox"/> Abandoned, poor quality	10 <input type="checkbox"/> Replacement well
3 <input type="checkbox"/> Test hole	7 <input type="checkbox"/> Abandoned (Other)	
4 <input type="checkbox"/> Recharge well	8 <input type="checkbox"/> Dewatering	

<b>WATER USE</b>		55-56
1 <input type="checkbox"/> Domestic	5 <input type="checkbox"/> Commercial	9 <input type="checkbox"/> Not use
2 <input type="checkbox"/> Stock	6 <input type="checkbox"/> Municipal	10 <input type="checkbox"/> Other .....
3 <input type="checkbox"/> Irrigation	7 <input type="checkbox"/> Public supply	
4 <input type="checkbox"/> Industrial	8 <input type="checkbox"/> Cooling & air conditioning	

<b>METHOD OF CONSTRUCTION</b>		57
1 <input type="checkbox"/> Cable tool	5 <input type="checkbox"/> Air percussion	9 <input type="checkbox"/> Driving
2 <input type="checkbox"/> Rotary (conventional)	6 <input type="checkbox"/> Boring	10 <input type="checkbox"/> Digging
3 <input type="checkbox"/> Rotary (reverse)	7 <input type="checkbox"/> Diamond	11 <input checked="" type="checkbox"/> Other <b>WELL</b>
4 <input type="checkbox"/> Rotary (air)	8 <input type="checkbox"/> Jetting	

**CASING EXTENSION**

**LOCATION OF WELL**

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

21' 36'

WELL

FERMBANK RD

257728

Name of Well Contractor	Well Contractor's Licence No.
AQUA PUMP SERVICE	6907
Address	
5555 FERNBANK RD.	
Name of Well Technician	Well Technician's Licence No.
Barry Webb	T-2489
Signature of Technician/Contractor	Submission date
<i>[Signature]</i>	03 day 04 mo 03 yr

MINISTRY USE ONLY	Data source	58	Contractor	59-62	Date received	63-68	69-70
			6907	APR 08 2003			
	Date of inspection		Inspector				
	Remarks						
	CSS.ES3						

Ministry of the  
Environment

# WATER WELL RECORD

Ontario

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

11 1516663

MUNICIP.  
15003

CON.  
CQN

0.9

COUNTY OR DISTRICT <i>Carlton</i>		TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE <i>Southbourn</i>		CON.. BLOCK, TRACT, SURVEY, ETC. <i>9</i>		LOT <i>030</i>	
OWNER (SURNAME FIRST) <i>Van De Ven Const.</i>		ADDRESS <i>Hwy 16, Manotick Ont</i>		DATE COMPLETED DAY <i>15</i> MO <i>08</i> YR <i>78</i>			
U T	ZONE <i>18</i>	EASTING <i>431399</i>	NORTHING <i>5613699</i>	RC <i>41</i>	ELEVATION <i>10320</i>	RC <i>4</i>	BASIN CODE <i>26</i>

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

MOE  
VF-18

31	0012605	0152305	01852157485				
32							

## WATER RECORD

WATER FOUND AT - FEET		KIND OF WATER		
0180	10-13	1 <input checked="" type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	14
		2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
	15-18	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	19
		2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
	20-23	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	24
		2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
	25-28	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	29
		2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
	30-33	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	34
		2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	

### CASING & OPEN HOLE RECORD

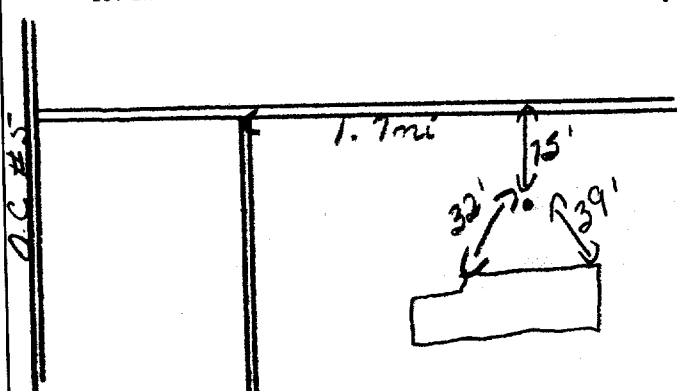
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-19 6 7/8 06	<input checked="" type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input type="checkbox"/> 4 OPEN HOLE	12 .188	0	0157
17-18 06	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input type="checkbox"/> 4 OPEN HOLE	19		20-23
24-25	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input type="checkbox"/> 4 OPEN HOLE	26	157	0185
	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input type="checkbox"/> 4 OPEN HOLE			27-30

### PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

LOCATION OF WELL

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



DRILLERS REMARKS

**FINAL  
STATUS  
OF WELL**

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

## WATER USE

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

## METHOD OF DRILLING

1 <input type="checkbox"/> CABLE TOOL	6 <input type="checkbox"/> BORING
2 <input type="checkbox"/> ROTARY (CONVENTIONAL)	7 <input type="checkbox"/> DIAMOND
3 <input type="checkbox"/> ROTARY (REVERSE)	8 <input type="checkbox"/> JETTING
4 <input type="checkbox"/> ROTARY (AIR)	9 <input type="checkbox"/> DRIVING
5 <input checked="" type="checkbox"/> AIR PERCUSSION	

CONTRACTOR	NAME OF WELL CONTRACTOR	LICENCE NUMBER
	CAPITAL WATER SUPPLY LTD	1558
	ADDRESS	
	Box 490, STITTVILLE	
	NAME OF DRILLER OR BORER	LICENCE NUMBER
	S. Miller	
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE
	W. Kavanagh	DAY 16 MO. 8 YEAR 78

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-52	DATE RECEIVED	63-68	80
	1		1538		080978		
	DATE OF INSPECTION		INSPECTOR				
			Km				
	REMARKS:						



Date Nov. 22/48 Licence Number 339



N/A
-----

## Regulation 903 Ontario Water Resources Act

Page \_\_\_\_\_ of \_\_\_\_\_

First Name	Last Name / Organization		<input type="checkbox"/> Well Constructed by Well Owner
City of Ottawa	[Redacted]		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
Construction Limited #9094 Cavanagh Road	Ashton Ont	K6A 1B6		

Address of Well Location (Street Number/Name)	Township	Lot	Concession
---	----------	-----	------------

# 5371 Fernbank Road	Goulbourn P/L 30	10.
County/District/Municipality	City/Town/Village	Province

<u>Huron-Charleton</u>				<u>Stittsville</u>				<b>Ontario</b>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10						
UTM Coordinates    Zone    Easting    Northing				Municipal Plan and Sublot Number				Other							

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD   8   3	18	431620	5913745		

General Colour	Most Common Material	Other Materials	General Description	Depth (m)
----------------	----------------------	-----------------	---------------------	-----------

6" Drilled Well Abandonment	From	To
	0'	146'

* P-0 #	33461	*			

Depth Set at (m/ft)	From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
---------------------	---------	---	---------------------------

146'	6'	Hole Plug	11 Bags.
6'	0'	Backfill	

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input checked="" type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, <i>specify</i> _____		<input type="checkbox"/> Other, <i>specify</i> _____		

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input checked="" type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Inefficient, Clogged
			From	To	

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


☐ Abandoned, poor Water Quality  
☐ Abandoned, other, *specify* \_\_\_\_\_  
☐ Other, *specify* \_\_\_\_\_

Water Details		Hole Diameter	
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, <i>specify</i> _____	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, <i>specify</i> _____		
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, <i>specify</i> _____		

Business Name of Well Contractor		Well Contractor's Licence No.	
AIR ROCK DRILLING CO LTD		1119	
Business Address (Street Number/Name)		Municipality	
PR #1 RICHMOND			
Province	Postal Code	Business E-mail Address	

ONT	KOAJZO
Bus Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)

613 838 2170 Desautels Kar

Vol. 1	Section 4	Signature of Purchasing Officer	Contractor	Date Submitted
1	4			July 11, 2013

After test of well yield, water was:	Draw Down	Recovery
--------------------------------------	-----------	----------

<input type="checkbox"/> Clear and sand free	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
<input type="checkbox"/> Other, <i>specify</i>				

If pumping discontinued, give reason:	Static		
---------------------------------------	--------	--	--

Level			
1		1	

Pump intake set at (m/ft)	2	/	2
---------------------------	---	---	---

Pumping rate (l/min / GPM)	3	3
----------------------------	---	---

Duration of pumping	4	4	

_____ hrs + _____ min	5	5	
Final water level end of pumping (m/ft)			

Final water level end of pumping (mm)	10	10
15	15	15

If flowing give rate (l/min / GPM)	15		15
	20		20

Recommended pump depth (m/ft)	25	25
-------------------------------	----	----

Recommended pump rate (l/min / GPM)	30	30
--	----	----

Well production (l/min / GPM)	40	40
	50	50

Disinfected?	50	50
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	60	60

**Map of Well Location**

Please provide a map below following instructions on the back.

Terry Fox Drive

#5371  
Fernbank Road

1 KM.

150'

A hand-drawn map showing the location of a house. A vertical line is labeled "Terry Fox Drive" and a horizontal line is labeled "#5371 Fernbank Road". The intersection is marked with a small circle. A double-headed arrow below the intersection indicates a distance of "1 KM." to the right. A vertical double-headed arrow to the right of the intersection indicates a distance of "150'" south to a circled 'X' representing the house.

Comments:

[illegible]

Well owner's information	Date Package Delivered	Ministry Use Only
		Audit No.

package delivered									Adult No. <b>z 137090</b>
	Y	Y	Y	Y	M	M	D	D	
<input type="checkbox"/> Yes	Date Work Completed								

☐ Yes  
☒ No

20110200

Received JAN 26 2012

0506F (2007/12) © Queen's Printer for Ontario 2007

Ministry's Convo

## Well ID

Well ID Number: 1502817

Well Audit Number:

Well Tag Number:

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

## Well Location

### Address of Well Location

<b>Township</b>	GOULBOURN TOWNSHIP
<b>Lot</b>	030
<b>Concession</b>	CON 10
<b>County/District/Municipality</b>	OTTAWA-CARLETON
<b>City/Town/Village</b>	
<b>Province</b>	ON
<b>Postal Code</b>	n/a

**UTM Coordinates**  
NAD83 — Zone 18  
Easting: 431630.70  
Northing: 5013722.00

## Overburden and Bedrock Materials Interval

<b>General Colour</b>	<b>Most Common Material</b>	<b>Other Materials</b>	<b>General Description</b>	<b>Depth From</b>	<b>Depth To</b>
BLUE	CLAY			0 ft	100 ft
GREY	CLAY	STNS		100 ft	112 ft

## Annular Space/Abandonment Sealing Record

<b>Depth From</b>	<b>Depth To</b>	<b>Type of Sealant Used (Material and Type)</b>	<b>Volume Placed</b>
-------------------	-----------------	---	----------------------

## Method of Construction & Well Use

### Method of Construction

Cable Tool

### Well Use

Domestic

Livestock

## Status of Well

Water Supply

## Construction Record - Casing

<b>Inside Diameter</b>	<b>Open Hole or material</b>	<b>Depth From</b>	<b>Depth To</b>
4 inch	STEEL		112 ft



N/A

## Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

Page of

## Well Owner's Information

First Name City of Ottawa	Last Name / Organization [Redacted]	<input type="checkbox"/> Well Constructed by Well Owner	
Mailing Address (Street Number/Name) Instruction #9094 Cavanagh Road, Ashton Ont K0A1B0	Municipality	Province	Postal Code
Telephone No. (inc. area code)			

## Well Location

Address of Well Location (Street Number/Name)				Township		Lot		Concession	
# 5355 Fernbank Road				Goulbourn		P/L30		10	
County/District/Municipality				City/Town/Village		Province		Postal Code	
Ottawa-Carleton				Stittsville		Ontario			
UTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number		Other	
NAD		8	3	184317265013745					

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

## Annular Space

Depth Set at (m) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m <sup>3</sup> /ft <sup>3</sup> )
86'	6'	hole Plug	6 Bags
6'	0'	Backfill	

## Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
<input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
Pump intake set at (m/ft)		1		1	
Pumping rate (l/min / GPM)		2		2	
Duration of pumping _____ hrs + _____ min		3		3	
Final water level end of pumping (m/ft)		4		4	
If flowing give rate (l/min / GPM)		5		5	
Recommended pump depth (m/ft)		10		10	
Recommended pump rate (l/min / GPM)		15		15	
Well production (l/min / GPM)		20		20	
Disinfected?		25		25	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		30		30	
		40		40	
		50		50	
		60		60	

## 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	
					<input type="checkbox"/> Water Supply
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input checked="" type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Silted, etc.

## Construction Record - Screen

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

☐ Abandoned, Poor Water Quality  
☐ Abandoned, other, *specify* \_\_\_\_\_  
☐ Other, *specify* \_\_\_\_\_

## Water Details

Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____	Depth (m/ft)		Diameter (cm/in)
		From	To	
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____			
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____			
Water found at Depth (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____			

## Hole Diameter

[illegible]

### Well Contractor and Well Technician Information

Business Name of Well Contractor		Well Contractor's Licence No.	
AIR ROCK DRILLING LTD		1119	
Business Address (Street Number/Name)		Municipality	
RR# 1		RICHMOND	
Province	Postal Code	Business E-mail Address	
ONT	K0A 2Z0		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
613 838 2170		Desaulniers Ken	
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
T 4	Ken Desaulniers		2011 Y 11 M 30

### Map of Well Location

Please provide a map below following instructions on the back.

Terry Fox Drive

#5355 Farnbank Road

500'

80'

X

Comments:

Well owner's information package delivered  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Package Delivered Y Y Y Y M M D D 2 0 1 1 1 0 2 0	<b>Ministry Use Only</b> Audit No. <b>z137084</b> Received <b>JAN 26 2012</b>
	Date Work Completed Y Y Y Y M M D D 2 0 1 1 1 0 2 0	

316/5c.



15 No 2819

B

UTM 18 24 4 3 1 7 0 0 E

5 R 5 9 1 3 5 4 0 N

The Ontario Water Resources Commission Act

Elev. 4 R 0 3 2 2

# WATER WELL RECORD

Basin 2 5 1 1 Carleton

Township, Village, Town or City Goulbourn

County or District

Con 10

Lot

31 30 H3

Date completed 1st December 1967

(day)

month

year)

R.R. 1 - Stittsville, Ont.

## Casing and Screen Record

Inside diameter of casing 4" old - 2"  
 Total length of casing 56 - 2"  
 Type of screen -  
 Length of screen -  
 Depth to top of screen -  
 Diameter of finished hole 2

## Pumping Test

Static level 4  
 Test-pumping rate 700 GPH XXXXX  
 Pumping level 28  
 Duration of test pumping 1 hr.  
 Water clear or cloudy at end of test clear  
 Recommended pumping rate 5 G.P.M.  
 with pump setting of 40 feet below ground surface

## Well Log

### Overburden and Bedrock Record

4" already drilled  
 2" sand  
 rock, sandstone & limestone  
 mix

From  
ft.To  
ft.Depth(s) at  
which water(s)  
foundKind of water  
(fresh, salty,  
sulphur)

0 136  
 136 140  
 140 159

155 fresh

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

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

Drilling or Boring Firm

J.B. DUFRESNE &amp; CO. LIMITED

Address 1014 Maitland Ave.,

Ottawa 5, Ont.

Licence Number

Name of Driller or Borer V. Cossette

Address 60 Clarence - Eastview, Ont.

Date December 1st 1967

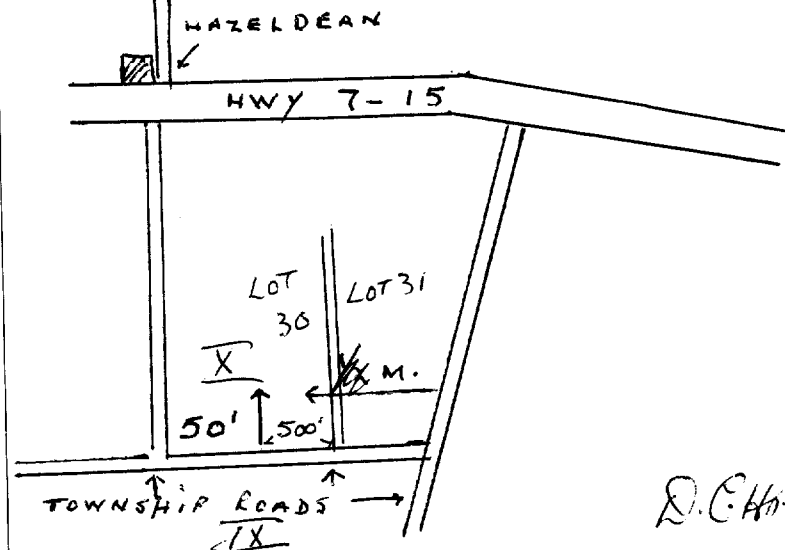
(Signature of Licensed Drilling or Boring Contractor)  
for J.B. Dufresne & Co. Limited

Form 7 15M-60-4138

OWRC COPY

## Location of Well

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

D.C.H.  
Buried H3







09.43

# **APPENDIX 3**

## **QUALIFICATIONS OF ASSESSORS**

## 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  
Consulting 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  
Rideau Centre Expansion project - Ottawa  
Agricultural Supply Facilities - Eastern Ontario  
Laboratory Facility – Edmonton (Alberta)  
Ottawa International Airport - Contaminant Migration Study - Ottawa  
Investigation and Remediation – Cotton Mill Redevelopment, Cornwall  
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  
Assessment and Remediation - North Bay Airport  
Commercial Properties – Guelph and Brampton  
Brownfields Remediation – Alcan Site - Kingston  
PWGSC Building – 90 Elgin Street - Ottawa  
Remediation Program - Ottawa Train Yards  
MHLH Facility – CFB Petawawa  
Ottawa Congress Centre  
Lansdowne Park Redevelopment - Ottawa

**Environmental  
Engineering**

**Geotechnical  
Engineering**

**Materials Testing  
Quality Control**

**Building Science**

**Hydrogeology**

**Archaeological  
Services**



## **POSITION**

Environmental Consultant

## **EDUCATION**

Carleton University, B.Eng. 2015  
Environmental Engineering

St. Lawrence College, 2008  
Environmental Technician

## **EXPERIENCE**

*2016 to Present:*

**Paterson Group Inc.**

Consulting Engineers  
Geotechnical and Environmental Division  
Environmental Consultant

*2015 to 2016*

**Kanellos Consulting Inc.**

Environmental Consulting Firm  
Environmental Consultant

*Summers 2013 & 2014*

**GFL Environmental Inc.**

Bio-Remediation Facility  
Environmental Technician

*2008 to 2011, summer of 2012*

**Petroleum Enviro Services (Div. of ASM Corrosion Control)**

Environmental Consulting Firm  
Environmental Consultant

## **SELECT LIST OF PROJECTS**

Nordex Industrial Site - Soil and Groundwater Remediation - Kingston, ON  
Contaminated Soil and Groundwater Sampling - Various sites - Eastern Ontario  
Designated Substance Surveys and Reports - Various sites - Eastern Ontario  
Mould Sampling, Assessments and Reports - Various sites - Eastern Ontario  
Surcharge and Settlement Surveys - Ottawa, ON  
Tank Site Remediation Program - Various sites - Alberta  
Tank Drawing Submittal to PTMAA - Various sites - Alberta

**Environmental  
Engineering**

**Geotechnical  
Engineering**

**Materials Testing  
Quality Control**

**Building Sciences**

**Hydrogeology**

**Archaeological  
Services**