Geotechnical Engineering

**Environmental Engineering** 

**Hydrogeology** 

Geological Engineering

**Materials Testing** 

**Building Science** 

Archaeological Services

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# **Phase I-Environmental Site Assessment**

390 Bank Street Ottawa, Ontario

# **Prepared For**

Urban Capital Property Group

# **Paterson Group Inc.**

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Report: PE4650-1



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## **EXECUTIVE SUMMARY**

#### **Assessment**

Paterson Group was retained by Urban Capital Property Group to conduct a Phase I-Environmental Site Assessment (ESA) for the property located at 390 Bank Street, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the subject site and the Phase I Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property.

According to the historical research, the Phase I Property was initially developed prior to 1888 and used for residential purposes until the early 1910s. In the early 1920s, the subject land was then occupied by a retail fuel outlet (RFO) on the northern portion of the property until 1970. The former operation of the RFO resulted in an area of potential environmental concern (APEC) on the Phase I Property. This APEC was addressed in previous environmental investigations conducted by Trow Associates Inc. (Trow) in 2008 and by Paterson in 2011. A record of site condition (RSC) was subsequently filed for the property. Based on the RSC file, the soil and groundwater on and beneath the Phase I Property were in compliance of the applicable MECP standards. It should be noted that maximum reported concentrations remaining on-site, comply with the current MECP Table 3 Residential Standards. No further work was recommended by Trow or Paterson.

Historical land use of the neighbouring properties included residential, commercial/light-industrial and retailers. Several potentially contaminating activities (PCAs) were identified within the study area. Based on the separation distance and redevelopment of the neighbouring properties, these PCAs did not result in APECs on the Phase I Property.

Following the historical research, a site visit was conducted. Currently, the subject property is occupied by a single-storey commercial building operating as a restaurant since circa 2003. Neighbouring land use in the Phase I Study Area consists of residential and commercial (retailers and restaurants). No PCAs were noted with the current use of the Phase I Property or within the Study Area.

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



## Recommendations

Based on the age of the subject building, potentially asbestos containing materials (ACMs) maybe present in the subject building, including the vinyl floor tiles, drywall joint compound, suspended ceiling tiles, interior stucco and plaster finishes. Lead-based paints may also be present on painted surfaces.

It is our understanding that the subject building will be demolished in conjunction with future redevelopment. Prior to any demolition activities, a designated substance survey (DSS) must be conducted for the existing structure, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.



# 1.0 INTRODUCTION

At the request of Urban Capital Property Group, Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) for the property located at 390 Bank Street, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

Paterson was engaged to conduct this Phase I-ESA by Ms. Taya Cook from Urban Capital Property Group. The head office is located at 17 Nelson Street, Toronto, Ontario. Ms. Cook can be reached by telephone at (416) 304-1755.

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 (O.Reg.) 153/04, as amended, under the Environmental Protection Act, and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I-ESA are based on a review of readily available geological, historical and regulatory information 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: 390 Bank Street, Ottawa, Ontario

Legal Description: Lot 18 and 19, Plan 15558, Bank Street West, Ottawa

Location: The site is located on the southwest corner of where

James Street transects with Bank Street, in the City of Ottawa, Ontario. Refer to Figure 1 - Key Plan in the

Figures section following the text.

PIN: 04119-0139

Latitude and Longitude: 45° 24' 47.07" N, 75° 41' 40.91" W

Site Description:

Configuration: Rectangular

Area: 1,081 m<sup>2</sup> (approximately)

Zoning: TM – Traditional Mainstreet, Mixed-use Zone

Current Use: The subject site is occupied by a single storey

commercial building (restaurant) on the eastern portion of the property, while the northwestern portion is used

for vehicular parking.

Services: The subject site is situated in a municipally serviced

area.



# 3.0 SCOPE OF INVESTIGATION

e scope of work for this Phase I – Environmental Site Assessment was as lows:
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 properties, and if warranted, neighbouring properties;
Present the results of our findings in a comprehensive report in general accordance with the requirements of O.Reg. 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 Study Area for this assignment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

# First Developed Use Determination

Based on fire insurance plans and aerial photographs, the subject site was initially developed with a residential dwelling prior to 1888.

#### Fire Insurance Plans

The 1888, 1912, 1925 and 1956 Fire Insurance Plans (FIPs) for the subject site and surrounding lands were review as part of this assessment.

The 1888 FIPs indicate that the subject site existed at this time as two (2) parcels of land, one occupied by a residential dwelling at 21 James Street and a vacant lot at 394 Bank Street. The 1912 FIPs indicate that the site is still occupied by a residential dwelling and the present-day commercial building that was occupied by a mirror and bevelling workshop. The 1925 and 1956 FIPs indicate that the site is occupied by a retail fuel outlet with two (2) underground storage tanks (USTs), a commercial building fronting Bank Street and the pre-existing residence fronting James Street.

Based on the FIPs, the neighbouring lands consisted of commercial businesses along Bank Street and residential along streets that transect with Bank Street. Several potentially contaminating activities (PCAs) were identified within the Phase I study area. These historical PCAs are listed in Table 1.



TABLE 1. Potentially Contaminating Activities Fire Insurance Plans Review Summary				
Address Year of FIP		Listed Activity	Approximate Distance / Orientation from Site	
Bank Street				
394-396	1925, 1956	Gasoline Service Station (2 USTs)	Onsite	
370	1901	Printing Office (motor)	65 m N	
374	1901	Printing (motor)		
404	1901, 1925, 1956	Paints	2 m S	
370	1925	Photos	68 m N	
376-378	1925, 1956	Electrical Works	63 m N	
384	1925	Glass Works	60 m N	
448	1925, 1956	Gasoline Service Station (4 USTs)	168 m S	
455	1925, 1956	Gasoline Service Station (3 USTs)	175 m S	
464	1925, 1956	Dealership & Automotive Garage	213 m S	
Gladstone Av	enue			
433	433 1956 Gasoline Service Station (2 USTs) 162 m SV		162 m SW	
430	1956	Progressive Printers 170 m SW		
Gilmour Stree	Gilmour Street			
385-389	1888	Shingles and Lumber Yard 62 m NE		
384	1925, 1956	Garage & Repairs 92 m NE		
James Street				
9	1925	Garage & Repairs 25 m NW		
24-26	1925	Battery Charging	45 m SW	
Florence Stre	et			
7-11	1925, 1956	Garage & Repairs (1 UST)	25 m S	

Based on the separation distances and/or downgradient orientation with respect to the subject site, the off-site PCAs are not considered to represent areas of potential environmental concern (APECs).

An on-site PCA, a former retail fuel outlet (RFO) would normally represent an APEC on the Phase I Property, however, previous environmental investigations (Phase I & II ESA) conducted by Trow Associates Inc. (Trow) in 2008, addressed this on-site PCA and it no longer poses an environmental concern on the Phase I Property. More details regarding this former APEC has been discussed in the Previous Engineering Reports section.



Historical PCAs identified in the FIPs review are shown on Drawing PE4650-2 Surrounding Land Use Plan.

# **City of Ottawa Street Directories**

City directories were reviewed in approximately ten (10) year intervals back to the 1888. The subject site was first listed as residential from 1888 to early 1920s. The property was then listed as John's Service Station and Sunlight Oil Service Station from 1922 to 1970. From 1955 to 2011, the property was also shared by a commercial building that operated as restaurants over the course of those years. Surrounding lands listed several other retail fuel outlets (FROs) in the directories. PCAs identified within the study area are presented in Table 2.

TABLE 2. Potentially Contaminating Activities City Directories Review Summary					
Address	Years Listed	Listed Activity	Approximate Distance / Orientation from Site		
Bank Street	Bank Street				
394-396	1922-1970	Various Retail fuel outlets On-site			
448	1922-1960	Retail fuel outlet	168 m S		
455	1922-1960	Retail fuel outlet	175 m S		
464	1922-1960	Automotive Garage	213 m S		
Gladstone Avenue					
433	433 1950-1960 Retail fuel outlet 162 m SW		162 m SW		
James Street					
9	1925	Garage & Repairs 25 m NW			
7-11	1930-1960 Automotive Garage 25 m S				

Based on the separation distances and/or orientation with respect to the subject site in combination with the previous environmental investigations, these listed activities are not considered to result in APECs on the Phase I Property.

Historical PCAs identified in the city directories review are shown on Drawing PE4650-2 Surrounding Land Use Plan.



#### Chain of Title

Paterson verified the current land title for the Phase I Property with Read Abstracts Limited. According to the chain of title received on August 8, 2019, Plan 15558, covers Lot 18 and 19, was first registered by James McLaren on July 10, 1872. The deed was transferred over the years to private individuals until 1883, when the property was acquired by Freehold Association of Ottawa and subsequently separated into Lots 18 and 19.

Ownership of Lot 18 was transferred from Freehold Association of Ottawa to a private individual in 1884, and over many years, transferred to other individuals until 1946, where the property was acquired by Arthur Dupont and Ewart Mustard trading as Sunlight Oil Company, and from Arthur Dupont to B.P Canada Limited in 1958. Subsequently, the land was transferred from B.P Oil Limited to Jimmy's Grill Limited in 1974.

Ownership of Lot 19 was transferred from Freehold Association of Ottawa to a private individual in 1883, and over many years, transferred to a number of different private individuals until 1952. The property was leased to Thomas Hum and William Roy trading as H & P Realty Company to Jimmy's Grill Limited, until they acquired the property in 1966, and subsequently transferred the deed of Lots 18 and 19 to a registered corporation in 1996. The current property owner, Urban Capital (James Street) Inc. acquired the Phase I Property in February 2012.

One (1) former activity of concern was identified during a review of the chain of title. Plan 15558, Lot 18 was acquired by Arthur Dupont and Ewart Mustard trading as Sunlight Oil Company in 1946. Dupont and Mustard subsequently transferred the property to B.P Oil Limited in 1958, to which the property was acquired by Jimmy's Grill Limited in 1974. Arthur Dupont and Ewart Mustard were considered the owners and operators of the RFO previously identified on the Phase I Property in the 1925 and 1956 FIPs and city directories.

The former presence of the RFO has been addressed in a Phase I & II ESA by Trow (2008) and Paterson (2011). A Record of Site Condition (RSC) was subsequently filed in 2011. The former RFO no longer represents an APEC on the Phase I Property. More details regarding the environmental work and RSC for the Phase I Property are discussed in the Previous Engineering Reports and Record of Site Condition section of this report.

No other PCAs were identified on the Phase I Property during the review of the chain of title.



# **Proposed Site Plan**

A survey plan was not provided at the time. A proposed site plan prepared by Raw Design (2019) was review as part of the assessment. The plan depicts the Phase I Property in its current configuration.

# **Previous Environmental Reports**

The report: "Phase I & II Environmental Site Assessment, 390 Bank Street, Ottawa, Ontario" prepared by Trow Associates Inc. (Trow), dated January 2008 was reviewed. The report summarized a previous Phase I & II ESA report, a fuel tank decommissioning report and a soil and bedrock investigation and assessment, which were completed for the site. According to these reports, the primary environmental concern was associated with the operation of a retail fuel outlet between approximately 1920 and 1970. The former underground storage tanks (USTs) and petroleum impacted soil were subsequently removed from the site. In addition, the former pump island had been assessed and no indications of petroleum impacts to either soil or groundwater were detected.

Based on the findings of the Phase I & II ESA conducted by Trow, the former presence of a gasoline service station on the subject property was considered to represent an area of potential environmental concern (APEC) on the subject site. Six (6) borehole were drilled, three (3) of which were completed as groundwater monitoring wells. The boreholes/monitoring wells were placed to assess potential on-site concerns with the former retail fuel outlet (RFO) and with respect to the automotive repair garage south of the site. None of the soil and groundwater analytical results were found to exceed the selected MOE Table 3 standards for residential land use. No further investigation was required.

Trow recommended that a designated substance survey (DSS) be conducted for the subject building.

In November 2011, Paterson conducted a Phase I ESA. Based on their findings, the historical land use of the subject site was confirmed, however, the analytical test results from 2008 indicated that the former RFO had not impacted the Phase I Property. Additionally, a record of site condition (RSC) was filed for the subject site by EFI Global in April 2011. Given the latter and that the land use and current occupants of the site have not changed since the RSC was filed, Paterson concluded that no further environmental work was required.



# **Geotechnical Investigation**

Paterson conducted a subsurface investigation in July 2019. Based on the investigation, the soil profile was observed to consisted of either an asphaltic pavement structure or fill material (silty sand with gravel), followed by silty sand, underlain by silty clay, followed by glacial till and bedrock. Bedrock was encountered at approximately 17.5 m below the existing grade. No deleterious substances or hazardous materials were observed during the subsurface investigation.

# **Proposed Development Plan**

A proposed site plan was reviewed as part of this assessment. It depicts the Phase I Property with the proposed condominium building with a commercial ground level. A copy of the proposed plan is provided in Appendix 1.

## 4.2 Environmental Source Information

#### **Environment Canada**

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on June 27, 2019. No records were found in the NPRI database for properties within the study area.

#### **PCB Inventory**

A search of national PCB waste storage sites was conducted. No PCB waste storage sites are located within the Phase I study area.

#### Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the website of the Ontario Ministry of Natural Resources (MNR) on June 26, 2019. The search did not reveal any areas of natural significance within the Phase I study area.

## Ministry of the Environment, Conservation and Parks (MECP) Submissions

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the properties. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.



#### **MECP Instruments**

A request was submitted to the MECP Freedom of Information (FOI) office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

# **MECP Waste Management Records**

A request was submitted to the MECP FOI office for information with respect to waste management records. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

# **MECP Incident Reports**

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

## **MECP Brownfields Environmental Site Registry**

A search of the MECP Brownfields Environmental Site Registry (ESR) was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. One record of site condition (RSC) was filed for the Phase I Property in April 2011. Based on the ESR, an underground storage tank decommissioning program as well as a Phase I & II ESA were conducted on the subject site. The maximum reported concentrations remaining on-site were in compliance with the current MECP Table 3 Residential Standards. No remediation was required for the RSC Property.

Four (4) RSCs were identified for the following properties within the Phase I Study Area, 330 Gilmour Street, 340 McLeod Street, 453 Bank Street and 435 Gladstone Avenue. Based on the separation distances of these RSC properties with respect to the Phase I Property, in combination with the information in the ESR, these properties are not considered to represent APECs on the subject land.



# **MECP 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. There are no former waste disposal sites located within 250 m of the Phase I Study Area.

# **MECP 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 Municipal Coal Gasification Plant Sites are located within the Phase I Study Area.

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

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on June 27, 2019, to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. No records are listed in the TSSA registry for the subject site or the adjacent properties. A copy of the TSSA correspondence is included in Appendix 2.

#### **Former Industrial Sites**

The report titled "Mapping and Assessment of Former Industrial Sites, City of Ottawa" prepared by Intera Technologies Limited was reviewed. The aforementioned report indicated the presence of one former industrial site within the study area; Site #39 (Printing, Publishing and Allied Industries) located at 430 Gladstone Avenue, approximately 200 m SW of the subject site. This industrial site is not considered to have the potential to impact the subject site based on sufficient distance separating the former site from the subject site.

## City of Ottawa Landfill Document

The document entitled "Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa", was reviewed. No former landfill sites were identified in within the Phase I Study Area.

# City of Ottawa Historical Land Use Inventory (HLUI)

A search of the City of Ottawa's Historical Land Use Inventory (HLUI) database was conducted as part of this assessment.



At the time of issuance of this report, the HLUI search results had not been received. A copy of the HLUI request form is provided in Appendix 2.

# 4.3 Physical Setting Sources

# **Aerial Photographs**

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

1928	The subject site has been developed with what appear to be two buildings on the south portion of the property. Neighbouring properties have been developed for what appear to be commercial or residential purposes.
1950	It appears that the subject site has been redeveloped with a gasoline service station and a small building. No significant changes appear to have been made to the neighbouring properties.
1969	No significant changes have been made to the subject site. The properties to the northwest of the site have been developed with what appear to be residential apartment buildings. The properties to the west of the site have been cleared and are used as a parking lot. No other significant changes were made to the neighbouring properties.
1978	The retail fuel outlet appears to have been removed. The north portion of the site appears to be used for vehicular parking. The properties to the west of the site appear to have been redeveloped with the present-day office buildings. No other significant changes were made to the subject site or neighbouring properties.
1992	An addition appears to have been constructed on to the north portion of the subject building. No other significant changes were made to the subject site or neighbouring properties.
1999	(Poor scale) No significant changes were made to the subject site or neighbouring properties.
2002	(City of Ottawa) No significant changes were made to the subject site or neighbouring properties.



2017 (City of Ottawa) No significant changes were made to the subject site or neighbouring properties.

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

# **Topographic Maps**

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the regional topography in the general area of the site slopes down in a south/southeasterly direction. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

# **Physiographic Maps**

The Ontario Geological Survey publication 'The Physiography of Southern Ontario, Third Edition' was reviewed as a part of this assessment. According to the publication, the site is situated within the Ottawa Clay Plain physiographic region.

# **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 consists of shale of the Billings Formation. The surficial geology in the area of the site consists of alluvial sediments (fluvial terraces, sand and silt) with a drift thickness ranging from 10 to 25 m.

Based on the geotechnical investigation conducted by Paterson in July 2019, the site geology consists of a gravel or asphaltic concrete paved layer, followed by silty sand, underlain by a silty layer consisting of sand and some gravel, followed by limestone bedrock at approximately 13 m below the existing grade.

#### **Water Well Records**

A well record search was conducted on June 27, 2019 for all drilled wells within 250 m of the subject site. The search returned twenty-two (22) well records of which, nineteen (19) were monitoring wells and three (3) were abandoned wells.

The majority of these records were wells located 150 m or more away from the subject site. Based on the separation distance, the monitoring wells are not considered an environmental concern to the subject site.

Several monitoring wells were located within the immediate vicinity of the subject site: five (5) located on a Bank Street immediately north of James Street (366-382)



Bank Street), two (2) on the adjacent property to the south (408 Bank Street) and one at 21 James Street, approximately 25 north of the subject site. The monitoring wells were drilled to depths ranging from 4.5 to 5.8 m below the ground surface. The stratigraphy in the immediate area of the subject site consisted of sand and/or gravel, overlying a sandy silt/silty sand with some clay. No other information was provided in the well records. A copy of the well records has been included in Appendix 2.

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

No areas of natural significance or bodies of water were identified in the Phase I Study Area.

# 5.0 INTERVIEWS

#### **Property Owner Representative**

A representative of the current tenant was interviewed on July 22, 2019 during the site assessment. The current tenant is unaware of any potential environmental concerns regarding the subject property.

# 6.0 SITE RECONNAISSANCE

# 6.1 General Requirements

The site visit was conducted on July 22, 2019. Weather conditions were overcast with a temperature of approximately 20°C. Ms. Mandy Witteman from the Environmental Department of Paterson conducted the site assessment. In addition to the site, the uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site visit.



# 6.2 Specific Observations at the Phase I Property

# **Buildings and Structures**

The subject site is occupied by a single storey commercial building with a basement level. The building is occupied by the James Street Pub at the time of this assessment. The building exterior is finished off with concrete block and glass and has a concrete foundation, with a flat, tar and gravel roof. A wood patio is present to the north of the subject building. The building is heated by natural gas fired equipment.

#### **Site Features**

The commercial building is located on the southeast portion of the property. An asphalt paved parking area is present on the northwest portion of the site. A patio associated with the commercial building is present on the northeast portion of the site. Site drainage consists primarily of sheet drainage in the paved areas which drain to catch basins on site and along Bank Street and James Street. The site is generally flat, while the regional topography slopes gently down in a southerly direction.

The subject site is situated in a municipally serviced area. Underground utility services on the property include natural gas, water and sewer services which enter the site from Bank Street. One groundwater monitoring well was located next to the northwest side of the subject building at the time of the site visit.

No evidence of current or former railway or spur lines was observed on the subject property at the time of the site visit. No areas of stained pavement, stressed vegetation or unidentified substances were observed on-site at this time.

#### **Interior Assessment**

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

Floor finishes consisted of a combination of poured concrete, ceramic tiles vinyl tiles, terrazzo and hardwood.
Wall finishes consisted of concrete block, interior brick, panelling, lathe and plaster and drywall.
Ceilings were finished with plaster over wire mesh (interior stucco) suspended ceiling tiles, concrete decking on steel joists and drywall.
Lighting throughout the building is provided by incandescent and fluorescentixtures.



Based on the age of the building, potentially asbestos containing materials (ACMs) maybe present in the subject building, including the vinyl floor tiles, drywall joint compound, suspended ceiling tiles, interior stucco and plaster finishes. In general, all of the potential ACMs were in good condition. Lead-based paints may also be present on painted surfaces.

# **Fuel and Chemical Storage**

The building is heated by a natural gas fired furnace. No above ground storage tanks (ASTs), fuels or chemicals were observed in the subject building. No potential environmental concerns were identified in the interior of the subject building at the time of the assessment.

# **Wastewater Discharge and Waste Management**

Two floor drains, one in the kitchen and basement were observed to be dry. The liquid discharged from the subject building includes the washwater and sewage from the building. The subject site discharges into the City of Ottawa sewer system. No sumps were observed in the subject building.

Waste generated onsite generally consists of food waste and food packaging. No concerns were noted regarding waste generation and/or storage on the subject site.

## **Neighbouring Properties**

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection.

Land use adjacent to the subject site is as follows:

<b>_</b>	North -	James Street, followed by retailers and offices;
	South -	Commercial offices, followed by Florence Street;
<b>_</b>	East -	Bank Street, followed by restaurants;
	West -	Commercial offices, followed by residential dwellings.

Land use within the Phase I Study Area (250 m radius) is primarily used for residential and commercial purposes with some institutional land use. No existing off-site PCAs were identified at the time of the site visit. Surrounding land use is shown on Drawing PE4650-2 – Surrounding Land Use Plan.



# 7.0 REVIEW AND EVALUATION OF INFORMATION

# 7.1 Land Use History

The following table indicates the current and past uses of the site, as well as associated potentially contaminating activities dating back to the first developed use of the site based on the Chain of Title, Fire Insurance Plans, and aerial photographs.

Table 3. Land Use History – 390 Bank Street Lots 18 & 19, Plan 15558, West Bank St. (PIN 04119-0139)				
Time Period	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
1872-1883	Private Individuals	N/A	N/A	No available observations.
Lot 18				
1883-1933	Private Individuals	Residential	Small dwelling	1888 and 1901 FIP indicates a small structure that resembles a residential dwelling.
1933-1958	Arthur Dupont and Ewart Mustard (trading as Sunlight Oil Company)	Industrial	Retail fuel outlet	The 1925 and 1956 FIP, city directories, aerials and chain of title
1958-1974	B.P Oil Limited	Industrial	Retail fuel outlet	The city directories and aerial photographs confirm these findings.
1974-1996	Jimmy's Grill Ltd.	Commercial	Restaurant	City directories, chain of title
Lot 19				
1883-1911	Private Individuals	Vacant	N/A	1889 and 1901 FIPs, chain of title
1911-1925	Private Individuals	Commercial	Mirror bevelling works	1912 and 1925 FIP, directories
1925-1959	Private Individuals	Commercial	Retail	1925 and 1956 FIP, chain of title, directories
1959-1996	Jimmy's Grill Ltd.	Commercial	Restaurant	City directories, chain of title
Lots 18 and 19				
1996-1998	National Trust	Commercial	Restaurant	City directories, chain of title
1998-2012	176929 Canada Inc.	Commercial	Restaurant	City directories, chain of title
2012-present	Urban Capital (James Street) Inc.	Commercial	Restaurant	City directories, chain of title

As discussed in Section 4.1, Previous Engineering Reports and available information regarding the RSC filed for the subject property, the former operation



of the RFO on the subject site is no longer considered a PCA and therefore does not represent an APEC on the Phase I Property.

The Phase I Property is currently occupied by a restaurant/pub that has been operating onsite for over 16 years. No new potential environmental concerns were noted with the historical and current land use of the subject property.

# Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Table 2 of O.Reg. 153/04, a historical PCA was identified on the subject site; a former retail fuel outlet (FRO), which was previously addressed in 2008 as an APEC on the Phase I Property. Based on the previous environmental investigations (2008 Phase I & II ESA), as discussed in Section 4.1, in combination with the RSC documentation for the Phase I Property, this former RFO is no longer considered a PCA.

Several off-site PCAs were identified within the Phase I Study Area. Based on their respective locations and separation distances, they do not represent APECs on the Phase I Property.

#### **Contaminants of Potential Concern**

No Contaminants of Potential Concern (CPCs) were identified on the Phase I Property.

# 7.2 Conceptual Site Model

# Geological and Hydrogeological Setting

Based on the information from the Geological Survey of Canada, the overburden in the area consists of alluvial sediments (sand and silt) with a drift thickness ranging from 10 to 25 m. Bedrock in the area consists of shale of the Billings Formation.

Groundwater flow is interpreted to be in a south/southeasterly direction.

#### Fill Placement

Based on the findings of the subsurface investigation, no deleterious fill material or unknown substances were encountered during the subsurface investigations.



# **Existing Buildings and Structures**

The southeastern part of the site is occupied by a single storey commercial building with a single basement level and a wooden patio on the northeast side of the building. The northwestern part of the site is asphaltic concrete paved or gravel surface.

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

No areas of natural significance or water bodies were identified on the Phase I Property or within the Phase I Study Area.

# **Drinking Water Wells**

There are no potable water wells on the subject site.

# **Neighbouring Land Use**

Neighbouring land use in the Phase I Study Area consists of residential, commercial (offices, cafes, and retailers) and community (churches).

# Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, several PCAs were identified in the study area. Based on separation distance and/or orientation with respect to the subject site, off-site PCAs are not considered to represent APECs on the subject site. No new potentially contaminating activities were identified and thus, there are no areas of potential environmental concern on the Phase I Property.

#### **Contaminants of Potential Concern**

As per Section 7.1 of this report, there are no contaminants of potential concern.

## Assessment of Uncertainty and/or Absence of Information

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



# 8.0 CONCLUSIONS

## 8.1 Assessment

Paterson Group was retained by Urban Capital Property Group to conduct a Phase I-Environmental Site Assessment (ESA) for the property located at 390 Bank Street, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the subject site and the Phase I Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property.

According to the historical research, the Phase I Property was initially developed prior to 1888 and used for residential purposes until the early 1910s. In the early 1920s, the subject land was then occupied by a retail fuel outlet (RFO) on the northern portion of the property until 1970. The former operation of the RFO resulted in an area of potential environmental concern (APEC) on the Phase I Property. This APEC was addressed in previous environmental investigations conducted by Trow Associates Inc. (Trow) in 2008 and by Paterson in 2011. A record of site condition (RSC) was subsequently filed for the property. Based on the RSC file, the soil and groundwater on and beneath the Phase I Property were in compliance of the applicable MECP standards. It should be noted that maximum reported concentrations remaining on-site, comply with the current MECP Table 3 Residential Standards. No further work was recommended by Trow or Paterson.

Historical land use of the neighbouring properties included residential, commercial/light-industrial and retailers. Several potentially contaminating activities (PCAs) were identified within the study area. Based on the separation distance and redevelopment of the neighbouring properties, these PCAs did not result in APECs on the Phase I Property.

Following the historical research, a site visit was conducted. Currently, the subject property is occupied by a single-storey commercial building operating as a restaurant since circa 2003. Neighbouring land use in the Phase I Study Area consists of residential and commercial (retailers and restaurants). No PCAs were noted with the current use of the Phase I Property or within the Study Area.

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



# 8.2 Recommendations

Based on the age of the subject building, potentially asbestos containing materials (ACMs) maybe present in the subject building, including the vinyl floor tiles, drywall joint compound, suspended ceiling tiles, interior stucco and plaster finishes. Leadbased paints may also be present on painted surfaces.

It is our understanding that the subject building will be demolished in conjunction with future redevelopment. Prior to any demolition activities, a designated substance survey (DSS) must be conducted for the existing structure, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

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#### 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, 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 Urban Capital Property Group. Permission and notification from Urban Capital Property Group and Paterson will be required to release this report to any other party.

**Paterson Group Inc.** 

Mandy Witteman, B.Eng., M.A.Sc.

Mark S. D'Arcy, P.Eng., QPESA

# viain 6. *D* 7 11 0 y, 1 . Eng., st 137

#### **Report Distribution:**

- □ Urban Capital Property Group
- Paterson Group



# 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**

MECP Freedom of Information and Privacy Office.

MECP Municipal Coal Gasification Plant Site Inventory, 1991.

MECP document titled "Waste Disposal Site Inventory in Ontario".

MECP Brownfields Environmental Site Registry.

Office of Technical Standards and Safety Authority, Fuels Safety Branch.

MNR Areas of Natural Significance.

MECP Water Well Record Inventory.

Chapman, L.J., and Putnam, D.F., 1984: 'The Physiography of Southern Ontario, Third Edition', Ontario Geological Survey Special Volume 2.

# **Municipal Records**

City of Ottawa Document "Old Landfill Management Strategy, Phase I -

Identification of Sites.", prepared by Golder Associates, 2004.

Intera Technologies Limited Report "Mapping and Assessment of Former Industrial Sites, City of Ottawa", 1988.

geoOttawa: City of Ottawa electronic mapping website.

City of Ottawa Historical Land Use Inventory (HLUI) Database

#### **Local Information Sources**

Personal Interviews.

#### **Public Information Sources**

Google Earth.

Google Maps/Street View.

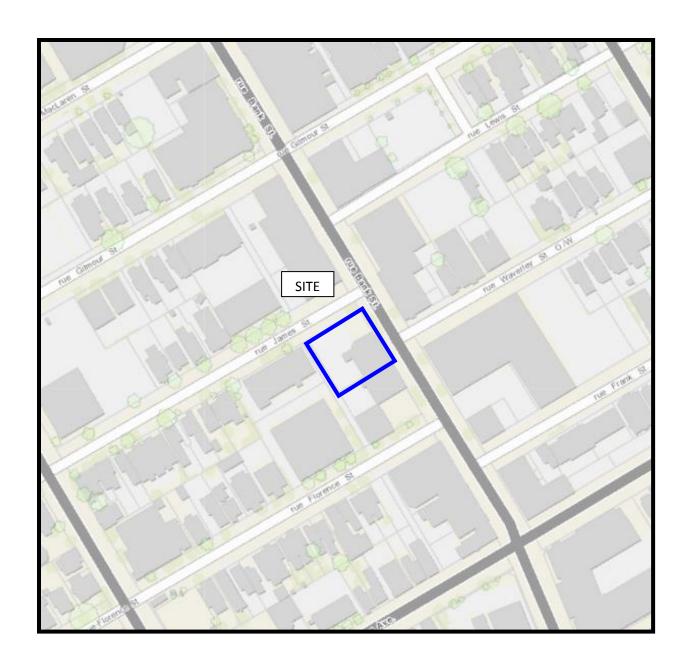
# **FIGURES**

FIGURE 1 – KEY PLAN

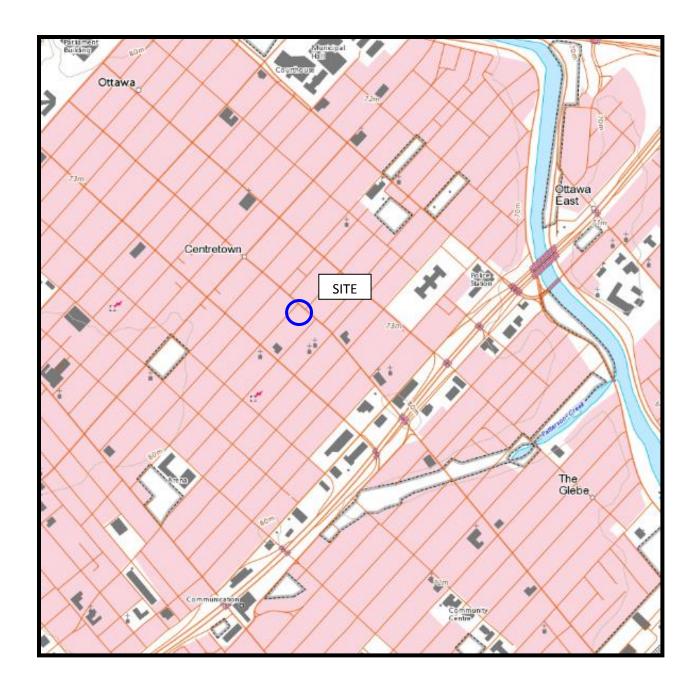
FIGURE 2 - TOPOGRAPHIC MAP

**DRAWING PE4650-1 - SITE PLAN** 

DRAWING PE4650-2 - SURROUNDING LAND USE PLAN

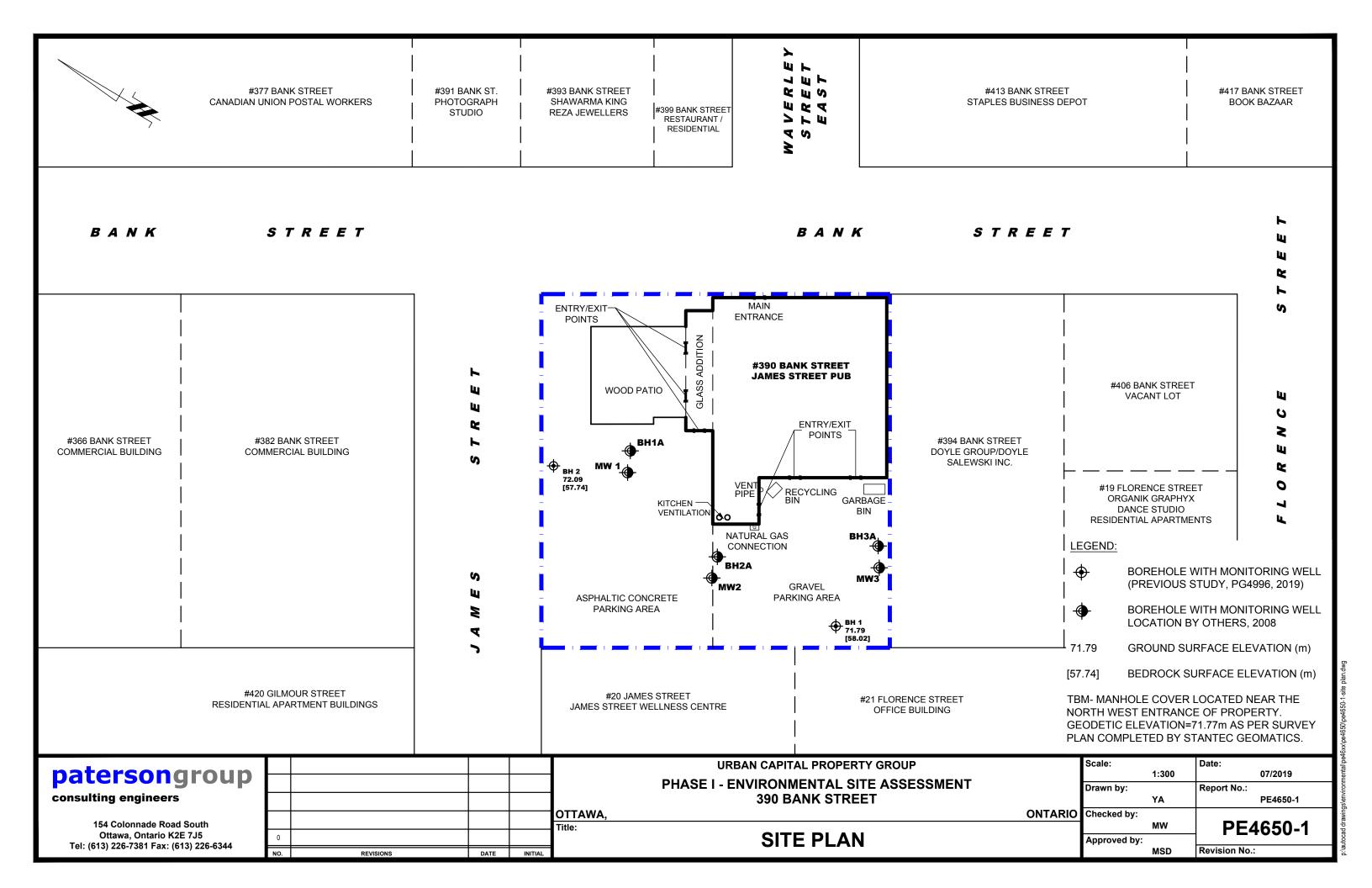


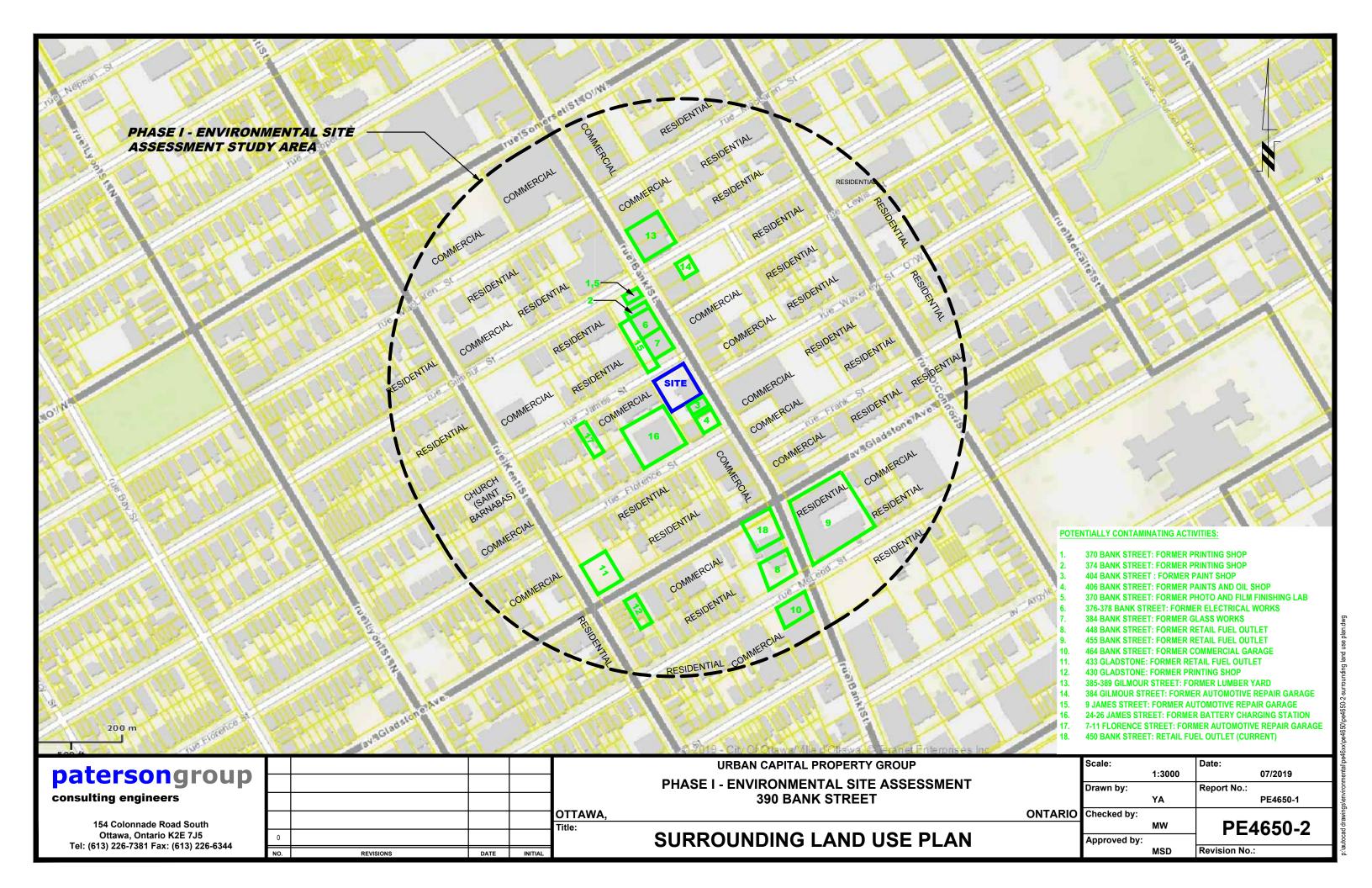
# FIGURE 1 KEY PLAN



# FIGURE 2 TOPOGRAPHIC MAP

patersongroup.



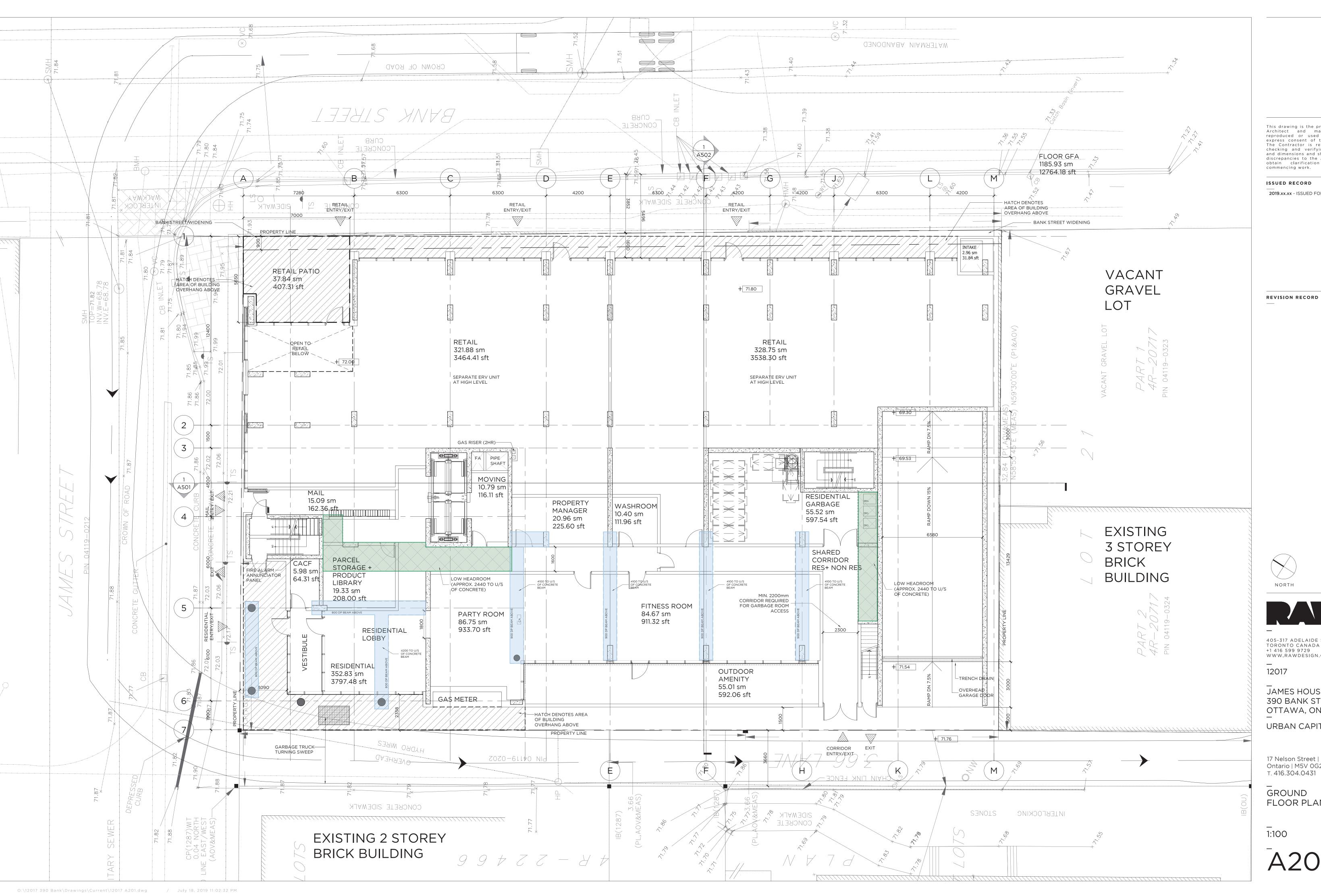


# **APPENDIX 1**

**PROPOSED SITE PLAN** 

**AERIAL PHOTOGRAPHS** 

**SITE PHOTOGRAPHS** 



This drawing is the property of the Architect and may not be reproduced or used without the express consent of the Architect. The Contractor is responsible for checking and verifying all levels checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and obtain clarification prior to commencing work.

ISSUED RECORD

2019.xx.xx - ISSUED FOR

405-317 ADELAIDE STREET WEST TORONTO CANADA M5V 1P9 +1 416 599 9729 WWW.RAWDESIGN.CA

JAMES HOUSE 390 BANK STREET OTTAWA, ON

URBAN CAPITAL

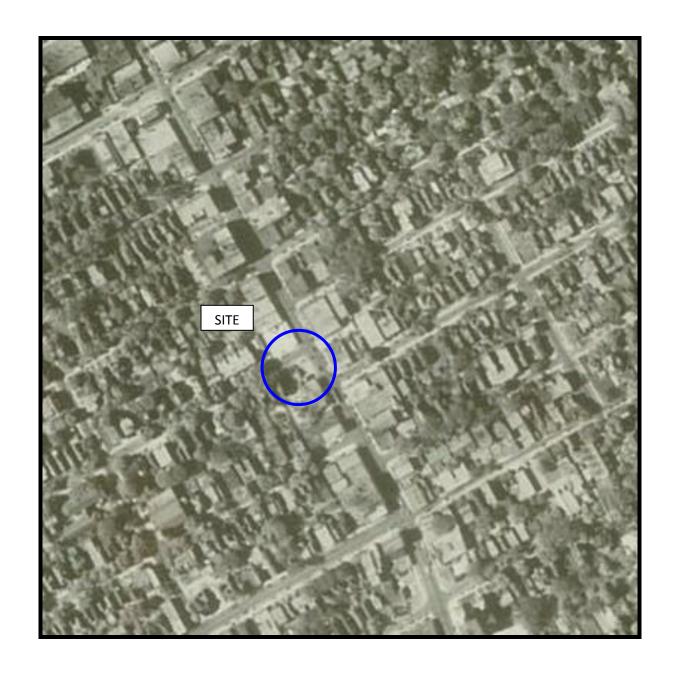
17 Nelson Street | Toronto | Ontario | M5V 0G2

GROUND FLOOR PLAN



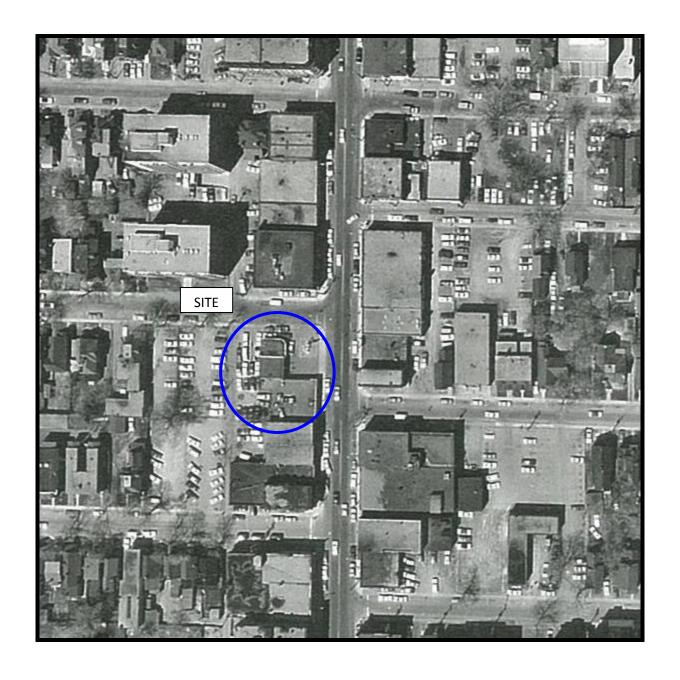
# AERIAL PHOTOGRAPH 1928

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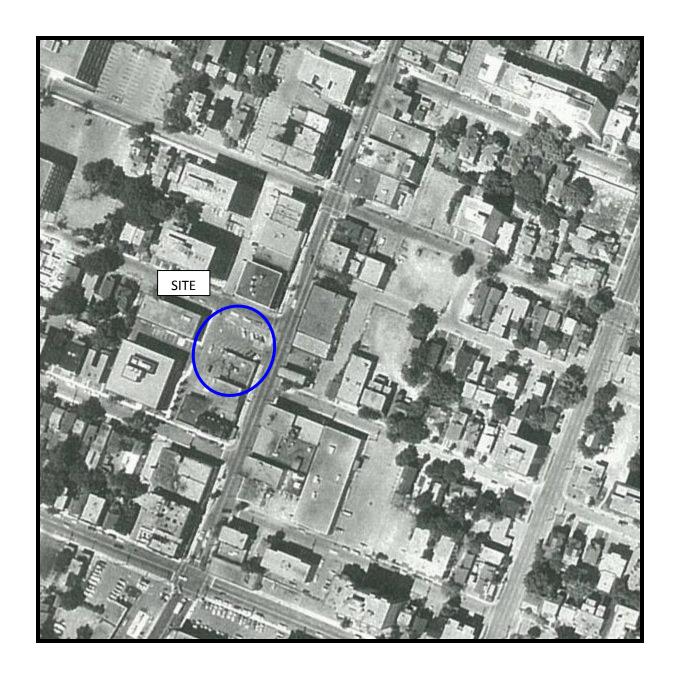


AERIAL PHOTOGRAPH 1950

patersongroup \_\_\_\_



patersongroup



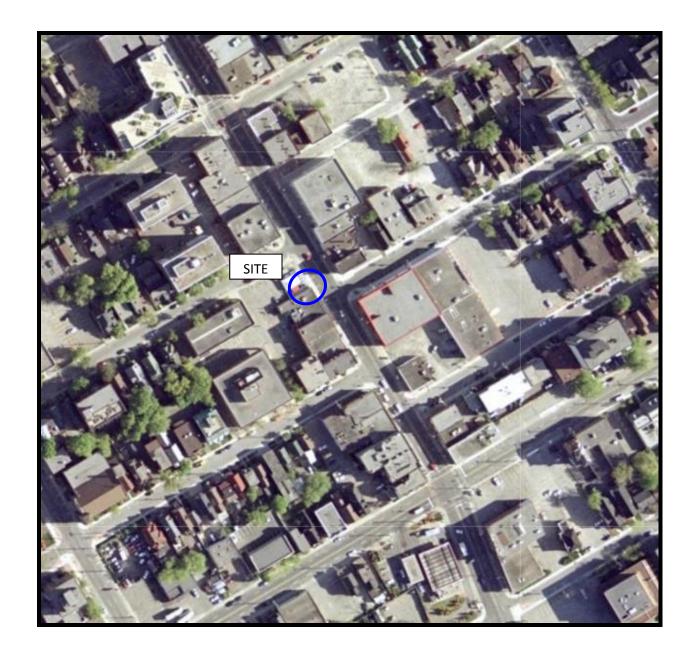
patersongroup \_\_\_\_



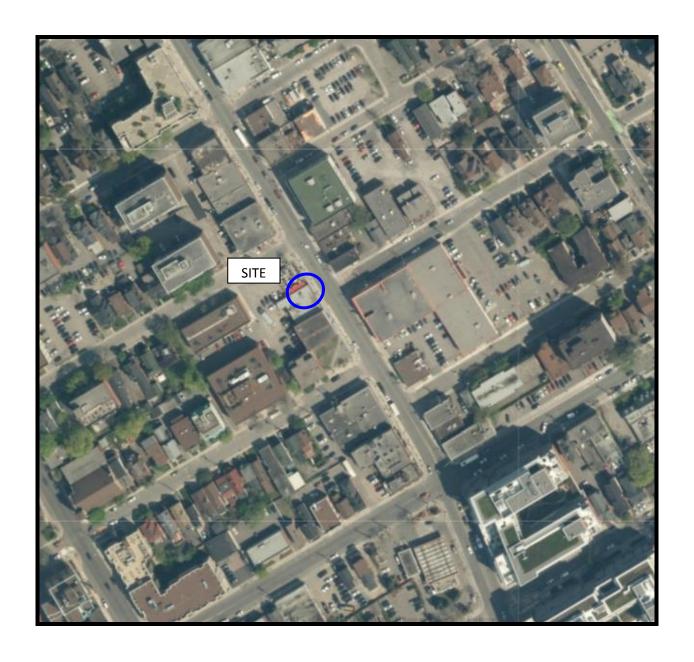
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Photograph 1 (Google Street View): View of the site looking west. Photograph illustrates the commercial building on the site.



Photograph 2: View of the back of the subject building, looking east. Photograph illustrates waste storage locations, rear entrances, natural gas connection (far left) and a possible vent pipe encased in protective concrete.



Photograph 3: View of the interior of the basement of the subject building.



Photograph 4: View of the interior of the ground floor of the subject building. Photograph illustrates use of the building as a pub/restaurant.

# **APPENDIX 2**

CHAIN OF TITLE

MECP FREEDOM OF INFORMATION

MECP WELL RECORDS

HLUI RESPONSE

**TSSA CORRESPONDENCE** 



#### **READ Abstracts Limited**

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4 Email: search@readsearch.com

Tel.: 613-236-0664 Fax: 613-236-3677

#### **ENVIRONMENTAL SEARCH**

Patersongroup Attn: Mandy

#### BRIEF DESCRIPTION OF LAND:

390 Bank St., Ottawa Lots 18 and 19, plan 15558, west Bank St.

PIN: 04119-0139

LAST REGISTERED OWNER: URBAN CAPITAL (JAMES STREET) INC.

#### CHAIN OF TITLE:

Plan 15558 registered Jul 10, 1872 By James MacLaren

Deed CR21483 registered Oct 1, 1883 From James MacLaren to John Christie

Deed CR21485 registered Oct 1, 1883 From John Christie to Robert Blackburn

Deed CR21486 registered Oct 1, 1883 From Charles Magee et al. to Freehold Association of Ottawa

#### **Lot 18**

Deed CR21846 registered Jan 9, 1884 From Freehold Association of Ottawa to James Ross

Foreclosure CR33197 registered Aug 30, 1890 From James Ross to Henry Small

Deed CR33714 registered Nov 17, 1890 From Henry Small to Annie Ross

Foreclosure CR42712 registered Nov 24, 1894

From Alex Sparks to Kenneth McDonald

Deed CR77862 registered Jun 5, 1906 From Kenneth McDonald to Robert Cram

Deed CR78905 registered Oct 3, 1906

From Robert Cram to Michael Rock and Mary Kennedy

Deed CR80062 registered Dec 27, 1906

From Michael Rock and Mary Kennedy to William & Francis Cluff

Deed CR83384registered Nov 6, 1906

From William Cluff to Francis Cluff

Deed CR90151 registered May 14, 1909

From Francis Cluff to Charles Rogers, John Stewart, and William Carson

Deed CR93623 Registered Dec 6, 1909

From Charles Rogers, John Stewart, and William Carson to Robert Edey, Israel Cowie and Richard Kemp

Deed CR99833 registered Oct 17, 1910

From Robert Edey, Israel Cowie and Richard Kemp to Theodore St. Germain and James Fraas

Deed CR211079 registered Nov 27, 1933

From Theodore St. Germain and James Fraas to Lillian St. Germain and Gertrude Fraas

Deed CR257316 registered Mar 11, 1946

From Lillian St. Germain and Gertrude Fraas to Arthur Dupont and Ewart Mustard trading as Sunlight Oil Company

Deed CR359238 registered May 21, 1957

From Ewart Mustard to Arthur Dupont

Deed CR369348 registered Mar 5, 1958

From Arthur Dupont to B. P. Canada Limited

Deed CR654100 registered May 31, 1974

From B. P. Oil Limited to Jimmy's Grill Limited

#### Lot 19

Deed CR21679 registered Nov 21, 1883

From Freehold Association of Ottawa to Margaret Bobier

Tax Deed CR30905 registered Aug 20, 1889

From City of Ottawa to John Bobier

Deed CR32404 registered April 24, 1890

From John Bobier to Henry Howell

Deed CR32512 registered May 7, 1890 From Henry Howell to John Bobier

Vesting Order CR57908 registered Jun 23, 1900 To William Crain

Deed CR61047 registered May 25, 1901 From William Crain to Harry Harwood

Deed CR63062 registered Jan 11, 1902 From Harry Harwood to Samuel Paddington

Deed CR103174 registered Mar 31, 1911 From Harry Hardwood to William Thomas Charleson

Deed CR166869 registered Dec 26, 1921 From estate of William Thomas Charleson to Frederick Huul

Deed CR169506 registered Jun 11, 1923 From Frederick Huul to Maud Kidd

Foreclosure CR201978 registered Oct 16, 1930 From Maud Kidd estate of Harry Harwood

Deed CR256119 registered Dec 17, 1945 From estate of Harry Harwood to David and Annie Ain

Deed CR294119 registered Aug 16, 1951 From David and Annie Ain to Gertrude Sutherland

Deed CR296543 registered Nov 19, 1951 From Gertrude Sutherland to Agnes Abrahams

Deed CR307075 registered Dec 30, 1952 From Agnes Abrahams to Thomas Hum and William Roy

Lease CR395026 registered Sep 23, 1959 From Thomas Hum and William Roy trading as H & P Realty Company to Jimmy's Grill Limited

Deed CR514281 registered Aug 18, 1966 From Thomas Hum and William Roy to Leon Kleiner and Harry Levine

Deed CR520405 registered Jan 9, 1967 From Harry Levine and Leon Kleiner to Jimmy's Grill Limited Deed CR695420 registered Aug 31, 1976 From Jimmy's Grill Limited to Arnold Kimmel and Lawrence Hartman

Deed NS28109 registered Dep 8, 1978 From Arnold Kimmel and Lawrence Hartman to Jimmy's Grill (1976) Ltd.

Deed LT1012653 registered Nov 25, 1996 From Jimmy's Grill (1976) Ltd. to 1189669 Ontario Ltd.

Power of Sale LT1105291 registered Feb 13, 1998 From National Trust Company to 176929 Canada Inc.

Deed OC1337765 registered Feb 29, 2012 From 176929 Canada Inc. .to Urban Capital (James Street ) Inc.

#### Leases

NS158788 – Aug 5, 1982 to 110814 Canada Ltd. NS275465 – Feb 11, 1985 to William Moreland Ministry of the Environment, **Conservation and Parks** 

Access and Privacy Office

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

Ministère de l'Environnement, de la Protection de la nature et des Parcs

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

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



June 27, 2019

Mandy Witteman Paterson Group Inc. 154 Colonnade Road Ottawa, ON K2E 7J5

Dear Mandy Witteman:

Freedom of Information and Protection of Privacy Act Request RE: Our File # A-2019-04414, Your Reference PE4650

The Ministry is in receipt of your request made pursuant to the Freedom of Information and Protection of Privacy Act and has received your payment in the amount of \$5,00 (non-refundable application fee), along with your \$30.00 deposit.

The search is being conducted on the following: 390 Bank Street, Ottawa. If there is any discrepancy please contact us immediately.

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

If you have any questions regarding this matter, please contact Victoria Partosa at victoria.partosa@ontario.ca.

Yours truly,

Janet Dadufalza Manager, Access and Privacy

# Well ID

Well ID Number: 7218928 Well Audit Number: *Z163980* Well Tag Number: *A136699* 

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

Address of Well Location	356 MACLAREN STREET
Township	NEPEAN TOWNSHIP
Lot	

Charles A Marine Charle	OTTAWA CADI ETON
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445678.00 Northing: 5029243.00
Municipal Plan and Sublot Number	
Other	

### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
GREY				0 m	.95 m
GREY	SAND	GRVL	FILL	.95 m	.53 m
BRWN	SAND		FILL	.53 m	1.52 m
BRWN	SILT	CLAY	WTHD	1.52 m	3.51 m

# **Annular Space/Abandonment Sealing Record**

Depth	Depth	Type of Sealant Used (Material and Type)	Volume
From	To		Placed
.75 m	1.5 m	BENTONITE	

### **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Other Method	
SSA	Monitoring

#### **Status of Well**

**Observation Wells** 

# **Construction Record - Casing**

Inside		Depth	Depth
Diameter Open Hole or material		From	To
3.18 cm	PLASTIC	0 m	3.05 m

#### **Construction Record - Screen**

Outside Material Depth Depth From To
3.8 cm PLASTIC 3.05 m

#### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

# **Results of Well Yield Testing**

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

Draw Down	Draw Down Water	Recovery	Recovery Water level
Time(min)	level	Time(min)	
SWL			

# Well ID

Well ID Number: 7239266 Well Audit Number: *C19500* Well Tag Number: *A122871* 

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

Address of Well Location	
Township	NEPEAN TOWNSHIP
Lot	

County/District/Municipality	OTTAWA-CARLETON
------------------------------	-----------------

#### City/Town/Village

Province ON

Postal Code n/a

NAD83 — Zone 18
UTM Coordinates Easting: 445732.00

Northing: 5029042.00

**Municipal Plan and Sublot Number** 

Other

#### Overburden and Bedrock Materials Interval

General	<b>Most Common</b>	Other	General	<b>Depth</b>	Depth
Colour	Material	Materials	Description	From	To

# **Annular Space/Abandonment Sealing Record**

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

#### **Method of Construction & Well Use**

**Method of Construction** Well Use

#### **Status of Well**

# **Construction Record - Casing**

Inside Diameter	Open Hole or material	Depth From	-

### **Construction Record - Screen**

Outside Diameter Material Pepth Depth From To

### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7328

# **Results of Well Yield Testing**

After test o	of well yield, water was
If pumping	discontinued, give reason
Pump intal	ke set at
Pumping R	Rate
<b>Duration</b> o	f Pumping
Final water	r level
If flowing g	give rate
Recommen	ded pump depth
Recommen	ded pump rate
Well Produ	ıction
Disinfected	?

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	

⊗ O₁	ntario	Ministry of the Environme		Fag Number	<u> </u>		Regulation 90	)3 Ontario	Well F	Record
Instructions for Completing Form				Αo	19061					
<ul><li>For use</li><li>All Section</li><li>Question</li><li>All metron</li></ul>	in the <b>Provinc</b> ons <b>must</b> be ons regarding or the <b>measureme</b>	e of Ontario on completed in full	to avoid dela oplication car oorted to 1/1	ment is a perr ys in processi be directed to	nanent <b>lega</b> ng. Further o the Water	instructions a	Please retain for futund explanations are averment Coordinator at	railable or 416-23	ence.	
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DD#/Ct-set No.	408 B	ANK STA	EET	-	wiiship		Lot		Concession	
		******			City/Town/V	TTAWA		artment/E	llock/Tract et	C.
GPS Reading	8 3	one Easting 4456	411   5	orthing 0/7/9/1/06	Unit Make/M	GPS Mod		differentiate erentiated,		aged D
General Colour	Most commo	Bedrock Mater on material		structions) Materials		Gener	al Description		Depth	Metres
LT BROWN	SANG	)				SANO	a. Decemption		From	0.Z
DK BROWN	SAND		SILT, G	2AVEC	5A	NO, 512	TY TRACE GR	AVEC	0.2	Z.0
GREY	CLAY		SILT			CAY,	SILTY		2.0	5.4
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				-					***************************************	
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·	etres Diamete To Centimetre	Inside	Material	Wall thickness	Depth	Metres	Pumping test method	Draw I		ecovery Water Level
0 5	4 10	centimetres		centimetres	From	То	Pump intake set at -	min M Static	letres min	Metres
		St	eel Fibreglas	Casing			(metres) Pumping rate -	Level 1	1	
Water	Record	"ו ⊸בי ו	astic Concrete	0.5	0	2.2	(litres/min) Duration of pumping	2	2	
Water found at <b>3.4</b> Metres /	Kind of Water	St	eel Fibreglas	s			hrs + min			
Gas :	Fresh Sulphu Salty Mineral		astic Concrete				of pumpingmetres	3	3	
Other:	Fresh Sulphu	Ste	eel Fibreglas	s			Recommended pump type.    Shallow   Deep	4	4	
	Salty Mineral	s Pla	astic Concrete Ilvanized				Recommended pump depth. metres	5	5	
mI	resh Sulphu			Screen		L	Recommended pump rate.	10	10	
Other:	Salty Mineral	diam	eel Fibreglas	Slot No.	~ ~	F 11	(litres/min) If flowing give rate -	15 20	15 20	
After test of well Clear and sec		A	livanized	10	2.2	5.4	(litres/min) If pumping discontin-	25 30	25 30	
Other, specify	/		No	Casing or Scre	en	1	ued, give reason.  TEST HOLE	40	40	
Chlorinated \( \)	res No	Ор	en hole				1231 1102	50 60	50 60	
		Sealing Record			andonment e Placed	In dingram holo	Location o			
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Domestic Stock	☐ Indust	iercial	Public Sup		Other	Andrew Control of the	FLORENCE			
☐ Irrigation	Munic	Final Status of	f Well	air conditioning		Audit No. Z	19282 Date	e Well Con	npleted YYYY <b>Zoo5</b>	MM DD
☐ Water Supply ☐ Observation w		d, insufficient supply	Unfinished Dewatering		ned, (Other)	Was the well ow package delivere	THOI O WHOTH HARDS	e Delivered	77YY <b>2005</b>	MM DD 123
▼ Test Hole		l, poor quality ntractor/Technici		on			Ministry Use			
Name of Well Con	WALALA	STATE DRIL	LINE	/ell Contractor's Li	cence No.	Data Source	Con	tractor	34 A	
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Name of Well Tec	Iame of Well Technician (last name, first name)  Well Technician's Licence No.  Well Record Number  Well Record Number									
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X 0506E (08/03)		Contractor	's Copy 🔲 M	linistry's Copy	Well Owner	er's Copy 🗌	Cette fo	rmule est	disponible e	n français
U					<b>\</b>					

# Well ID

Well ID Number: 7246842 Well Audit Number: *Z208884* Well Tag Number: *A165621* 

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

Address of Well Location	296 BANK ST.	
Township	OTTAWA CITY	
Lot		

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445519.00 Northing: 5029299.00
<b>Municipal Plan and Sublot Number</b>	
Other	_

### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
GREY				0 ft	1 ft
GREY	CLAY	SILT		1 ft	10 ft
	TILL			10 ft	20 ft

# **Annular Space/Abandonment Sealing Record**

Depth From	Depth To	Type of Sealant Used Volume (Material and Type) Place	ume ced
0 ft	1 ft	CONCRETE/FLUSHMOUNT	
1 ft	9 ft	BENSEAL	
9 ft	20 ft	FILTER SAND	

### **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	
	Monitoring and Test Hole

#### **Status of Well**

**Observation Wells** 

# **Construction Record - Casing**

Inside Diameter	Onen Hole or material		Depth To
1.38 inch	PLASTIC	0 ft	10 ft

#### **Construction Record - Screen**

Outside Material Depth Depth From To
1.06 inch PLASTIC 10 ft 20 ft

#### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

Draw Down	Draw Down Water	Recovery	Recovery Water level
Time(min)	level	Time(min)	
SWL			

# Well ID

Well ID Number: 7246843 Well Audit Number: *Z208885* Well Tag Number: *A163032* 

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

<b>Address of Well Location</b>	296 BANK ST.	
Township	OTTAWA CITY	
Lot		

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445519.00 Northing: 5029299.00
<b>Municipal Plan and Sublot Number</b>	
Other	

### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
GREY		HARD		0 ft	1 ft
GREY	CLAY	SILT	SOFT	1 ft	10 ft

# **Annular Space/Abandonment Sealing Record**

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 ft	1 ft	CONCRETE/FLUSHMOUNT	
1 ft	2.5 ft	BENSEAL	
2.5 ft	10 ft	FILTER SAND	

#### **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	
	Monitoring and Test Hole

#### **Status of Well**

Observation Wells

# **Construction Record - Casing**

Inside Diameter Open Hole or material		Depth From	-
1.38 inch	PLASTIC	0 ft	3 ft

#### **Construction Record - Screen**

Outside Material Depth Depth Diameter From To

1.66 inch PLASTIC 3 ft 10 ft

#### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

Draw Down	Draw Down Water	Recovery	Recovery Water
Time(min)	level	Time(min)	level
~***			

# Well ID

Well ID Number: 7295729 Well Audit Number: *Z206496* Well Tag Number: *A182829* 

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

Address of Well Location	366 382 BANK STREET
Township	OTTAWA CITY
Lot	

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445570.00 Northing: 5029192.00
Municipal Plan and Sublot Number	
Other	

#### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	2.74 m
GREY	SILT	CLAY	SOFT	2.74 m	3.96 m
GREY	SILT	CLAY	SOFT	3.96 m	5.79 m

# **Annular Space/Abandonment Sealing Record**

Depth From	_	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	,
.31 m	2.44 m	BENSEAL	
2.44 m	5.79 m	SAND	

### **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	Monitoring
	Test Hole

#### **Status of Well**

Monitoring and Test Hole

# **Construction Record - Casing**

Inside Diameter	Onen Hole or material		Depth To	
4.03 cm	PLASTIC	0 m	2.74 m	

#### **Construction Record - Screen**

Outside Material Depth Depth From To
4.82 cm PLASTIC 2.74 m 5.79 m

#### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

Draw Down	Draw Down Water	Recovery	Recovery Water
Time(min)	level	Time(min)	level
~***			

# Well ID

Well ID Number: 7295730 Well Audit Number: *Z206497* Well Tag Number: *A189880* 

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

Address of Well Location	366 382 BANK STREET
Township	OTTAWA CITY
Lot	

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445582.00 Northing: 5029178.00
<b>Municipal Plan and Sublot Number</b>	
Other	

#### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND		0 m	2.74 m
GREY	SILT	CLAY	SOFT	2.74 m	3.46 m
GREY	SILT	CLAY	WBRG	3.46 m	5.79 m

# **Annular Space/Abandonment Sealing Record**

Depth From	_	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	,
.31 m	2.44 m	BENSEAL	
2.44 m	5.79 m	SAND	

### **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	Monitoring
	Test Hole

#### **Status of Well**

Monitoring and Test Hole

# **Construction Record - Casing**

Inside Diameter	Onen Hole or material		Depth To	
4.03 cm	PLASTIC	0 m	2.74 m	

#### **Construction Record - Screen**

Outside Material Depth Depth From To
4.82 cm PLASTIC 2.74 m 5.79 m

#### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

Draw Down	Draw Down Water	Recovery	Recovery Water
Time(min)	level	Time(min)	level
~***			

# Well ID

Well ID Number: 7295731 Well Audit Number: *Z206498* Well Tag Number: *A189879* 

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

Address of Well Location	366 382 BANK STREET	
Township	OTTAWA CITY	
Lot		

County/District/Municipality	OTTAWA-CARLETON
t t	_
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
	NAD83 — Zone 18
<b>UTM Coordinates</b>	Easting: 445584.00
	Northing: 5029168.00
Municipal Plan and Sublot Number	
Other	

#### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	DRY	0 m	2.74 m
GREY	SILT	CLAY		2.74 m	3.96 m
GREY	SILT	CLAY	SOFT	3.96 m	5.79 m

# **Annular Space/Abandonment Sealing Record**

Depth From	_	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	,
.31 m	2.44 m	BENSEAL	
2.44 m	5.79 m	SAND	

### **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	Monitoring
	Test Hole

#### **Status of Well**

Monitoring and Test Hole

# **Construction Record - Casing**

Inside		Depth	Depth
Diameter Open Hole or material		From	To
4.03 cm	PLASTIC	0 m	2.74 m

#### **Construction Record - Screen**

Outside Material Depth Depth From To
4.82 cm PLASTIC 2.74 m 5.79 m

#### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

Draw Down	Draw Down Water	Recovery	Recovery Water
Time(min)	level	Time(min)	level
~***			

Go Back to Map

# Well ID

Well ID Number: 7295732 Well Audit Number: *Z206499* Well Tag Number: *A189788* 

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

# **Well Location**

Address of Well Location	366 382 BANKS STREET
Township	OTTAWA CITY
Lot	

### Concession

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445593.00 Northing: 5029168.00
<b>Municipal Plan and Sublot Number</b>	
Other	_

### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	2.13 m
GREY	SILT	CLAY	SOFT	2.13 m	3.96 m
GREY	SILT	CLAY	WBRG	3.96 m	5.79 m

# **Annular Space/Abandonment Sealing Record**

Depth From	-	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	,
.31 m	2.44 m	BENSEAL	
2.44 m	5.79 m	SAND	

# **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	Monitoring
	Test Hole

### **Status of Well**

Monitoring and Test Hole

# **Construction Record - Casing**

Inside	Open Hole or material	Depth	Depth
Diameter		From	To
4.03 cm	PLASTIC	0 m	2.74 m

### **Construction Record - Screen**

Outside Material Depth Depth From To
4.82 cm PLASTIC 2.79 m 5.79 m

### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

### **Draw Down & Recovery**

Draw Down	Draw Down Water	Recovery	<b>Recovery Water</b>
Time(min)	level	Time(min)	level
CATA			

Ontario Ministry of the Environment r Print Below) Well Record A 070252 Regulation 903 Ontario Water Resources Act Page 7070252 Well Owner's Information 7 9 Florence St. City/Town/Village Postal Code Province UTM Coordinates Zone Easting Northing Ontario Kapowb GPS Unit Make Mode of Operation: Undifferentiated ▲ Averaged NAD 18 3 18 445461 5979169 Germa Etex Differentiated, specify Overburden and Bedrock Materials (see instructions on the back of this form) Depth (Metres General Colour Other Materials Most Common Material General Description Sand Bricks Soft, 4.57 5.7 Results of Well Yield Testing Annular Space/Abandonment Sealing Record Type of Sealant Used (Material and Type) Volume Placed (Cubic Metres) Depth Set at (Metres) Check box if after test of well vield. Draw Down Recovery Water Level Time Water Level Clear and sand free (Min) (Metres) (Metres) (Min) 244 Benseal 0.0112 ☐ Cannot develop to sand-free Statio eve Level 0.0154 2.44 5.79 If pumping discontinued, give reason 1 1 2 2 Pumping test method 3 3 Pump intake set at (Metres) Method of Construction Water Use 4 4 Public Not used Cable Tool Diamond Commercial ☐ Domestic Pumping rate (Litres/min) Municipal Municipal Rotary (Conventional) □ Dewatering Jetting 5 5 Test Hole Rotary (Reverse) Driving Livestock Monitoring Rotary (Air) ☐ Digging ☐ Irrigation Cooling & Air Conditioning Duration of pumping 10 10 Nother, specify Copro De Industrial hrs + Other, specify 15 15 Final water level end of pumping Status of Well 20 20 ☐ Water Supply Dewatering Well Observation and/or Monitoring Hole Recommended pump type Replacement Well Abandoned, Insufficient Supply Alteration (Construction) 25 25 Shallow Deep Test Hole
Recharge Well Abandoned, Poor Water Quality Other, specify Recommended pump depth Abandoned, other, specify 30 30 Location of Well Metres 40 40 Recommended pump rate (Litres/min) Please provide a map below showing:
- all property boundaries, and measurements sufficient to locate the well in relation to fixed points 50 50 an arrow indicating the North direction
 detailed drawings can be provided as attachments no larger than legal size (8.5" by 14") If flowing give rate (Litres/min) 60 60 - vidigital pictures of inside of well can also be provided **Water Details** Water found at Depth Kind of Water Fresh Salty Sulphur Minerals Metres Gas Water found at Depth Kind of Water Fresh Salty Sulphur Minerals Metres Gas Water found at Depth Kind of Water Fresh Salty Sulphur Minerals Metres Casing and Well Details Casing Used Screen Used Galvanized Galvanized Steel Steel Depth of the Hole (Metres) Fibreglass Fibreglass Date the Well Record and Package Delivered to Well Owner (yyyy/mm/dd) Was the well owner's information package delivered?

Yes Plastic Plastic Date Well Completed (yyyy/mm/dd) 202/03/05 Concrete Concrete 0.0037 No Casing and Screen Used Well Contractor and Well Technician Information er of the Casing (Metres,

Open Hole 0,040 Disinfected? Depth of the Casing (Metres) Yes No Ministry Use Only Well Contractor No. Cla jandear z 62488 Stratasul, con Date Received (yyyy/mm/dd) Date of Inspection (yyyy/mm/dd) MAR 1 8 2008 9057649304 Well Technician's Licence No. | Signa Date Submitted (yyyy/mm/dd) 2008/03/05 @ Queen's Printer for Ontario, 200 Ministry's Copy



Well Tag No. for Master Well (Place Sticker and/or Print Below)

A104644

A104644

**Master Well Record for Cluster Well Construction** 

Regulation 903 Ontario Water Resources Act

Master	Well Own	er's and	Land Owner's Inf				,		<u> </u>	Page of 3
First Nan	oth:	equit	U Limile	st Name					E-mail Ad	ddress
HOC	•	reet Numbe 39 (	Kent St	ret "	lunicipality OH	aw a	L	Provi	uce U	Postal Code Telephone No. (inc. area code)
Address			n of the Master Vet Number/Name, RR							Lot   Concession
381	Ken7	L 57.				Γο <b>γ</b> η/Villa	~~			
					0	Hawl	?			Province Postal Code Ontario
UTM Cod	0   8   3   1	Zone Eastii	_	ng 2 9 0 3		nit Make MIN	Model Etr	ex	Mode of C	Operation: Undifferentiated WAveraged ntiated, specify
Over General		nd Bedroci Common	k Materials (see ins		on the bac eneral	7 .	orm) (Metres)	Depth	(Metres)	Hole Details Diameter
Colour	Ma	aterial	Materials	De	scription	From	То	From	То	(Centimetres)
Bra		.nd	\$:11	50ft	ary	0	1.22	0	6-1	8.25
6-1	_ Cla	Clay		5084	dry	3.96	3.96			
bry		10/24		501	wet	2.16	6.1			
-										Water Use
V71111								Public		ndustrial Not used Other, specify
***************************************				,	V/////////////////////////////////////			☐ Livesto	ock 🔲 M	Commercial Dewatering  Municipal Monitoring  Test Hole Cooling & Air Conditioning
	.///								On LA	Method of Construction
7711111	***		WATER THE STREET					☐ Cable ☐ Rotary	Tool (Convention	
		v/nas/n	ATTION OF THE PROPERTY OF THE		THE PROPERTY OF THE PARTY OF TH			☐ Rotary	(Reverse) (Air)	☐ Jetting ☐ Other, specify ☐ Driving Oirect Push
***************************************										Status of Well
		***************************************						I — ·	ement Well	<ul><li>☐ Abandoned, Insufficient Supply</li><li>☐ Abandoned, Poor Water Quality</li></ul>
				***************************************				1 —	ering Well lion (Constru	☐ Other, specify
A					A-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-					creen Used Static Water Level Test
	1		Construction D	etails				Open Hole	Yes N	
Inside Dia (Centime		eel, plastîc,	Material fibreglass, concrete,	galvanized)	Wall Thickness		Metres)   To	Galvan	ized  S	Screen  Steel Fibreglass Concrete Dastic
4.03		PVC	Riser		,368	0	3. /		iameter (Ce	Intimetres) Slot No.
~~ <u>~~~</u>		PVC	Screen		**********	3.1	61			Water Details
Normal Market Comment				·····					ınd at Dept Metres    [	h Kind of Water Gas Fresh Salty Sulphur Minerals
		Annular	Space/Abandonme	nt Sealing	Pacord			l, ,	ind at Dept	h Kind of Water Gas Fresh Salty Sulphur Minerals
Depth Set From	at ( <i>Metres)</i>		Type of Sealant (Material and Ty	Used	Record	Volume (Cubic i		Water fou	ınd at Dept	h Kind of Water
D	.31	Conc	crete / Flu		n +	(000.0		<u> </u>		Gas Fresh Salty Sulphur Minerals  No If no, provide reason: Date Master Well Completed
+31	2.74	1	Bensea/							(bysys/mm/dd) 12/02
2.74	6-1		Sand					Cluster la	nformation ion for Wel	(Please also fill out the additional Cluster Well I Construction for each parcel of land and cluster.)
									ls in Cluster	
	VF20F111111 1		***************************************			·		Total Wel	ls on this Pi	· · · · · · · · · · · · · · · · · · ·
								Detailed A	100 must be	Location of Well Cluster
***************************************								(8.5 <b>"×</b> /14"	"). Sketches	e provided as an attachment no larger than legal size s are not allowed. firm detailed map is provided as per Section 11.1 (3)
										additional information concerning the cluster to
								r o		
Business N	<b>V</b> ame of We	<b>Vell Contra</b> Il Contractor	actor and Well Tec	hnician In	of block a chief mumble more many look	ractor's Lice	nce No.	N		
Stroa Business A	ddress (Str	SO ) ( eet No./Nan	Sampling ne, number, RR)	Inc	7 d	2   4		S		
			Business E-m			and t	1:11			Ministry Use Only
			Business E-m					Audit No.	Contract to Contract	242 Well Contractor No.
Bus.Telepho	one No. (inc.	area code) N	Name of Well Technic Beatty	ian (Last Na	me, First N	ame)		Date Recei	ved (yyyy/gr	Date of Inspection (yyyy/mm/ald)
	21 EUS 61	1		J					ries Pascilias (1986)	
13 16	dan's Licence		ture of Technician		Date Sub	mitted (yyy)	y/mm/dd)	Remarks	10.000.000	



Well Tag No. for Master Well (Print Well Tag No.)

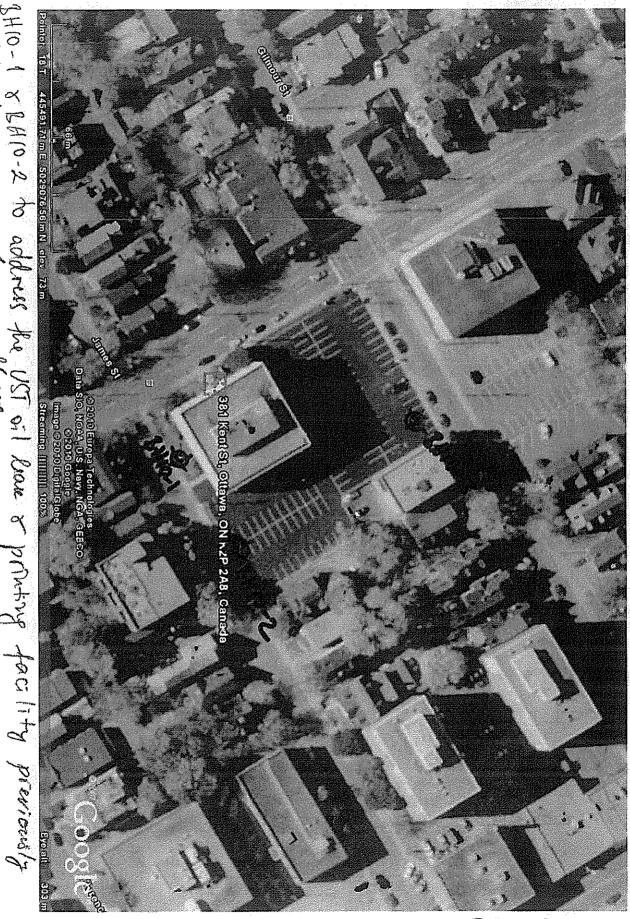
A104644

A104644

### **Cluster Well Information for Cluster Well Construction**

Regulation 903 Ontario Water Resources Act

		L			110 10	14				8092 Page	e _2 _ of _3
Property Owner's Information											
First Name Last TOWN EQUITY HIM LECT	Name 2\(\lambda\)		Mailing A	Address (Street N O -39 (	lo./Name, // /) V	PR) Sh	PP+ Munic	ipality Hawa			
Province Postal Col	PIZIAB	E-mail Address	1 1 100	0 001	102 1	(1 0 //	Telephone	No. (inc. area	code)		
Cluster Well Information	MAIMO	'					1(015)	1241	63801		
Address of Well Location (Street Number/Name, RF	₹)	Lot	Concession	Township			Count	y/District/Mun	icipality	upon request Signature of Technician/Contract	etor Date (yyyy/mm/dd)
381 Kent 57. City/Town/Village Provi	ince Postal Co	ode	GPS Unit Make	Model	Unit Mo	de of Oper	ation 🗆 Un	differentiated	Averaged		
	ario		Garmin	Etrex	1	rentiated, s				h///	2010/12/02
Well # UTM Coordinates on Sketch Zone Easting Northing	Full Depth of Hole C	Diameter Method (cm) Construc	ction	erial Casing Length (metres)	Screen In	terval (metres)	Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
2 184455015029044	6.1 8.3	25 Push		3. 1	3.1	6.1	Benseal				2010/12/0
3 118 414 5480 50 29 111 4	1 1	25 Push	t prc	3. /	3.1	6.1	Benseal				2010/12/02
								-			
					ļ						
Well Contractor and Well Technician In	iformation									Date 1st Well in Cluster Constructed (yyyy/mm/dd) / 12 / 02	Date Last Well in Cluster Constructed (yyyy/mm/dd) 12 02
Business Name of Well Contractor		Business Addr	ess (Street Numbe	r/Name, RR)	L P	Municipa	lity	Hall	Province	Ministry Use Only	1 4007 80 3 3
Business Name of Well Contractor  State Soil Sam  Postal Code  Business Telephone I	No. (inc. area code)	Well Conf	tractor's Licence No.	Business E-mail	Address	<u>II INCI</u>	amona	<u> </u>		Date Received (yyyy/mm/dd)	Date Inspected (yyyy/mm/dd)
L   4   B   1   C   G   905   76 4   Name of Well Technician (First Name, Last Name)	79131019	Well Tech	Q U I	Wrecon Date Submitted (	d5 (o.	) ST ) Signatur	GTASON of Technician	1.00	$\sim$	Audit Notes at the appropriate to the	Remarks
Beatty Brian			6   1   6			L	///			c05908	m03240
1991 (11/2006)					Ministry	's Copy					© Queen's Printer for Ontario, 2006



1009th at 50 x 52 James Offeet facilities poen locoted 8 BH10-2 to address the UST of love or printing fact it & previously 25 to 3/1 m 001-08 0

A

C65908

Well Tag No. (Place Sticker and/or Print Below)

A115780

111578

SI2067 . Well Record

Regulation 903 Ontario Water Resources Act

Address of Well Location (Street Number/Name)  320 G MOLL St.  County/District/Municipality  City/Town/Village  Office Address of Well Location (Street Number Name)  City/Town/Village  Office Address of Well Location (Street Number Name)  City/Town/Village  Office Address of Well Location (Street Number Name)  Municipal Plan and Sublet Number	Lot	Concession	
DHOWR		Concession	
	Province Post		
[ [ ] [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	Other	tario	
NAD 8 3   4455645029134			
Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)  General Colour Most Common Material Other Materials Gen		Depth (m/ft)	1
B 6-2001 ( )	eral Description	From To	o
Gry Clay Silt Soft	dry	9, 3,9	<u> </u>
3047,	wet	·  ,91   3.9	6
			,
Annular Space  Depth Set at (m/ft) Type of Sealant Used Volume Placed After test of well yield	Results of Well Yie		
From To (Material and Type) (m³/ft³) □ Clear and sand	free Time		_evel
O 31 Concrete/flushmount   Other, specify_	(min)		<u>"</u>
.31 .41 Benseal	Level		
.91 3.96 Sand Pump intake set at (	(m/ft) 1	1	
	,   2	2	
Method of Construction Well Use Pumping rate (Vmin.)	(GPM) 3	3	
□ Cable Tool     □ Diamond     □ Public     □ Commercial     □ Not used     □ Duration of pumping       □ Rotary (Conventional)     □ Jetting     □ Domestic     □ Municipal     □ Dewatering     □ Duration of pumping	11	4	
□ Rotary (Reverse)     □ Driving     □ Livestock     □ Test Hole     □ Monitoring     □ hrs +       □ Boring     □ Digging     □ Irrigation     □ Cooling & Air Conditioning     Final water level end	min 5	5	
☐ Air percussion ☐ ☐ Industrial	or pumping (min) 10	10	
The state of the s	(min / GPM) 15	15	
Inside Open Hole OR Material Wall Depth (m/ft) Water Supply Recommended num	p depth (m/ft)	20	
Diameter (Galvanized, Fibreglass, Concrete, Plastic, Steel) Thickness (cm/in) From To Replacement Well	25	25	
3.45 PVC 356 0 91 Recharge Well Recommended pum	p rate 30	30	
Dewatering Well  Observation and/or  Well production (I/mi	n / GPM) 40	40	
Monitoring Hole  ☐ Alteration  ☐ Division Hole	50	50	
(Construction) Disinfected?  Abandoned, Yes No	60	60	
Construction Record - Screen Insufficient Supply Abandoned, Poor	Map of Well Loc		
	below following instruct のルームた み	tions on the back.	_ /
4.21 PUC 10 :91 3.96			+/
Other, specify 430			
Water Details Hole Diameter	nderground		
Water found at Depth Kind of Water: Fresh Untested Depth (m/ft) Diameter  From To (cm/in)	nderground irrage intrance for		,
(m/ft) □ Gas □ Other, specify □     From □ To (cm/in)       Water found at Depth   Kind of Water: □ Fresh □ Untested   O   3.96   5.71	entrance 1>		200
(m/ft) Gas Other, specify	Jaom	- (	Banks
	<u> </u>	-	1 1
(m/ft) Gas Other, specify		1 1	
(m/ft) Gas Other, specify  Well Contractor and Well Technician Information			上
Well Contractor and Well Technician Information  Business Name of Well Contractor  Strata Soil Sampling  Business Address (Street Number/Name)  Municipality  Comments:			
Well Contractor and Well Technician Information  Business Name of Well Contractor  Strata Soil Sampling  Business Address (Street Number/Name)  147-2 W. Beaver Creek  Richmondhill		T-Normal Ellin	
Well Contractor and Well Technician Information  Business Name of Well Contractor  Strata Soil Sampling  Business Address (Street Number/Name)  Hunicipality  Province   Postal Code   Business E-mail Address   Code   Cod	Parkage Dellinos	Messe	
Well Contractor and Well Technician Information  Business Name of Well Contractor  Strata Soil Sampling  Business Address (Street Number/Name)  Province  Postal Code  Business E-mail Address  ON  LyBitCb  Well owners  Business E-mail Address  ON  LyBitCb  Well owners  Date Finformation  Well owners  Date Finformation  Well owners  Date Finformation  Dat	Package Delivered	Ministry Use Only Audit No.	
Well Contractor and Well Technician Information  Business Name of Well Contractor  Strata Soil Sampling  Business Address (Street Number/Name)  Province  ON  LyBiCol  Well Contractor's Licence No.  7 2 4 1  Municipality  Richmondhill  Province  Postal Code  Business E-mail Address  ON  LyBiCol  Well owner's Date Finformation  Well owner's Date Finformation  Page 10 15 7 6 (1913 104 8 0 4	Package Delivered  Y Y M M D D  Work Completed	White the same of	6

SIZOGT Well Record Tan No. (Place Sticker and/or Print Below) Ministry of Ontario the Environment A106637 Regulation 903 Ontario Water Resources Act A106637 Metric Page Measurements recorded in: ☐ Imperial Well Owner's Information ast Name / Organization E-mail Address Well Constructed tpartments Minto by Well Owner Mailing Address (Street Number/Name) Province Postal Code Telephone No. (inc. area code) ottawa 1051 Baxter K121631812 Rd ON Well Location Address of Well Location (Street Number/Name) 320 6, Imour County/District/Municipality City/Town/Village Postal Code Province Ontario Municipal Plan and Sublot Number UTM Coordinates Zone | Coordinates | Zone | Easting | Northing | NAD | 8 | 3 | 1 | 8 | 4 | 4 | 5 | 6 | 4 | 5 | 6 | 7 | 9 | 1 | 3 | 4 Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form) General Colour Depth (m/ft) Most Common Material Other Materials General Description From Brn .2 Gravel  $\Diamond$ Cla Results of Well Yield Testing Annular Space Type of Sealant Used (Material and Type) Depth Set at (m/ft) After test of well yield, water was: Volume Placed Draw Down Recovery  $(m^3/ft^3)$ Time Water Level Clear and sand free Time | Water Level Concrete / flushmount (m/ft) Other, specify (min) (m/ft) (min) 0 .31 Static If pumping discontinued, give reason: 31 91 Benseal Level 1 1 4.27 Pump intake set at (m/ft) 2 2 3 3 Pumping rate (I/min / GPM) Method of Construction Well Use Public
Domestic 4 4 Commercial Cable Tool Diamond Not used Duration of pumping ☐ Rotary (Conventional) \_\_\_ Jetting Municipal □ Dewatering 5 5 hrs + Rotary (Reverse) □ Driving Livestock est Hole Monitoring Final water level end of pumping (m/ft) ☐ Boring Digging Irrigation Cooling & Air Conditioning 10 10 Air percussion D. P. Other, specify ☐ Industrial Other, specify 15 15 If flowing give rate (I/min / GPM) Construction Record - Casing Status of Well 20 20 Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel) Wall Thicknes (cm/in) Inside Depth (m/ft) Water Supply Recommended pump depth (m/ft) Diamete (cm/in) Replacement Well 25 25 From То est Hole Recommended pump rate (I/min / GPM) Prc 1,22 3.45 Recharge Weil 30 30 Ó 356 Dewatering Well 40 40 bservation and/or Well production (I/min / GPM) Monitoring Hale 50 50 ☐ Alteration Disinfected? (Construction) 60 60 Yes No Abandoned, Insufficient Supply Construction Record - Screen Map of Well Location Abandoned, Poor Please provide a map below following instructions on the back. ຜ່າໄກຣະຕາ Outside Depth (m/ft) Water Quality Material Slot No. ☐ Abandoned, other. (Plastic Galvanized Steel) From (cm/in) Τo specify PUC 4.21 4.27 1.22 ID Other, specify 5m Water Details Hole Diameter BETE Depth (m/ft) Water found at Depth Kind of Water: Fresh Untested Diameter From (cm/in) To (m/ft) Gas Other, specify farking 4.27 5.71 Water found at Depth Kind of Water: Fresh Untested Entrance (m/ft) Gas Other, specify 6 Well Contractor and Well Technician Information Business Name of Well Contractor Well Contractor's Licence No Strata Soil 7 1a Business Address (Street Number/Name) 147-2 W. Beaver Municipality
Richmondhill Comments: creek Postal Code

Business E-mail Address

LY B11 C6 Wrecords Ostratasoil. Com

nc. area code)

Name of Well Technician (Last Name, First Name)

1913 D4 Beath Brian

Well owner's information

package delivered

Yes ☐ No

20120120

Bys.Telephone No. (inc. area code)

Well Technician's Licence No. Signature of Technician and/or Contractor Date Submitted

Date Package Delivered

Date Work Completed

Y Y Y Y M M O D

2011201124

Ministry Use Only

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Ontario

Ministry of the Environment

Well Tag No. (Place Sticker and/or Print Below)

A106638

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	Well	Recor
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Measurem			vetric	lmt	ATUDO	)30	<u> </u>	106652				Page_	2	_ of <b>2</b>
Well Ow First Name	110/10/4/0/ A 600/4/ 4 16/0/1111/0/0	formation L	ast Name /	Organizatio	n ,	_		E-mail A	Idress		is this region		Well	Constructed
Mint	5 A	partme	n ts	.,			····						by W	ell Owner
Mailing Add	Bax	eet Number/Nar		te 2	$\mathcal{AB} \parallel^{w}$	lunicipality OHan	)a	Province		Code		Telephone N	o. (inc. 	area code)
Well Loc	ation							Carlo Marca (St.	in o					
Address of		ation (Street Nu	mber/Name) ろナ	1	T	ownship			Lot			Concession		
County/Dis	0,,	,			С	ity/Town/Vil	lagę			1	Provin	ce	Posta	l Code
LITMO	l'a ata a   7a	Fasting	NI.	a unita lua au		OTTO		- L. M. Committee in the Committee in th			Ont	ario		
UTM Coord NAD	١.	ne Easting		orthing [0  2 9		iunicipai Pia	an and Sublo	ot Number			Other			
		edrock Materi				rd (see instr	uctions on the	back of this for	n)		19			
General C	olour	Most Comn	non Material		Oth	er Materials		<i>c</i> 0	General Des	cription			From	oth (m/ft)
₩.cv		Drav	e/			<u>and</u>		-52+7	$\frac{d}{dx}$	7			0	,9/
Gry		Clay	-		<u> </u>	11+		3244	,	W	e+		91	3,66
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	September 1	and the second second	A message 1 mes							(ZE14)	SH(Ver≃)	a T. 221	Variety and the second	ASSOCIACION CONTRACTOR DE CONT
	et at ( <i>m/ft</i> )		Annular Type of Sea	alant Used		A STATE OF THE PROPERTY OF THE	Placed	After test of w	ell yield, water wa			d Testing aw Down		Recovery
From	To		(Material ar			(m	³/ft³)	☐ Clear an			Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
0	.3/		ete 14	TUSH MO	Dien T				continued, give	eason:	Static	, ,	, ,	
•3/	161		rseal								1		1	
.61	3.66	ے۔	and					Pump intake	set at (m/ft)		2		2	
*									W-2- (00t)		3		3	
		onstruction				e		Pumping rate	(Vmin / GPM)		4		4	
☐ Cable To		☐ Diamond al) ☐ Jetting		blic mestic	Commer Municipa	al 🔲	Not used Dewatering	Duration of p			5			
☐ Rotary (f	Reverse)	☐ Driving ☐ Digging	Liv	estock gation	Test Hol	e ليك & Air Conditio	Monitoring	hrs +	min /el end of pumpir	na <i>(m/it</i> )	ļ		5	***************************************
Air percu		$\mathcal{P}$	☐ Inc	- lustrial			9			J ( )	10		10	
Utner, sp		onstruction R		ner, <i>specify</i> _		Status	of Well	If flowing give	rate (I/min / GP.	M)	15		15	
Inside	Open H	ole OR Material	Wall		n ( <i>m/ft)</i>	☐ Water S	Supply	Recommend	ed pump depth	(m/ft)	20		20	
Diameter (cm/in)	Concrete	ized, Fibreglass, e, Plastic, Steel)	Thickness (cm/in)	From	То	Replace	ement Well ble	Danamand			25		25	***************************************
3.45	P	PVL	.356	0	3.66	Rechar	_	(l/min / GPM)	ed pump rate		30		30	
					161	Observa	ation and/or	Well producti	on (Vmin / GPM)		40		40	
						Monitori Alteration	on	Disinfected?			50		50	
***************************************						(Constr	ned,	Yes	No		60		60	
	1 (	Construction R	ecord - Scre	en		☐ Abando						ation		dy comment of the
Outside Diameter		Material Galvanized, Steel)	Slot No.	Depth From	n ( <i>m/ft)</i>   To	Water 0	Quality oned, other,	Please provid	e a map below fo	ollowing	instruct *	ions on the ba	ack.	1 9
(cm/in)	PK		10	3₹6€		specify			/	120	M			十心
421	120		, ,	.61	3.66	Other,	specify			th			7	
				l		AND A CONTROL OF THE PARTY OF T	****			<b>②</b>			1	Benk 5
Water four	nd at Dept	h Kind of Wate	tails r: ∐Fresh		Dept	ole Diame h ( <i>m/ft)</i>	Diameter							1 3
		s Other, spe			From	3.66	(cm/in)							1
	-	th Kind of Wate is ☐Other, <i>spe</i>		Untested		7.66	5:71			, .				-
		h Kind of Wate		Untested										/
(n		S Other, spe		2 - das W 2 1894; 2 hv/ 2 2 h	Constitution of the Consti	•	320000000000000000000000000000000000000						1	
Business N		<b>Nell Contracto</b> ell Contractor	χ.		We	I Contractor's						<u> </u>		Barrier i am
Strat		o./ Sz	n(gn	1	7		41					······································		É RO .
		treet Number/Na Beaver	ime)" " Circle 1	K	Mu  R	nicipality Ichmon	dhi'll	Comments:						
Province	T	Postal Code	Business	s E-mail Ado	iress /	- 1			T			alirádowi v	02.05	
Bus.Telenhr		LHB/C. area code) Na					Com	Well owner's information	Date Package			Minist Audit No.	ry Us	e Only
905	764	9   3   6   4   ce No.   Signature	Bear	42	Brian			package delivered	Y Y Y Y Date Work Cor		ם ם	Z <u></u>	_45	5264
Well Technic	cian's Licenc	ce No. Signature	of Technicia	n and/or Co	ontractor Dat	e Submitted	311214	Yes	2 4/12	٠.,	21.4			2057



Well Tag No. (Place Sticker and/or Print Below)

Tag#: A131060 1/3/5/√

S-12830 Well Record
Regulation 903 Ontario Water Resources Act

Measurements recorded in: Metric Imperial			Pageof
Well Owner's Information		E-mail Address	
Last Name / Organization C/O Min		L-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name)	Municipality	Province Postal Code	
1051 Baxter Rd Suite 22	B Ottawa	ON WALB	P[2]
Well Location	T	Lot	Concession
Address of Well Location (Street Number/Name)	Township		
County/District/Municipality	City/Town/Village		Province Postal Code
	OHOUR -		Ontario
UTM Coordinates Zone Easting Northing	Municipal Plan and Subl	ot Number	Other
NAD 8 3 10 4 5 2 1 7 ラレス 1 Overburden and Bedrock Materials/Abandonment Sea	\   ङ्री । aling Record (see instructions on the	a back of this form)	
General Colour Most Common Material	Other Materials	General Description	Depth ( <i>m/ft</i> ) From To
	4524	<.C.4	0 1.5
		1 C D L W 10 +	1,5 4,50
	······································		
Annular Space			ell Yield Testing
Depth Set at (m/ft)  Type of Sealant Used  (Material and Type)	Volume Placed (m³/ft³)	After test of well yield, water was:  Clear and sand free	Draw Down   Recovery   Time   Water Level   Time   Water Level   Time   Water Level
From To (Material and Type)	mount	Other, specify	(min) (m/ft) (min) (m/ft)
	mount	If pumping discontinued, give reason:	Static   Level   Lev
31 DAD Bensen			1 1
1.22 4.57 Sand		Pump intake set at (m/ft)	
Method of Construction	Well Use	Pumping rate (I/min / GPM)	3
☐ Cable Tool ☐ Diamond ☐ Public	☐ Commercial ☐ Not used	Duration of pumping	4 4
☐ Rotary (Conventional) ☐ Jetting ☐ Domestic ☐ Rotary (Reverse) ☐ Driving ☐ Livestock	☐ Municipal ☐ Dewatering ☐ Test Hole ☐ Monitoring	hre 4 min	5 5
☐ Rotary (Reverse)       ☐ Driving       ☐ Livestock         ☐ Boring       ☐ Digging       ☐ Irrigation	Cooling & Air Conditioning	Final water level end of pumping (m/ft)	10 10
Air percussion		If flowing sive rate (Unio / CDM)	15 15
Construction Record - Casing	Status of Well	If flowing give rate (I/min / GPM)	
Inside Open Hole OR Material Wall Depti	h ( <i>m/ft</i> )	Recommended pump depth (m/ft)	
Diameter (Galvanized, Fibreglass, Thickness From (cm/in) Concrete, Plastic, Steel) (cm/in)	To Replacement Well	Assumption   - Art   -	25   25
345 PVC 345 A	Recharge Well	Recommended pump rate (I/min / GPM)	30 30
	Dewatering Well  Dewatering Well  Dewatering Well	Well production (I/min / GPM)	40 40
	Monitoring Hole	Well production ("I'll" / Gr W)	50 50
	Alteration (Construction)	Disinfected?	60 60
	Abandoned, Insufficient Supply	Yes No	
Construction Record - Screen	Abandoned, Poor  h (m/ft) Water Quality	Please provide a map below following	instructions on the back.
Outside Diameter (cm/in)  Material (Plastic, Galvanized, Steel)  Slot No. From	To		567 Mair St 1
	specify		
4.21 4% 10 1.5	Other, specify		
Water Details Weter found at Dooth Kind of Water   Freeh   Untested	Hole Diameter  Depth (m/ft) Diameter		
Water found at Depth Kind of Water: Fresh Untested  (m/ft) Gas Other, specify	From To (cm/in)		
Water found at Depth Kind of Water: Fresh Untested	0 4.57 5.71		
(m/ft) Gas Other, specify		2- W6	
Water found at Depth Kind of Water: Fresh Untested			
(m/ft) Gas Other, specify	n Information		
Business Name of Well Contractor	Well Contractor's Licence No.		
Strata Drilling Group	7 2 4 1		<u> </u>
Business Address (Street Number Name)	Municipality Richinondhill	Comments:	
Province Postal Code Business E-mail Add			
, , , , , , , , , , , , , , , , , , ,	Bitatasoi com	Well owner's Date Package Deliver	
Bus.Telephone No. (inc. area code) Name of Well Technician (	34-9-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	information package	Audit No.
Well Technician's Licence No. Signature of Technician-and/or C	ontractor Date Submitted	delivered Date Work Completed Yes	
3 6 6 6 Signature of Technician and/or C	30120727	1 No 2 2 2 2 7	26

Ministry's Copy

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Ministry of the Environment

Well Tag No. (Place Sticker and/or Print Below)

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Regulation 903 Ontario Water Resources Act

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N /	A	

Measurements recorded in:  Metric  Imperial			ragi		
Well Owner's Information					
First Name Last Name / Organization	ř	E-mail Address	Hereit et		Constructed
CITY OF OTTAWA COLAUTTI CON		7 <u>と</u> へ Province Postal Code	Tolonbone	by vve No. (inc. a	Il Owner
Mailing Address (Street Number/Name)	Municipality			, 140. pmo. t	
2562 DEL ZOTTO AVENUE	OTTAWA	ONT KIT3	<u>V   I                                   </u>		001000000000000000000000000000000000000
Well Location	T	Lot	Concessi	on	
Address of Well Location (Street Number/Name)	Township				
GLA DSTONE AVENUE  County/District/Municipality	City/Town/Village	J. F.C.	Province	Postal	Code
OTTAWACARLETON	0777A-11/	Agent,	Ontario		
UTM Coordinates Zone , Easting , Northing	Municipal Plan and Sublo		Other		
NAD 8 3 18 4 45 8 5 2 50 2 9 04	6	h de la companya de l			
Overburden and Bedrock Materials/Abandonment Sealing	Record (see instructions on the	back of this form)			
General Colour Most Common Material	Other Materials	General Description	And Tolland	Dept From	th ( <i>m(ft)</i> ) To
Nº 1204	"> ~ 1/1/1 - 1/4 - 1	NONITORING WELL	***************************************	0/	201
2 PORIN	Int Cal No. 18 5 Same N. S.	MONTION PAGE DECE	***************************************		<u> </u>
Additional residence of the second se	CONTRACTOR OF THE PROPERTY OF	A A A A A A A A A A A A A A A A A A A			<del> </del>
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	Andrew 1997		Annual A		
	\$4.6.6.000 \$100.000 \$			wvv	
	A A-LLANGE I VICENTIA	A ALAMANIAN WAY AND A ALAM			
* BOREHOLE #1	<u> </u>				
			2		
	291VV-1-99-5-V	A			
		Passite of We	ell Yield Testin		
Annular Space  Depth Set at (m/ft) Type of Sealant Used	Volume Placed	After test of well yield, water was:	Draw Down		ecovery
From To (Material and Type)	(m³/ft³)	☐ Clear and sand free	Time Water Le	1 1	Water Level
20' 2' 3/8 HOLE PLUG	1846	Other, specify	(min) (m/ft)	. (min)	· · · (m/ft) / .
	(37,5)	If pumping discontinued, give reason:	Static Level		
2' O' BACK FILL			1	1/	
		Pump intake set at (m/ft)			
	A CONTRACTOR OF THE CONTRACTOR		2	2	
CONTRACTOR OF THE CONTRACTOR O		Pumping rate (I/min / GPM)	3.	3	
	ell Use Not used		4	4	
	Commercial Not used  funicipal Dewatering	Duration of pumping			
	est Hole Monitoring	hrs + min	5	5	
	Cooling & Air Conditioning	Final water level end of pumping (m/ft)	10	10	geretterer:
☐ Air percussion ☐ Industrial ☐ Other, specify ☐ Other,		16.00	15	15	
Construction Record - Casing	Status of Well	If flowing give rate (Vmin / GPM)	<u> </u>		
Inside Open Hole OR Material Wall Depth m/ft		Recommended pump depth (m/ft)	20	20	
Diameter (Galvanized Fibreolass, Thickness	To Replacement Well		25	25	tanan salah salah s
Concett, Flasto, Geely (critical)	Test Hole Recharge Well	Recommended pump rate	30	30	
	Dewatering Well	(Vprin / GPM)	30	- 30	<u> </u>
	Observation and/or	Well production (I/min / GPM)	40	40	
	Monitoring Hole  Alteration		50	50	
	(Construction)	Disinfected?	60	60	<del>distribution</del> National Contraction
	Abandoned, Insufficient Supply	X Yes No			
Construction Record - Screen	Abandoned, Poor		ell Location	l	HANGE BETTE THE WATER AND WATER OF COLUMN
Outside Diameter (Plastic, Galvanized, Steel) Slot No. From T	Abandanad albar	Please provide a map below following	nstructions on the	) Dack.	0.1
(cm/in) (Plastic, Galvanized, Steel) From T	specify (OM)				S S
	_CONSTRUCTIC	K 3.			121
	Other, specify	₹			Name Name Name Name Name Name Name Name
					13
Water Details  Water found at Depth Kind of Water: ☐ Fresh ☐ Untested	Hole Diameter  Depth (m/ft) Diameter				P
	rom To (cm/in)	Y W			La constitui
Water found at Depth Kind of Water: Fresh Untested		and a grant of the state of the		80',	
(m/ft) Gas Other, specify		a Militario de Militario de Albano antigo de Antono antigo a por como de la principa de Antono antigo a principa d	<del></del>		
Water found at Depth Kind of Water: Fresh Untested	***************************************	GLADSTON	-		
(m/ft) Gas Other, specify		J-045310X	JE AVE		
Well Contractor and Well Technician Info					
Business Name of Well Contractor	Well Contractor's Licence No.	BOA	RE HOLE #	=12-3	-
AIRROCK DRILLING CO.LTD		į.			!
Business Address (Street Number/Name)	Municipality  October 100	Comments:			
Province Postal Code Business E-mail Address	RICHMOND				
ONT KOARZO		Well owner's Date Package Delivered	Min	stry Use	Only
Bus Telephone No. (inc. area code) Name of Well Technician (Last N	ame, First Name)	information	Audit No.		
61131813181211 DESAULXIERS	KEN	delivered Date West Completed	<u> </u>	155	230
Well Technician's Licence No. Signature of Technician and/or Contract	or Date Submitted	Yes Date work completed  Ves 201/30912			

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Well Tag No. (Place Sticker and/or Print Below)

Well Record

Tan#- 4152603 A

		B B	# H 4	12	# P	C C	#	<b>₩</b>
Regulation 903	Ontario	Wa	ter F	₹es	sou	rces	A	ct

Measurements recorded in: Metric   Imperi	1ag#: A15260.	3 A152603	Page	of
Well Owner's Information First Name   Last Name / Organ	ization	E mail Address		
First Name   Last Name / Organ	Realty Corporation	E-mail Address		Well Constructed by Well Owner
Mailing Address (Street Number/Name)	Municipality	Province Postal Code	Telephone	No. (inc. area code)
50 Baysnater prenue	<u>Ottawa</u>	ON  KI1412	179	
Well Location <sup>1</sup> Address of Well Location (Street Number/Name)	Township	Lot	Concessio	n
384 McLauren Rd	y			
County/District/Municipality	City/Town/Village		Province	Postal Code
UTM Coordinates   Zone   Easting   Northing		olot Number	Ontario Other	
	15231			
Overburden and Bedrock Materials/Abandonmer	t Sealing Record (see instructions on the			Death (-16)
General Colour Most Common Material	Other Materials	General Description	1	Depth (m/ft) From To
10Ky concrete	gravel,	hard		0 .3/
BRN sand	91900	10030		3,1 2.13
GRY clay	TI M	soft	-	7.13 Bal
9				
	7.0000000			
Annular Space		Results of We	II Yield Testing	
Depth Set at (m/ft) Type of Sealant Us	sed Volume Placed	After test of well yield, water was:	Draw Down	Recovery
		Clear and sand free Other, specify	Time Water Leve	Time Water Level
21 271 1 V -to	Lushmont	If pumping discontinued, give reason:	Static	
19/ 2/19 benfortt	1		Level 1	1
dill61 litter some		Pump intake set at (m/ft)		
			2	2
Method of Construction	Well Use	Pumping rate (Ilmin I GPM)	3	3
Cable Tool Diamond Public	Commercial Not used	Duration of pumping	14	4
☐ Rotary (Conventional) ☐ Jetting ☐ Domestic ☐ Rotary (Reverse) ☐ Driving ☐ Livestock	☐ Municipal ☐ Dewatering ☐ Test Hole ☐ Monitoring	hrs + min	5	5
☐ Boring ☐ Digging ☐ Irrigation ☐ Air percussion ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	Cooling & Air Conditioning	Final water level end of pumping (m/ft)	10	10
Other, specify Other, specify Other, specify	cify	If flowing give rate (Ilmin   GPM)	15	15
Construction Record - Casing	Status of Well	I in howing give rate (IIIIIII / GPINI)		
Diameter (Galvanized, Fibreglass, Thickness	Depth (m/ft) Water Supply	Recommended pump depth (m/ft)	20	20
(cmlin) Concrete, Plastic, Steel) (cmlin) From	1 Test Hole	Recommended pump rate	25	25
345 PVC ,>56 0	Recharge Well	(Ilmin   GPM)	30	30
	Observation and/or	Well production (Ilmin   GPM)	40	40
	Monitoring Hole  Alteration	. , ,	50	50
	(Construction)	Disinfected?  Yes No	60	60
Construction Record - Screen	Insufficient Supply	Map of We	II I ocation	
Outside Material Diameter (Plastic Galvanized Stock) Slot No.	epth ( <i>m/ft</i> ) Abandoned, Poor Water Quality	Please provide a map below following in		ack.
(cm/in) (Fron	To Abandoned, other, specify			
421 PVC 16 3.	6./		X	
	U Other, specify	1111	32m =	1,64,
Water Details	Hole Diameter	5 1 7m	*	J Wy
Water found at Depth Kind of Water: Fresh Unites	ted Depth ( <i>m/ft</i> ) Diameter From To ( <i>cm/in</i> )	BAN	Jan Sales	· 1 (By 0)
(m/ft)		100	3m 3000	11 /
(m/ft) Gas Other, specify			Ψ,	
Water found at Depth Kind of Water: Fresh Unites	ted			
(mlft) Gas Other, specify  Well Contractor and Well Technic		- t: [MI AW	REN	
Business Name of Well Contractor	Well Contractor's Licence No.	I I I INCO.		
Strate Derting Grand	721			
Business Address (Street Number/Name),	Crack Rich rand At 11	Comments:		
Province Postal Code Business E-mail /				
IN 44B/166W(200rd)	Ostralasell. com	Well owner's Date Package Delivered	Ministr	y Use Only
Bus. Telephone No. (inc. area code) Name of Well Technicia	n (Last Name, First Name)	information package	ALLER NE	,
Vell Technician's Licence No. Signature of Technician and/or	Contractor Date Submitted	delivered Date Work Completed	H - LI	7968
3 6 5 6	20131005	No 2013201	5 NOV 2	8 2013
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Tag#: A150791 A15079	Regulation 903 Ontario Water Resources A
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Well Owner's Information					
First Name   Last Name / Organi	zation C. Co. r. d.	E-mail Address			Constructed
Mailing Address (Street Number/Name)	Realty Cosposation	Province Postal Code	Tolophor		ell Owner area code)
50 Bayswater Avenue	CHALLE	ON KILY2		ie No. (#ic.	area code)
Well Location	) Ortana	0/0 1/1/9/2	<u> -                                     </u>		
Address of Well Location (Street Number/Name)	Township	Lot	Concess	ion	
384 Milauren Rd.		77			
County/District/Municipality	City/Town/Village		Province	Postal	Code
LITM Coordinates Zono Easting Northing	Municipal Plan and Sub	olat Number	Ontario		
UTM Coordinates   Zone   Easting   Northing   NAD   8   3   1   8   9   9   9   5   5   6   1   5   0   2	19 2 2 1	DIOL NUMBER	Other		
Overburden and Bedrock Materials/Abandonmen		he back of this form)			
General Colour Most Common Material	Other Materials	General Description	า		th (m/ft)
	and and	11	-	From	7 To
BRN sand	7 40	Dh. d		- 1	1, 3/
BORN Sond	gravel	soft, loose		, )/	1,85
GRY clay	F, 18	SOFF		1.82	4.5/
/	•	TOTAL			
		Control of the Contro			
Annular Space		Results of W	ell Yield Testin	q	
Depth Set at (m/ft) Type of Sealant Us		After test of well yield, water was:	Draw Down		ecovery
From To (Material and Type		☐ Clear and sand free☐ Other, <i>specify</i>	Time Water Le	vel Time (min)	Water Level (m/ft)
0.3) concrete/ Chisha	16 um	If pumping discontinued, give reason:	Static		111111
.3/ 277 Dentonde		In partipling dissortances, give reason.	Level		
774 4.57 CHe- 5and			1	1	
5/10 13 / W// Date		Pump intake set at (m/ft)	2	2	
		Pumping rate (Ilmin I GPM)	3	3	
Method of Construction	Well Use	Historia in the second			
□ Cable Tool     □ Diamond     □ Public       □ Rotary (Conventional)     □ Jetting     □ Domestic	☐ Commercial ☐ Not used ☐ Municipal ☐ Dewatering	Duration of pumping	4	4	
Rotary (Reverse) Driving Livestock	Test Hole Monitoring	hrs + min	5	5	
□ Boring □ Digging □ Irrigation □ Air percussion   □   □  □ Industrial	Cooling & Air Conditioning	Final water level end of pumping (m/ft)	10	10	
☐ Air percussion ☐ Industrial ☐ Other, specify ☐ Other,	cify	15.00	15	15	***************************************
Construction Record - Casing	Status of Well	If flowing give rate (Ilmin / GPM)		15	
Inside Open Hole OR Material Wall D	Depth (m/ft)	Recommended pump depth (m/ft)	20	20	
Diameter (Galvanized, Fibreglass, Concrete, Plastic, Steel) Thickness (cm/in), Fron	n To Replacement Well		25	25	
3.45 // . 356 )	Test Hole Recharge Well	Recommended pump rate (//min / GPM)	30	30	
	L Dewatering Well	(intilit i GFNi)			
	Observation and/or Monitoring Hole	Well production (Ilmin   GPM)	40	40	
Take 1	☐ Alteration	Disinfected?	50	50	
	(Construction)  Abandoned.	Yes No	60	60	y and the desired distance of the second dist
Construction Record - Screen	Insufficient Supply	Man of We	Il Location		
	epth ( <i>m/ft</i> ) Abandoned, Poor Water Quality	Please provide a map below following	instructions on the	back.	_
Commeter (Plastic, Galvanized, Steel) Slot No. From	To Abandoned, other, specify	Please provide a map below following	Sement		. [
4.24 YUC 10 3.1	1 457		-		
	Other, specify			=,	
		\$ 1	•		+
Water Details  Water found at Depth Kind of Water: ☐ Fresh ☐ Untes	ted Depth (m/ft) Diameter	8	mag.		
(m/ft) Gas Other, specify	From To (cm/in)				1
Water found at Depth Kind of Water: Fresh Untest	ted 0 5.71 4.57		entransia di Maria di Arigina di Siria di Siria di Siria di Antonia di Antonia di Siria di Antonia di Siria di	*	AP SECURITY OF THE SECURITY OF
(m/ft) Gas Other, specify				Harried Charles and Principles of the State of the Stat	File could be compared as compared to compared and a separate compared to the
Nater found at Depth Kind of Water: Fresh Untest	ted	McLAN	REU		
(mlft) Gas Other, specify		I McCi	•		
Well Contractor and Well Technic Business Name of Well Contractor					
Trata Dowling Group	Well Contractor's Licence No.				
usiness Address (Street Number/Name)	/ Municipality	Comments:		390	
147 West Beaver Cre	el Kichmand Hill				
Province Postal Code Business E-mail A	Address 1		·		
ON 49B/C6 Wrecon		Well owner's Date Package Delivered	25650556670556756	stry Use (	Only
us.Telephone No. (inc. area code) Name of Well Technician	n (Last Name, First Name)	package	Audit No.		Section In
/ell Technician's Licence Ne Signature of Technician and/or		Date Work Completed	<del></del>	779	67
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Ministry's Copy

Ontario Ministry of	Well Tag No. (Place Sticker	and/or Print Below)	Well Record
the Environment	ALIA	Regulation	on 903 Ontario Water Resources Act
Measurements recorded in: Metric Mimperial			Pageof
Well Owner's Information  First Name   Last Name / Organizatio	n	E <sub>z</sub> mail Address	
CITY OF OTTAWA	Go Colant	Li Construction	Well Constructed
Mailing Address (Street Number/Name)	Municipality	Province Postal Cod	
2562 Del Zotto Ave	nue Chan	a over kill	
Address of Well Location (Street Number/Name)	Township	Lot	Concession
GLADSTONE AUD	ALED PUR	X Aw.	
County/District/Municipality  CARLETON	City/Town/Village	Alla	Province Postal Code Ontario
UTM Coordinates Zone Easting Northing	Municipal Plan and Sub	lot Number	Other
NAD 8 3 18 445766 56 D			
Overburden and Bedrock Materials/Abandonment Sea General Colour Most Common Material	aling Record (see instructions on the Other Materials		Depth (n(ft))
Ceneral colour Most continon Material	Other Materials	General Descriptio	n From To
S. Wenter	g well hivon	donnont	0' 20'
	AND THE RESERVE OF THE PARTY OF		1,100
& B = 0.0. 15 1.	<u> </u>		
a borate 10-		germangs-	
Contract 3179	9-18D#13	-5116 6	
Annular Space  Depth Set at (mtf) Type of Sealant Used	Volume Placed	Results of W After test of well yield, water was:	ell Yield Testing  Draw Down Recovery
From To (Material and Type)	(m³/ft³)	☐ Clear and sand free	Time Water Level Time Water Level
20, 318 fforthing	1600	Other, specify  If pumping discontinued, give reason:	(min) (m/ft) (min) (m/ft)     Static
21 01 Beckfill	0	The parties of the pa	Level
		Pump intake set at (m/ft)	
		A supplied to the supplied to	2 2
Method of Construction	Well Use	Pumping rate (Ilmin / GPM)	3 3
☐ Cable Tool ☐ Diamond ☐ Public ☐ Rotary (Conventional) ☐ Jetting ☐ Domestic	Commercial Not used	Duration of pumping	4 4
Rotary (Reverse) Driving Livestock	☐ Municipal     ☐ Dewatering       ☐ Test Hole     ☐ Monitoring	hrs + min	5 5
☐ Boring ☐ Digging ☐ Irrigation ☐ Air percussion ☐ Industrial	Cooling & Air Conditioning	Final water level end of pumping (mlft)	10 10
Other, specify Other, specify		If flowing give rate (Ilmin I GPM)	15 15
Construction Record - Casing Inside Open Hole OR Material Wall Depth	Status of Well		20 20
Inside Open Hole OR Material Wall Depth Diameter (Galvanized, Fibreglass, Thickness (cmlin) Concrete, Plastic, Steel) (cmlin) From	(m/ft) Water Supply  Replacement Well	Recommended pump depth (mlft)	25 25
(CHIIII)	☐ Test Hole ☐ Recharge Well	Recommended pump rate	30 30
	☐ Dewatering Well	(Ilmin I GPM)	
	Observation and/or Monitoring Hole	Well production (Ilprin / GPM)	40 40
	Alteration (Construction)	Qisin/ected?	50 50
	Abandoned, Insufficient Supply	Yes No	60 60
Construction Record - Screen  Outside Material Depth	Abandoned, Poor	Map of W Please provide a map below following	ell Location
Diameter (cmlin) (Plastic, Galvanized, Steel) Slot No. From	To Abandoned, other,	* Todoo provide a map below following	mandelions on the pack.
	CONSTRUCTION	1	31
	Other, specify	135	73/
Water Details	Hole Diameter	1 7 7 7	$\bigcirc$
Nater found at Depth Kind of Water: Fresh Untested	Depth (mlft) Diameter	an on	
(m/ft) Gas Other, specify	From To (cm/in)	road	5
Water found at Depth Kind of Water: ☐ Fresh ☐ Untested  (pff) ☐ Gas ☐ Other, specify		( X )	
Water found at Depth Kind of Water: ☐ Fresh ☐ Untested		4 GA	DSTONE O
(mlft) Gas Other, specify			9
Well Contractor and Well Technician lusiness Name of Well Contractor	Information Well Contractor's Licence No.		
TIP ROCK DRILL INCCOL	TD 1119		
iusiness Address (Street Number/Name)	Municipality	Comments:	
rovince Postal Code Business E-mail Addre	CIVIONU	Dorelow	212-1
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us. Telephone No, finc. area code) Name of Well Technician (La		information package	Audit No.
/ell Technician's Licence No. Signature of Technician and/or Con	tractor Date Submitted	delivered Date Work Completed	Z166933
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Well Tag No. (Place Sticker and/or Print Below)

Tag#: A173762

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Regulation 903 Ontario Water Resources Act

Measurements re	_	perial .	Tag#: A17	<b>3762</b> 54	6268 Pag	e	of
HOG Hac	Information  Last Name / Org  LUB 72    Street Number/Name)  LAST Name / Org	Ontanoli	nc. The Hair Ottawa	E-mail Address  Loff Le Spg  Province Postal Code  ON K2P1	e Telephon	by We	Constructed all Owner area code)
Well Location Address of Well L County/District/M  UTM Coordinates  NAD   8   3	Zone Easting North	C Ming , M	ownship ity/Town/Village lunicipal Plan and Sublo	Lot ot Number	Concessi Province Ontario Other	on Postal	Code
	Bedrock Materials/Abandonn  Most Common Material  F. ()  S, / + Sand	nent Sealing Reco	rd (see instructions on the er Materials Sand Clay	General Description Seft	n	Depr From Q (-22	th ( <i>m/ft</i> ) To 1. 2
GRY	Silt Clay Clay	57	//	50 F 7. 50 F 7		488	U.B.
Depth Set at ( <i>m</i> From To Q	Material and Material and Concrete	nt Used Type) Lushwoun Chios	Volume Placed (m³/ft³)	Results of W After test of well yield, water was:  Clear and sand free Other, specify If pumping discontinued, give reason.  Pump intake set at (m/ft)	(min) (m/ft)	Re	ecovery Water Level (m/ft)
☐ Cable Tool ☐ Rotary (Conven ☐ Rotary (Reverse ☐ Boring ☐ Air percussion	Digging   Livestration   Livestratio	stic	cial	Pumping rate (I/min / GPM)  Duration of pumpinghrs +min  Final water level end of pumping (m/h	3 4 5 5 10 15 15 15 15 15 15 15 15 15 15 15 15 15	3 4 5 10	
Diameter (Gal	n Hole OR Material vanized, Fibreglass, crete, Plastic, Steel)  PVC  Gonstruction Record - Casin Wall Wall Thickness (cm/in)  PVC  Gonstruction Record - Casin Wall Wall Thickness (cm/in)  Thickness (cm/in)	g	Status of Well  Water Supply Replacement Well Test Hole Recharge Well Dewatering Well Observation and/or Monitoring Hole	Recommended pump depth (m/ft)  Recommended pump rate (l/min / GPM)  Well production (l/min / GPM)	20 25 30 40 50	20 25 30 40 50	
Outside Diameter (cm/in) (Plasti	Construction Record - Screen  Material ic, Galvanized, Steel)  Slot No.	Depth ( <i>m/ft</i> ) From To	Alteration (Construction)	Disinfected?  Yes No  Map of W  Please provide a map below following	60 Vell Location	60	*
(m/ft) [] Water found at D (m/ft) []	Gas Other, specify epth Kind of Water: Fresh Gas Other, specify epth Kind of Water: Fresh G	Untested Depth From Untested	ole Diameter  (m/ft) Diameter  To (cm/in)  G. ( 15.3)	Start Start	19m Park 1429	2t orweren	
Business Name of S Constitution of S Constitutio	Well Contractor and Well Tell Well Contractor  (Street Number/Name)  Postal Code Business E-	Mur Mur mail Address	Contractor's Licence No.	Comments:			
Well Technician's Lic	(inc. area code) Name of Well Teg (inc. area code) Name of Technician area code) Name of Technician area code (inc. area code) Name of Na	hnician (Last Name, F L h and/or Contractor Date	Tratagor - ( First Name) e Submitted C 1 4 4 4 4 6 Ministry's Copy	Well owner's information package delivered	Audit No.	istry Use Z 186 C 15	8288

Go Back to Map

# Well ID

Well ID Number: 7295733 Well Audit Number: *Z206495* Well Tag Number: *A182830* 

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

# **Well Location**

<b>Address of Well Location</b>	366 382 BANK STREET
Township	OTTAWA CITY
Lot	

### Concession

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445605.00 Northing: 5029135.00
Municipal Plan and Sublot Number	
Other	_

### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND		0 m	2.44 m
GREY	SILT	CLAY	SOFT	2.44 m	3.96 m
GREY	SILT	CLAY	WBRG	3.96 m	5.79 m

# **Annular Space/Abandonment Sealing Record**

Depth From	_	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	,
.31 m	2.44 m	BENSEAL	
2.44 m	5.79 m	SAND	

# **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	Monitoring
	Test Hole

### **Status of Well**

Monitoring and Test Hole

# **Construction Record - Casing**

Inside	Open Hole or material	Depth	Depth
Diameter		From	To
4.03 cm	PLASTIC	0 m	2.74 m

### **Construction Record - Screen**

Outside Material Depth Depth From To
4.82 cm PLASTIC 2.74 m 5.79 m

### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

### **Draw Down & Recovery**

Draw Down	Draw Down Water	Recovery	Recovery Water
Time(min)	level	Time(min)	level
~***			

Go Back to Map

# Well ID

Well ID Number: 7295734 Well Audit Number: *Z206494* Well Tag Number: *A182831* 

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

# **Well Location**

Address of Well Location	366 382 BANKS STREET
Township	OTTAWA CITY
Lot	

### Concession

County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445606.00 Northing: 5029117.00
<b>Municipal Plan and Sublot Number</b>	
Other	

### Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND		0 m	1.83 m
BLUE	CLAY	SILT	SOFT	1.83 m	3.35 m
BLUE	SAND	MUCK	SOFT	3.35 m	4.88 m
GREY	SILT	CLAY	SOFT	4.88 m	5.49 m

# **Annular Space/Abandonment Sealing Record**

-	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	,
.31 m	1.83 m	BENSEAL	
1.83 m	5.49 m	SAND	

# **Method of Construction & Well Use**

<b>Method of Construction</b>	Well Use
Direct Push	Monitoring
	Test Hole

### **Status of Well**

# **Construction Record - Casing**

Inside	Open Hole or material	Depth	Depth
Diameter		From	To
4.03 cm	PLASTIC	0 m	2.44 m

### **Construction Record - Screen**

Outside Material Depth Depth From To
4.82 cm PLASTIC 2.44 m 5.49 m

### Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

# **Results of Well Yield Testing**

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

### **Draw Down & Recovery**

June 26, 2019 File: PE4650-HLUI

City of Ottawa 110 Laurier Avenue W Ottawa, Ontario K1P 1J1

Subject:

**Authorization Letter, HLUI Search** 

**Phase I-Environmental Site Assessment** 

390 Bank St Ottawa, Ontario

Dear Sir,

Please consider this letter as confirmation that Paterson Group has been retained to conduct a Phase I-Environmental Site Assessment at the aforementioned property.

With this letter, the property owner authorizes the City of Ottawa and other regulatory bodies to release, to Paterson Group, information requested for the purpose of completing an environmental assessment of the property.

Name of Company/Property Owner:

Name of Representative/Owner

Signature of Representative/Owner

Date

#### **Mandy Witteman**

From: Public Information Services < publicinformationservices@tssa.org>

**Sent:** June-27-19 8:52 AM **To:** Mandy Witteman

Subject: RE: Search records Request (PE4650)

#### No Records Found

Hello.

Thank you for your request for confirmation of public information.

We confirm that there are <u>no fuel storage tanks records</u> in our database at the subject address(es).

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

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

Kind regards,



#### Connie Hill | Public Information Agent

Facilities 345 Carlingview Drive Toronto, Ontario M9W 6N9

Tel: +1-416-734-3383 | Fax: +1-416-231-6183 | E-Mail: publicinformationservices@tssa.org

www.tssa.org







From: Mandy Witteman < MWitteman@Patersongroup.ca>

Sent: June 27, 2019 8:36 AM

To: Public Information Services <publicinformationservices@tssa.org>

Subject: Search records Request (PE4650)

Good Morning,

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

Bank St: 390, 394, 403, 366, 382

Gilmour St: 420

James St: 20, 27, 25, 30

Thank you

#### Cheers.

Mandy Witteman

# patersongroup

solution oriented engineering over 60 years servicing our clients

154 Colonnade Road South Ottawa, Ontario, K2E 7J5 Tel: (613) 226-7381 Ext. 339

Cell: (403) 921-1157

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# **APPENDIX 3**

**QUALIFICATIONS OF ASSESSORS** 

### Mandy Witteman, B.Eng., M.A.Sc.



#### **POSITION**

Intermediate Environmental Engineer

#### **EDUCATION**

Carleton University
M.A.Sc., Environmental Engineering, 2013
B.Eng., Environmental Engineering, 2008

#### **MEMBERSHIPS & AWARDS**

Ontario Professional Engineers Association (EIT) NSERC Industry R&D Scholarship

#### **EXPERIENCE**

2018 - Present

#### Paterson Group Inc.

Consulting Engineers
Geotechnical and Environmental Division
Environmental Engineer

2014 - 2015

#### **Thurber Engineering Limited**

Oil Sand Tailings Group Tailings Engineer

2009 - 2014

#### **Carleton University**

Department of Civil & Environmental Engineering Research Engineer, Research Assistant & Teaching Assistant

2008 - 2009

#### **SLR Consulting Limited**

Contaminated Sites
Junior Environmental Engineer

#### **SELECTED LIST OF PROJECTS**

Phase I & II Environmental Site Assessments – NRC, Kingston Remediation – National Capital Region, Saskatchewan Multi-lift and dry-stacking pilot programs – Northern Alberta Polymer amended oil sand tailings – Northern Alberta Hydraulic cut-off wall – Allen, Saskatchewan Cemented paste backfill systems – Northern Ontario

\_\_\_\_\_

### Mark S. D'Arcy, P. Eng.



Geotechnical Engineering

Environmental Engineering

**Hydrogeology** 

Geological Engineering

**Materials Testing** 

**Building Science** 

Archaeological Services

#### **POSITION**

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

#### **EDUCATION**

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

#### **MEMBERSHIPS**

Ottawa Geotechnical Group Professional Engineers of Ontario

#### **EXPERIENCE**

1991 to Present

Paterson Group Inc.

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

#### **SELECT LIST OF PROJECTS**

Mary River Exploration Mine Site - Northern Baffin Island

Agricultural Supply Facilities - Eastern Ontario

Laboratory Facility – Edmonton (Alberta)

Ottawa International Airport - Contaminant Migration Study - Ottawa

Richmond Road Reconstruction - Ottawa

Billings Hurdman Interconnect - Ottawa

Bank Street Reconstruction - Ottawa

Environmental Review - Various Laboratories across Canada - CFIA

Dwyer Hill Training Centre - Ottawa

Nortel Networks Environmental Monitoring - Carling Campus - Ottawa

Remediation Program - Block D Lands - Kingston

Investigation of former landfill sites - City of Ottawa

Record of Site Condition for Railway Lands - North Bay

Commercial Properties - Guelph and Brampton

Brownfields Remediation - Alcan Site - Kingston

Montreal Road Reconstruction - Ottawa

Appleford Street Residential Development - Ottawa

Remediation Program - Ottawa Train Yards

Remediation Program - Bayshore and Heron Gate

Gladstone Avenue Reconstruction – Ottawa

Somerset Avenue West Reconstruction - Ottawa