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Phase I Environmental Site Assessment

278, 280 and 282 O'Connor Street and
347 Gilmour Street
Ottawa, Ontario

Prepared For

Polo IV

June 28, 2019

Report: PE4530-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Polo IV (c/o AK Global) to conduct a Phase I – Environmental Site Assessment (ESA) for the Phase I Property addressed 278, 280 and 282 O'Connor Street and 347 Gilmour Street, in the City of Ottawa, Ontario. The purpose of this environmental assessment was to research the past and current use of the Phase I Property and Study Area and to identify any environmental concerns with the potential to impact the subject property.

Based on the available historical information sources, the Phase I Property was first developed for residential purposes circa 1888. By the 1920s, the property at 278 O'Connor Street was used for both residential and office purposes. Historical land use of surrounding lands consisted of residential, commercial offices, retailers and some service stations that were identified as potentially contaminating activities (PCAs). However, based on the significant distances separating them from the subject site, as well as down and/or cross gradient orientation, these activities do not represent an area of potential environmental concern (APEC) on the Phase I Property. No environmental concerns were identified with the historical use of the subject site or neighbouring lands that would pose a risk to the Phase I Property.

Following the historical review, a site visit was conducted. Based on the findings of the site visit, no on-site PCAs were identified. At the time of the site visit, the current use of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. No off-site PCAs with the potential to impact the Phase I Property were identified at the time of the site visit.

Based on the findings of the Phase I-ESA, it is our opinion that **a Phase II-ESA is not required for the Phase I Property.**

Recommendations

Based on the approximate age of the buildings, potential ACMs may be present within the buildings. Suspected ACMs observed at the time of our site visit include plaster/parging, lathe and plaster, decorative plaster, vinyl tiles and drywall joint compound. It should be noted that wall and ceiling cavities were not inspected at the time of our site visit.

Based on dates of construction, lead-based paints (LBPs) may be present within the structures on older or original painted surfaces beneath newer paints. All building

materials and painted surfaces were observed to be in reasonable condition at the time of the site visit and the potential for ACMs and LBPs is not considered to represent an immediate concern at 278, 280 and 282 O'Connor Street and 347 Gilmour Street.

It is our understanding that the subject structures will either be demolished and/or restored and upgraded in conjunction with future redevelopment. Prior to any demolition activities and building material disturbances, a designated substance survey (DSS) must be conducted for the existing structures, if none have been completed for the subject buildings, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

1.0 INTRODUCTION

At the request of AK Global Inc., Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (Phase I ESA) for the property addressed 278, 280 and 282 O'Connor Street and 347 Gilmour 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 properties and study area of 250 meters to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Tony Kazarian of AK Global Inc. Mr. Kazarian can be reached by telephone at (613) 983-2290.

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 the requirements of 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: 278, 280 and 282 O'Connor Street and 347 Gilmour Street, in Ottawa, Ontario.

Legal Description: PLAN 15558, Part of Lot 43; PLAN 15558, Lot 13 O'Connor West; PLAN 15558, Lot 12 O'Connor West, in Ottawa Ontario.

Property Identification No.: 04119-0056; 04119-0057; 04119-0058

Location: The Phase I Property is situated on the northwest corner of the O'Connor Street and Gilmour Street intersection, in the City of Ottawa.

Latitude and Longitude: 45° 24' 53.64" N, 75° 41' 37.15" W

Site Description:

Configuration: Rectangular

Site Area: 1610 m² (approximate)

Zoning: R4 – Residential 4th Density Zone

Current Use: The Phase I Property is currently occupied by two residential buildings (347 Gilmour Street and 280 and 282 O'Connor Street) and a mix-use (residential and office) building (278 O'Connor Street).

Services: The subject site is situated in a municipally serviced area.

3.0 SCOPE OF INVESTIGATION

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

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

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

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

First Developed Use Determination

According to the city directories, aerial photographs and fire insurance plans (FIPs), the subject properties were developed as early as 1888. The subject properties were shown in the 1888 FIPs and listed in the city directories in 1890 and 1900 as residential dwellings. For the purpose of this report, the first developed use of the subject site is considered to be residential in 1888.

Fire Insurance Plans

The 1901, 1912 and 1956 fire insurance plans (FIPs) for the Phase I Property and properties within the Phase I Study Area were reviewed from the National Archives. The 1901 and 1912 FIPs indicated that the subject properties, addressed 347 Gilmour Street, and 278-282 O'Connor Street were each occupied by a two-storey residential dwelling followed by the addition of private garage, present in the 1912 FIPs.

The surrounding properties in the 1901, 1912 and 1956 FIPs were primarily residential with some commercial land use along Bank Street, and occasional Institutional land use.

Based on the review of the FIPS, ten (10) potentially contaminating activities (PCAs) were identified within the Phase I Study Area. The 1912 FIPs identified a mirror and bevelling workshop at 402 Bank Street, two (2) paint shops at 404 and 406 Bank Street, and two (2) printing facilities at 307 and 374 Bank Street. The 1956 FIPs identified two (2) automotive repair garages at 7 Florence Street and 384 Gilmour Street, a retail fuel outlet (RFO) at 394 Bank Street, a tin-smelting and woodwork shop at 487 Lewis Street, and two (2) portrait/photography studios at 370 Bank Street and 286 MacLaren Street.

A summary of the PCAs identified from the 1912 and 1956 FIPs review with the respective distances and orientation to the Phase I Property have been provided in Table 1.

TABLE 1. PCAs identified from the 1912 and 1956 FIPs review within the Phase I Study Area			
Address	Year of FIP	Listed Activity	Approximate Distance / Orientation from Site
Bank Street			
370	1912, 1956	Printing shop & Photography studio	142 m SW
374	1912	Printing facilities	142 m SW
394	1956	Retail fuel outlet – 2 USTs	173 m SW
402	1912	Glass, mirror and bevelling works	190 m SW
404	1912, 1956	Paint shop	191 m SW
406	1912	Paints & oils shop	192 m SW
Florence Street			
7	1956	Automotive repair garage	215 m SW
Gilmour Street			
384	1956	Automotive repair garage	83 m SW
Lewis Street			
487	1956	Tin-smelting & woodworking shop	91 m SW
MacLaren Street			
286	1956	Portrait studio	70 m NW

Based on the separation distance and/or downgradient orientation with respect to the subject site, these off-site PCAs are not considered to represent an area of potential environmental concern (APEC) on the Phase I Property.

City of Ottawa Street Directories

City Directories from 1890 to 2011 were reviewed in approximate 10-year intervals for the area of the subject property. The subject properties addressed at 347 Gilmour Street and 280 and 282 O'Connor Street were listed as residential as early as 1890 until 2011. The property addressed 278 O'Connor Street was listed as residential dwelling from 1900 to 1920 and was then listed as offices and residences until 2011.

Neighbouring properties along O'Connor Street, MacLaren Street, and Lewis Street were a combination of residential and small commercial properties. The city directories were used to verify the presence of the portrait studio observed in the 1956 FIPs (discussed earlier). The directories confirmed the PCAs identified from the FIPs, such as the two (2) automotive repair garages located at 384 Gilmour Street (1940's to the 1960's) and at 394 Bank Street (1940's to the 1950's). A new off-site PCA was identified; a dry-cleaners located at 310 Bank Street, approximately 200 m to the west (1950's). The dry-cleaner is not considered to represent an APEC based on the significant distance separating it from the subject site.

Off-site PCAs are presented on Drawing PE4530-2 – Surrounding Land Use Plan in the Figures section.

Chain of Title

Paterson did not request a Chain of Title for the subject site as it was determined that sufficient information was gathered from other sources, such as personal interviews, aerial photograph and city directories.

Survey Plan

A preliminary survey plan, prepared by Farley, Smith & Denis Survey in 2019, was reviewed as a part of this assessment. The plan depicts the subject property in its current configuration. A copy of the survey plan is included in Appendix 1.

Previous Engineering Reports

Paterson completed a geotechnical investigation for the subject site in February 2019. The subsurface profile on site generally consisted of an asphaltic pavement structure, overlying native silty clay/clay layer deposit. Practical refusal was encountered at 18.8 to 19.0 m, which is considered inferred bedrock.

Based on the subsurface investigation, no deleterious material or fill of unknown quality was encountered on the Phase I Property.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on January 9, 2019. The Phase I Property was not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

A search of national PCB waste storage sites was conducted on January 9, 2019. No PCB waste storage sites were identified on the Phase I Property or in the Study Area.

Ministry of the Environment, Conservation and Parks (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. Based on the MECP FOI response, there was no information with regards to certificates of approvals, permits to take water, certificate of property use or any other similar MECP issued instruments for the subject site. A copy of the MECP FOI response is included in Appendix 2.

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. Based on the MECP FOI response, no records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP were noted regarding the subject site and adjacent properties. A copy of the MECP FOI response is included in Appendix 2.

MECP Waste Management Records

A request was submitted to the MECP FOI office for information with respect to waste management records. Based on the MECP FOI response, no issues were reported with regard to waste management practices on the subject site. A copy of the MECP FOI response is included in Appendix 2.

MECP Submissions

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the property. Based on the MECP FOI response, no potential environmental concerns were noted regarding the subject site. A copy of the MECP FOI response is included in Appendix 2.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry was conducted for the subject and neighbouring properties, as well as the general area of the site. Two (2) properties within the Phase I Study Area were listed as having a Record of Site Condition (RSC) filed at 330 Gilmour Street and 390 Bank Street, approximately 30 m southeast and 173 m southwest, of the subject site, respectively. No remedial work was required on either site. Based on the information in the Brownfields Registry, in combination with information in our file, the aforementioned RSC properties are not considered to pose a concern to the Phase I Property.

MECP 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.

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 km of the Phase I study area.

Areas of Natural Significance (ANSI)

A search for areas of natural significance and features within the Phase I Study Area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on January 9, 2019. The search did not reveal any natural features or ANSIs on the Phase I Property or within the Phase I ESA study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on January 9, 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 Intera report entitled “Mapping and Assessment of Former Industrial Sites, City of Ottawa” was reviewed. The Phase I Property or Study Area were not listed in the database as a former industrial site.

City of Ottawa Landfill Document

The document entitled “Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa”, was reviewed. Based on this document, there are no former landfills within the Phase I study area.

City of Ottawa Historical Land Use Inventory (HLUI)

A requisition form was sent to the City of Ottawa to request information from the City’s Historical Land Use Inventory (HLUI 2005) database for the subject property. A response had not been received at the time this report was issued. A copy of the response will be forwarded to the client if it contains any pertinent information. The HLUI request form has been 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. The review period dates to the first available air photos for the site. Based on the review, the following observations have been made:

- | | |
|------|--|
| 1925 | The subject site appears to be occupied by residential dwellings. Neighbouring land use appears as residential to the north, west, east and south. |
| 1958 | Three (3) residential dwellings can be seen at this time. The surrounding lands appear unchanged from the previous photograph. |

1965	No significant changes are apparent to the subject site or neighbouring lands.
1976	(Poor quality) The subject site appears unchanged from the previous photograph. A vacant lot is present immediately north of the subject site at this time.
1991	No significant changes are apparent to the subject site. A residential apartment building is present immediately north. Properties to the south, east and west remain unchanged from the previous photograph.
2002	No significant changes are apparent to the subject site or the surrounding lands.
2011	The subject site and surrounding lands appear unchanged from the previous photograph.
2017	No changes are apparent to the subject site or surrounding lands at this time.

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 elevation of the subject site is between 72 and 80 m ASL, and that the regional topography in the general area of the site slopes gradually downward to the north and east. According to the maps, the nearest water body is the Rideau Canal, located approximately 800 m to the east of the site. 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 and attached mapping, the site is situated within the Ottawa Valley Clay Plains physiographic region, described as "clay plains interrupted by ridges of rock or sand". Mapping shows the subject site as situated on an area of clay plains.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of shale of the Billings Formation. Overburden consists of clay and offshore marine sediment, with a drift thickness on the order of 15 to 25 m.

These findings are generally consistent with site-specific data from Paterson geotechnical investigation (February 2019), where the overburden was found to extend up to 20 m below grade.

Water Well Records

Well records for all drilled wells within the Phase I Study Area were obtained from the MECP website. Based on the results of the well records search, there were no well records found on-site. Twenty-one (21) well records were found within the 250 m search radius. The majority of these records referred to the installation and/or abandonment of groundwater monitoring wells, approximately 120 to 250 m away from the Phase I Property.

Based on the well records, the subsurface profile in the Phase I Study Area generally consisted of fill material, followed by silty clay, overlying clayey silt/clay layer. No concerns were noted during the well records review.

Water Bodies and Areas of Natural Significance

No creeks, rivers, streams, lakes or any other water body was identified in the Phase I study area. The nearest water body is the Rideau River, which is located well outside of the Phase I Study Area.

5.0 INTERVIEW

Property Owner Representative

The property owners of 347 Gilmour Street, 278, 280 and 282 O'Connor Street were interviewed during the site visit on June 20, 2019. The landowner of 278 O'Connor Street purchased the three (3) storey, mixed-use building in 1994, during which he completed several upgrades over the last two decades, such as converted from oil to natural gas fired boilers, new windows and roof. According to the owner an asbestos survey was conducted approximately 4 years ago.

The former landowner, as of last year, of 347 Gilmour Street purchased the residential property in the late 1990s as a small residential apartment building. Several upgrades were completed in the last 10 years, which includes, electrical work, replaced natural gas fired boilers and plumbing. The former landowner is not aware of any potential environmental concerns regarding the property or neighbouring lands.

Mr. Tony Kazarian, the current landowner of 280 and 282 O'Connor Street, recently purchased the property earlier this year. According to the previous owner, the subject building converted to a natural gas burning furnace in the late 1980s. Mr. Kazarian is not aware of any potential environmental concerns regarding this property of neighbouring lands.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on June 20, 2019. Weather conditions were overcast, with a temperature of approximately 19°C. Personnel from the Environmental Department of Paterson Group conducted the site visit. In addition to the site, the uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site visit.

6.2 Specific Observations at Phase I Property

Buildings and Structures

The subject site is occupied by three (3) residential buildings that were constructed circa 1888. All of the buildings were constructed with a stone and mortar foundation.

347 Gilmour Street is occupied by a two (2) storey residence with a basement, containing three (3) units. The building exterior is finished in red brick with a sloped style shingled roof.

280 and 282 O'Connor Street is occupied by a three (3) storey attached residential building with a basement level. The roof is a sloped style roof finished with a combination of shingles and metal roof sheets.

278 O'Connor Street is occupied by a three (3) storey with a basement level mixed-use (residential and offices) building. The building exterior is finished in red brick with sloped shingle style roof. Two (2) private garages, also constructed circa 1888 are also present on-site.

Site Features

The majority of the subject site is asphaltic paved concrete parking area for the residences occupying the subject site. There are two (2) access laneways/driveways to the parking fronting Gilmour Street and one access laneway from O'Connor Street. The main entrances of each building are landscaped. Site drainage consists primarily of sheet flow to the storm drains along Gilmour Street and O'Connor Street and infiltration on the landscaped areas.

The site topography is slightly above the grade of O'Connor Street and Gilmour Street and slopes gently downwards towards the south/southwest. The regional topography is relatively flat.

Domestic, non-hazardous waste containers are stored on the north side of 347 Gilmour Street and 278 O'Connor Street, and collected on a regular basis by the municipality. No concerns were noted with current waste management practices onsite. No unidentified substances were observed on the exterior of the subject property at the time of this assessment.

The property is municipally serviced. No underground structures were observed at the time of the visit. No evidence of current or former railway or spur lines on the subject property was observed at the time of the site visit.

Interior

A general description of the interior of each residential building is provided below:

347 Gilmour Street

- ☐ The floors throughout the building consisted of hardwood, ceramic tiles and concrete (basement);
- ☐ The walls consisted primarily of lathe and plaster, some gypsum board and stone and mortar (basement);
- ☐ The ceilings consisted of plaster;
- ☐ Lighting throughout the building was provided by incandescent fixtures.

The building is currently heated with natural gas-fired equipment located in the basement. Based on the age of the building (1888) in combination with observations made at the time of the site visit, it is very likely that the building was heated with fuel-oil, prior to conversion to natural gas. It should be noted however, that no evidence of an AST, spills, or staining were observed in the basement.

One floor drain was observed in the basement. The drain appeared to be dry. No other drains, or sumps were observed.

Chemical storage was limited to small quantities of commercially available paint, which were properly stored in their original containers, with no evidence of spills or staining observed at the time of the site visit. No concerns associated with chemical storage were identified at the subject site.

Potential asbestos-containing materials (ACMs) observed at the time of the site visit include vinyl floor tiles, lathe and plaster walls, plaster ceilings, and interior parging. Lead-based paints may also be present on painted surfaces. Building materials and painted surfaces were observed to be in good to poor condition at the time of the site visit.

280 and 282 O'Connor Street

- ☐ The floors throughout the building consisted of vinyl tiles, hardwood, some laminate and concrete (basement);
- ☐ The walls consisted primarily of decorative plaster, lathe and plaster, drywall and stone and mortar (basement);
- ☐ The ceilings consisted of plaster and suspended ceiling tiles;
- ☐ Lighting throughout the building was provided by incandescent fixtures.

The building is currently heated by natural gas fired equipment. Based on the age of the building, it is very likely that the subject building was formerly heated using fuel oil. At the time of the site assessment, there were no visual signs (leaks, spills, staining) or unusual olfactory odours in the basement. No large cracks/breaks within the concrete floor were noted at the time of the site visit.

Several floor drains were observed in the basement. The drains appeared to be dry. No other drains, or sumps were observed at the time of the site visit.

No chemicals were observed to be stored onsite. No concerns associated with chemical storage were identified on this part of the Phase I Property.

Potential asbestos-containing materials (ACMs) observed at the time of the site visit include decorative plaster, lathe and plaster, vinyl floor tiles and suspended ceiling tiles. Lead-based paints may also be present on painted surfaces. Building materials and painted surfaces were observed to be in good to poor condition at the time of the site visit.

278 O'Connor Street

- ☐ The floors throughout the building consisted of carpet, hardwood, vinyl tiles, ceramic tiles and concrete (basement);
- ☐ The walls consisted of lathe and plaster, gypsum board and stone and mortar (basement);
- ☐ The ceilings consisted of plaster;
- ☐ Lighting throughout the building was provided by incandescent fixtures.

The building is currently heated with a natural gas-fired boiler located in the basement. Based on the age of the building (1888) in combination with observations made at the time of the site visit, it is very likely that the building was originally heated with fuel-oil, prior to conversion to natural gas. It should be noted however, that no evidence of an AST, spills, or staining were observed in the basement.

One floor drain was observed in the basement. The drain appeared to be dry. No other drains, or sumps were observed.

Chemical storage was limited to small quantities of commercially available paint, which were properly stored in their original containers, with no evidence of spills or staining observed at the time of the site visit. No concerns associated with chemical storage were identified at the subject site.

Potential asbestos-containing materials (ACMs) observed at the time of the site visit include vinyl floor tiles, lathe and plaster walls, plaster ceilings and drywall joint compound. Lead-based paints may also be present on painted surfaces. Building materials and painted surfaces were observed to be in good condition at the time of the site visit.

It should be noted that there were no signs of UFFI in any of the buildings at the time of the site visit, although ceiling and wall cavities were not inspected.

Neighbouring Properties

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

- ☐ North - Residential dwellings and apartment building, MacLaren Street;
- ☐ South - Gilmour Street, followed by residential dwellings;
- ☐ East - O'Connor Street, followed by a commercial parking lot;
- ☐ West - Residential dwellings and an apartment building.

The current use of the adjacent properties is not considered to pose an environmental concern to the subject site. Land uses within the Phase I Study Area are residential along Gilmour Street and commercial and residential along O'Connor Street. Potentially contaminating activities (PCAs) within the Phase I Study Area were identified, however based on the separations distances, orientation with respect to the subject site, in combination with information from previous environmental work conducted by Paterson, these properties do not represent areas of potential environmental concerns (APECs). PCAs within the study area are illustrated and presented in green text on Drawing PE4530-2 – Surrounding Land Use Plan in the Figures section of this report.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The Phase I Property was initially developed circa 1888 with the present-day residential buildings. The Phase I Property has always been used for residential and office purposes.

Potentially Contaminating Activities (PCAs)

Off-site PCAs identified within the Phase I Study Area are illustrated on Drawing PE4530-2 – Surrounding Land Use Plan in the Figures section of this report, following the text. Based on their separation distances and/or orientations with respect to the subject land, as well as previous work completed by Paterson Group, the PCAs are not considered to represent APECs on the Phase I Property.

Areas of Potential Environmental Concern (APECs)

No APECs were identified on the Phase I Property.

Contaminants of Potential Concern (CPCs)

No CPCs were identified on the Phase I Property.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of shale of the Billings Formation. Overburden consists of clay and offshore marine sediment, with a drift thickness on the order of 15 to 25 m.

The findings of the subsurface investigation conducted by Paterson on the Phase I Property confirms the reported subsurface conditions.

Existing Buildings and Structures

The Phase I Property is occupied by two (2) residential buildings and one mixed-use residential and office building. Two (2) private garages associated with the residences also occupy the site.

Water Bodies

There are no water bodies on the subject site or within the Phase I study area.

Areas of Natural Significance

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

Drinking Water Wells

No drinking water wells are located on the Phase I property or within the Phase I study area.

Groundwater Monitoring Wells

No groundwater monitoring wells are located on the Phase I Property. Several monitoring wells were identified approximately 120 to 250 m away from the subject site.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is a combination of residential, commercial -retail, offices and restaurants. Surrounding land use is shown on Drawing PE4530-2 - Surrounding Land Use Plan.

Potentially Contaminating Activities (PCAs)

No existing on-site PCAs were identified on the Phase I Property. As noted previously, based on the separation distance and downgradient and/or cross gradient orientation with respect to the subject site, the off-site PCAs are not considered to represent an APEC on the Phase I Property.

Off-site PCAs identified within the Phase I-ESA study area are presented on Drawing PE4530-2 – Surrounding Land Use Plan.

Areas of Potential Environmental Concern (APECs) and Contaminants of Potential Concern (CPCs)

As noted previously, none of the aforementioned off-site PCAs identified within the Phase I Study Area are considered to have resulted in APECs on the Phase I Property. There are no contaminants of potential environmental concern on the Phase I Property.

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 PCAs in the Phase I Study Area that represent APECs on the subject site. The presence of PCAs was confirmed by a variety of independent sources, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSIONS

8.1 Assessment

Paterson Group was retained by Polo IV (c/o AK Global) to conduct a Phase I – Environmental Site Assessment (ESA) for the Phase I Property addressed 278, 280 and 282 O'Connor Street and 347 Gilmour Street, in the City of Ottawa, Ontario. The purpose of this environmental assessment was to research the past and current use of the Phase I Property and Study Area and to identify any environmental concerns with the potential to impact the subject property.

Based on the available historical information sources, the Phase I Property was first developed for residential purposes circa 1888. By the 1920s, the property at 278 O'Connor Street was used for both residential and office purposes. Historical land use of surrounding lands consisted of residential, commercial offices, retailers and some service stations that were identified as potentially contaminating activities (PCAs). However, based on the significant distances separating them from the subject site, as well as down and/or cross gradient orientation, these activities do not represent an area of potential environmental concern (APEC) on the Phase I Property. No environmental concerns were identified with the historical use of the subject site or neighbouring lands that would pose a risk to the Phase I Property.

Following the historical review, a site visit was conducted. Based on the findings of the site visit, no on-site PCAs were identified. At the time of the site visit, the current use of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. No off-site PCAs with the potential to impact the Phase I Property were identified at the time of the site visit.

Based on the findings of the Phase I-ESA, it is our opinion that **a Phase II-ESA is not required for the Phase I Property.**

8.2 Recommendations

Based on the approximate age of the buildings, potential ACMs may be present within the buildings. Suspected ACMs observed at the time of our site visit include plaster/parging, lathe and plaster, decorative plaster, vinyl tiles and drywall joint compound. It should be noted that wall and ceiling cavities were not inspected at the time of our site visit.

Based on dates of construction, lead-based paints (LBPs) may be present within the structures on older or original painted surfaces beneath newer paints. All building materials and painted surfaces were observed to be in reasonable condition at the time of the site visit and the potential for ACMs and LBPs is not considered to represent an immediate concern at 278, 280 and 282 O'Connor Street and 347 Gilmour Street.

It is our understanding that the subject structures will either be demolished and/or restored and upgraded in conjunction with future redevelopment. Prior to any demolition activities and building material disturbances, a designated substance survey (DSS) must be conducted for the existing structures, if none have been completed for the subject buildings, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

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 under the Environmental Protection Act 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 Polo IV. Permission and notification from Polo IV and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Mandy Witteman, B.Eng., MASc.



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



Report Distribution:

- ☐ Polo IV
- ☐ 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 Inventory.

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.
City of Ottawa Historical Land Use Inventory (HLUI) database
The City of Ottawa eMap website.

Local Information Sources

Chain of Title obtained through Read Abstracts Limited, July 2018.
Personal Interviews.
Previous Engineering Reports.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4530-1 – SITE PLAN

DRAWING PE4530-2 – SURROUNDING LAND USE PLAN

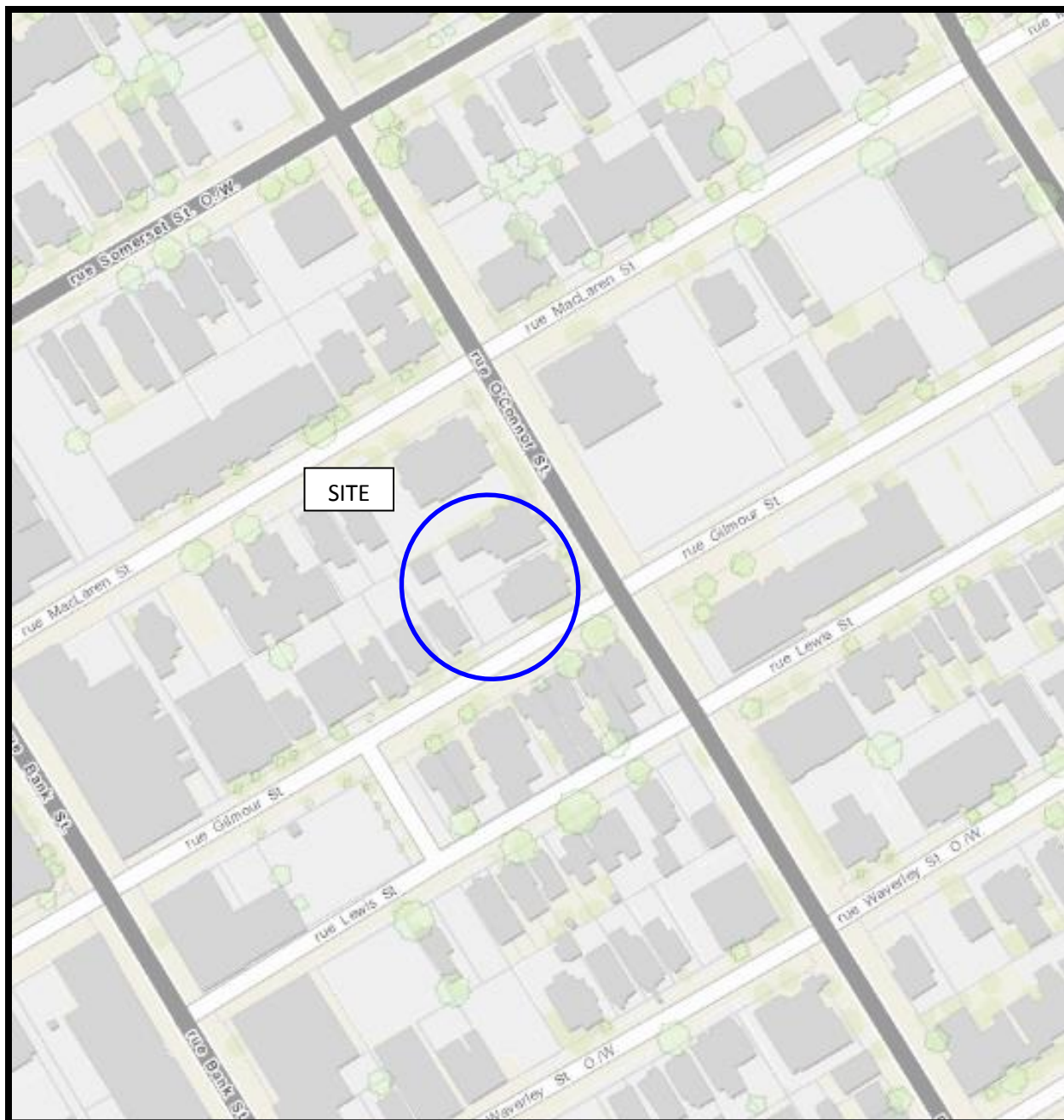
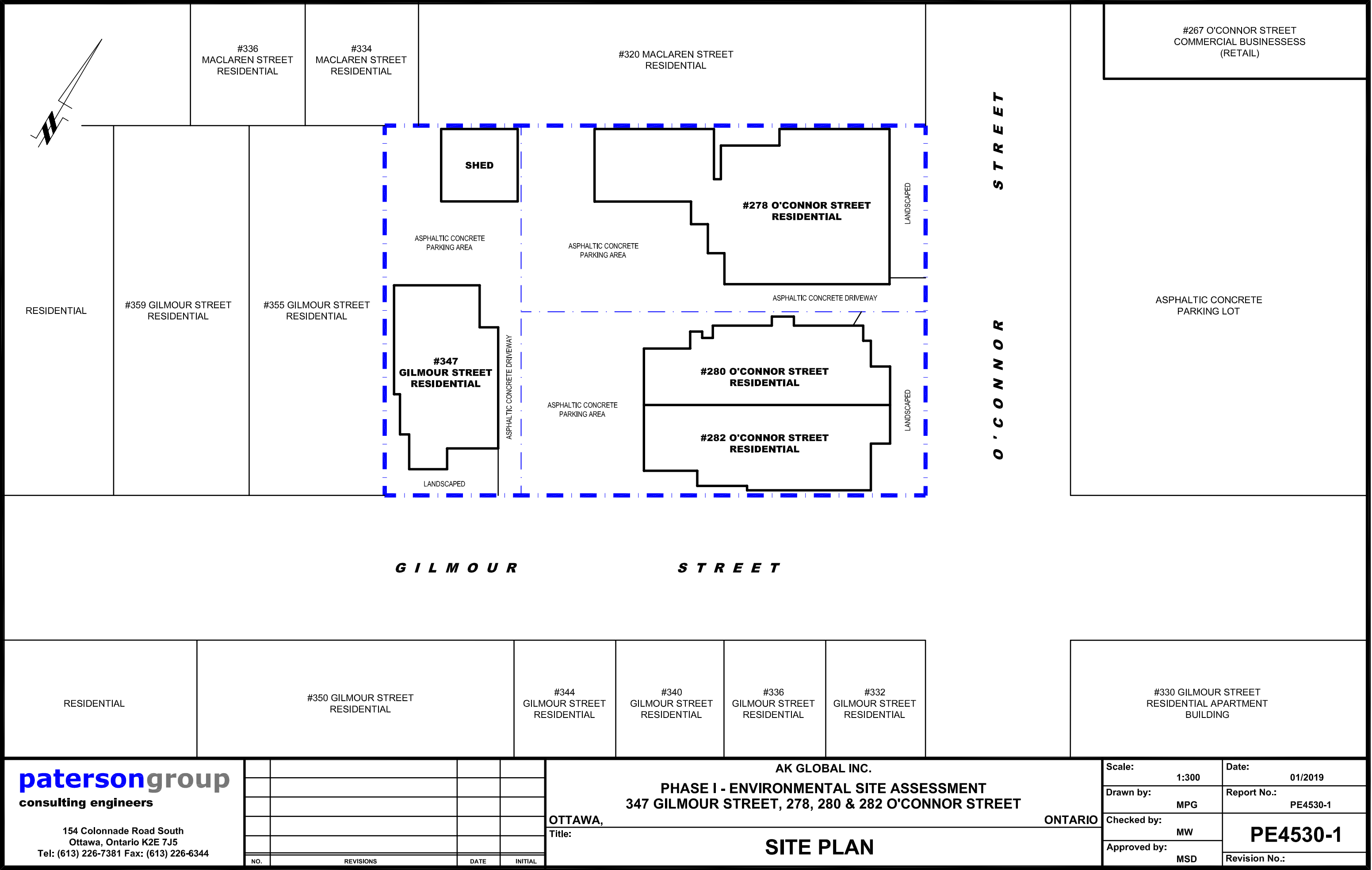


FIGURE 1
KEY PLAN



FIGURE 2
TOPOGRAPHIC MAP



patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL

AK GLOBAL INC.	
PHASE I - ENVIRONMENTAL SITE ASSESSMENT	
347 GILMOUR STREET, 278, 280 & 282 O'CONNOR STREET	
OTTAWA,	ONTARIO
Title:	
SITE PLAN	

Scale:	1:300	Date:	01/2019
Drawn by:	MPG	Report No.:	PE4530-1
Checked by:	MW	PE4530-1	
Approved by:	MSD		
		Revision No.:	

PHASE I ENVIRONMENTAL SITE ASSESSMENT STUDY AREA

The map displays a grid of residential streets in a neighborhood. A dashed black line outlines the study area. A blue rectangle labeled "SITE" is located at the intersection of rue O'Connor St and rue Gilmour St. Several green rectangles are numbered 1 through 10, indicating potentially contaminating activities. The streets shown include rue Lisgar St, rue Cooper St, rue Somerset St O/W, rue MacLaren St, rue O'Connor St, rue Lewis St, rue Waverley St, rue Frank St, rue Gladstone Ave, rue Bank St, rue Florence St, rue James St, rue Gilmour St, rue Nepean St, rue Elgin St, rue Cartier St, rue Hartington Pl, rue Stockport Riv, rue Allendale Riv, rue Jack Purcell Lane, rue Gloucester St, rue Kent St, rue Lyon St Nellyona St, rue Maclaren St, rue Gilmour St, rue Waverley St, rue Frank St, rue Gladstone Ave, rue Bank St, rue Florence St, rue James St, rue Gilmour St, rue Nepean St, rue Elgin St, rue Cartier St, rue Hartington Pl, rue Stockport Riv, rue Allendale Riv, rue Jack Purcell Lane.

POTENTIALLY CONTAMINATING ACTIVITIES:

- 286 MACLAREN STREET - FORMER PORTRAIT STUDIO
- 370 BANK STREET - FORMER PRINTING SHOP AND PHOTOGRAPHY STUDIO
- 374 BANK STREET - FORMER PRINTING SHOP
- 394 BANK STREET - FORMER RETAIL FUEL OUTLET (2 UNDERGROUND STORAGE TANKS)
- 402 BANK STREET - FORMER GLASS/MIRROR BEVELLING WORKS
- 404 BANK STREET - FORMER PAINT SHOP
- 406 BANK STREET - FORMER PAINTS AND OILS SHOP
- 7 FLORENCE STREET - FORMER AUTOMOTIVE REPAIR GARAGE
- 384 GILMOUR STREET - FORMER AUTOMOTIVE REPAIR GARAGE
- 487 LEWIS STREET - FORMER TIN-SMELTING AND WOOD WORKSHOP

1. 286 MACLAREN STREET - FORMER PORTRAIT STUDIO
2. 370 BANK STREET - FORMER PRINTING SHOP AND PHOTOGRAPHY STUDIO
3. 374 BANK STREET - FORMER PRINTING SHOP
4. 394 BANK STREET - FORMER RETAIL FUEL OUTLET (2 UNDERGROUND STORAGE TANKS)
5. 402 BANK STREET - FORMER GLASS/MIRROR BEVELLING WORKS
6. 404 BANK STREET - FORMER PAINT SHOP
7. 406 BANK STREET - FORMER PAINTS AND OILS SHOP
8. 7 FLORENCE STREET - FORMER AUTOMOTIVE REPAIR GARAGE
9. 384 GILMOUR STREET - FORMER AUTOMOTIVE REPAIR GARAGE
10. 487 LEWIS STREET - FORMER TIN-SMELTING AND WOOD WORKSHOP

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

NO.	REVISIONS	DATE	INITIAL

O	Scale:	1:3000	Date:	01/2019
	Drawn by:	MPG	Report No.:	PE4530-1
	Checked by:	EJL	PE4530-2	
	Approved by:	MSD		

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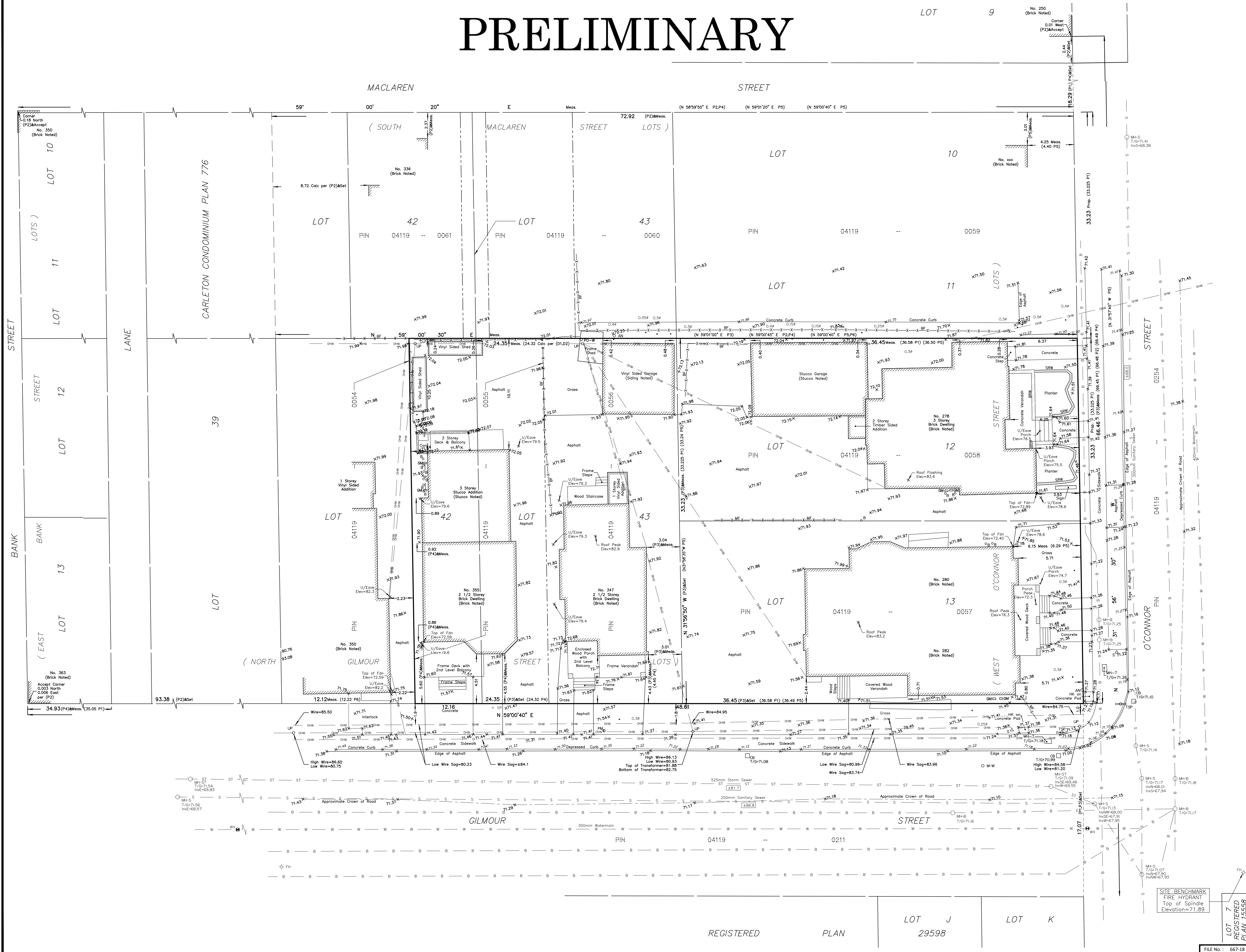
APPENDIX 1

SURVEY PLAN

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

PRELIMINARY

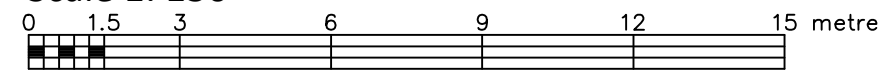


TOPOGRAPHIC PLAN OF SURVEY OF

LOTS 12 AND 13
(WEST O'CONNOR STREET)
AND LOT 43 AND
PART OF LOT 42
(NORTH GILMOUR STREET)
REGISTERED PLAN 15558
CITY OF OTTAWA

FARLEY, SMITH & DENIS SURVEYING LTD. 2018

Scale 1: 150



Metric Note

Distances and coordinates on this plan are in metres and can be converted to feet by dividing by 0.3048.

Distance Note

Distances shown on this plan are ground distances and can be converted to grid distances by multiplying by the combined scale factor of 0.999xx.

Bearing Note

Bearings are MTM grid, derived from the Smart-Net Real Time Network. GPS observations on reference points A and B, shown hereon, having a bearing of N x° x' x" E and are referred to the Central Meridian of MTM Zone 9 (76°30' West Longitude) Nad-83 (Original).

Bearings hereon are grid bearings derived from the Smart-Net Real Time Network and are referred to the Central Meridian of MTM Zone 9 (76°30' West Longitude) Nad-83 (Original).

Bearings hereon are grid bearings derived from Horizontal Control Monuments x (N x.xxx E x.xxx) and x (N x.xxx E x.xxx) and are referred to the Central Meridian of MTM Zone 9 (76°30' West Longitude) Nad-83 (Original)(CSRS)(1997.0).

Bearings are astronomical and are referred to the ?? limit of ?? having a bearing of N ??° ??' ??" E as shown on Plan 4R-xxxxx.

For bearing comparisons, a rotation of 0°00'00" (counter-clockwise) (clockwise) was applied to bearings on Plan

Elevation Notes

- Elevations shown are geodetic and are referred to Geodetic Datum CGVD-1928 :1978.
- Elevations derived from Vertical Benchmark XXXXXXXX having a published elevation of XXX.XXX.
- It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

Utility Notes

- This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
- Only visible surface utilities were located.
- Underground utility data derived from City of Ottawa utility sheet reference : E-12-24.
- Sanitary and storm sewer grades and inverts were derived/compiled from: Field measurement / City of Ottawa
- A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

Surveyor's Certificate

I certify that:

- This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act and the Regulations made under them.
- The survey was completed on the xxx day of xxxx, 2019.

Date

Daniel Robinson

Ontario Land Surveyor

TOPOGRAPHIC DATA WAS COLLECTED UNDER WINTER CONDITIONS. SNOW COVER AND ICE PRECLUDE DETERMINING LOCATION AND ELEVATION OF SOME TOPOGRAPHICAL DATA THAT IS OTHERWISE VISIBLE.

WARNING: NO PERSON MAY COPY, REPRODUCE, DISTRIBUTE OR ALTER THIS PLAN IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF FARLEY, SMITH & DENIS SURVEYING LTD.

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FARLEY, SMITH & DENIS SURVEYING LTD.

ONTARIO LAND SURVEYORS
CANADA LAND SURVEYORS

190 COLONNADE ROAD, OTTAWA, ONTARIO K2E 7J5
TEL: (613) 727-8226 FAX: (613) 727-1826

FILE No.: 667-18

SITE BENCHMARK
FIRE HYDRANT
Top of Spindle
Elevation=71.89

LOT 7
REGISTERED
PLAN 15558

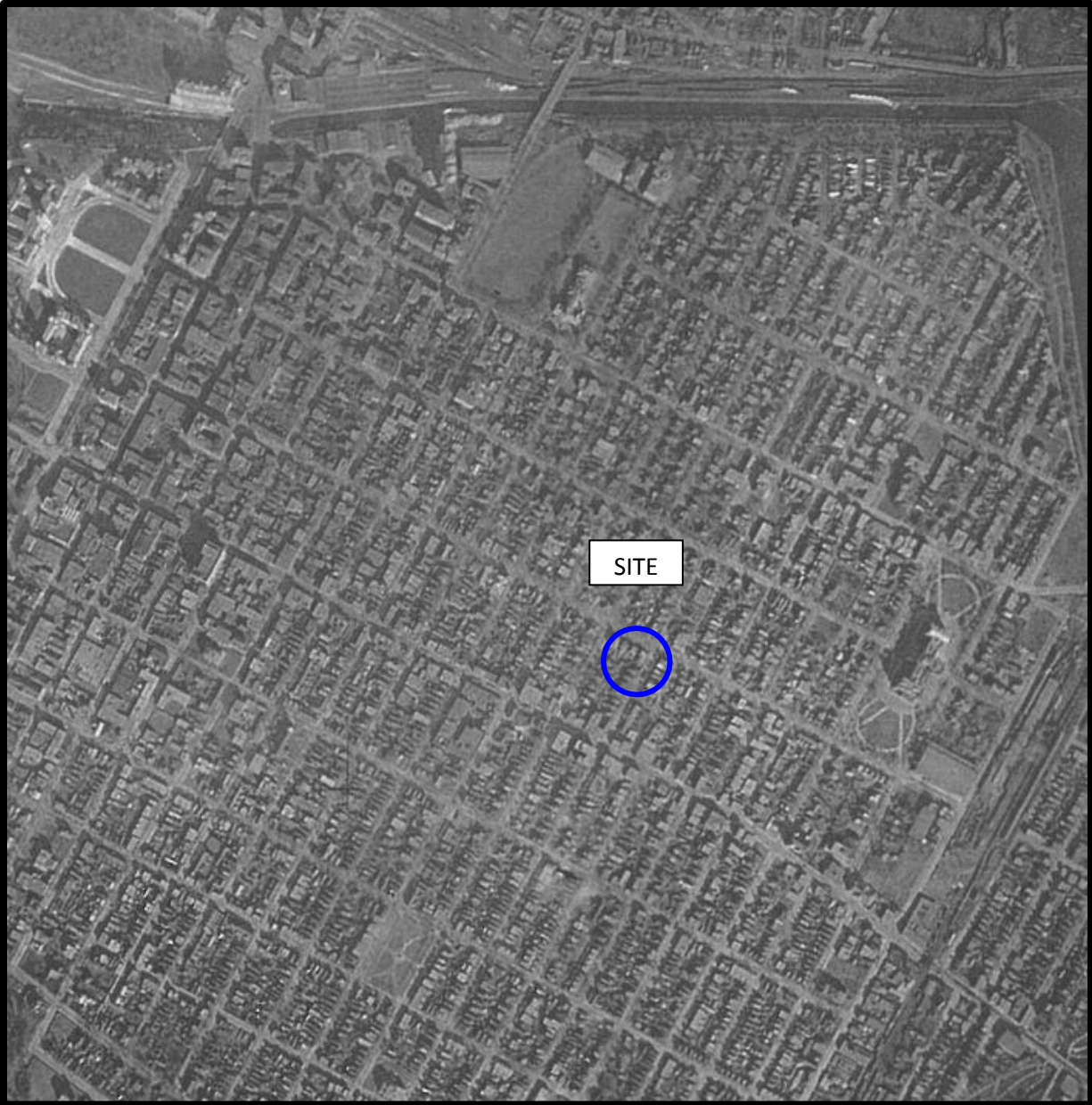
REGISTERED

PLAN

LOT J

29598

LOT K



AERIAL PHOTOGRAPH
1925



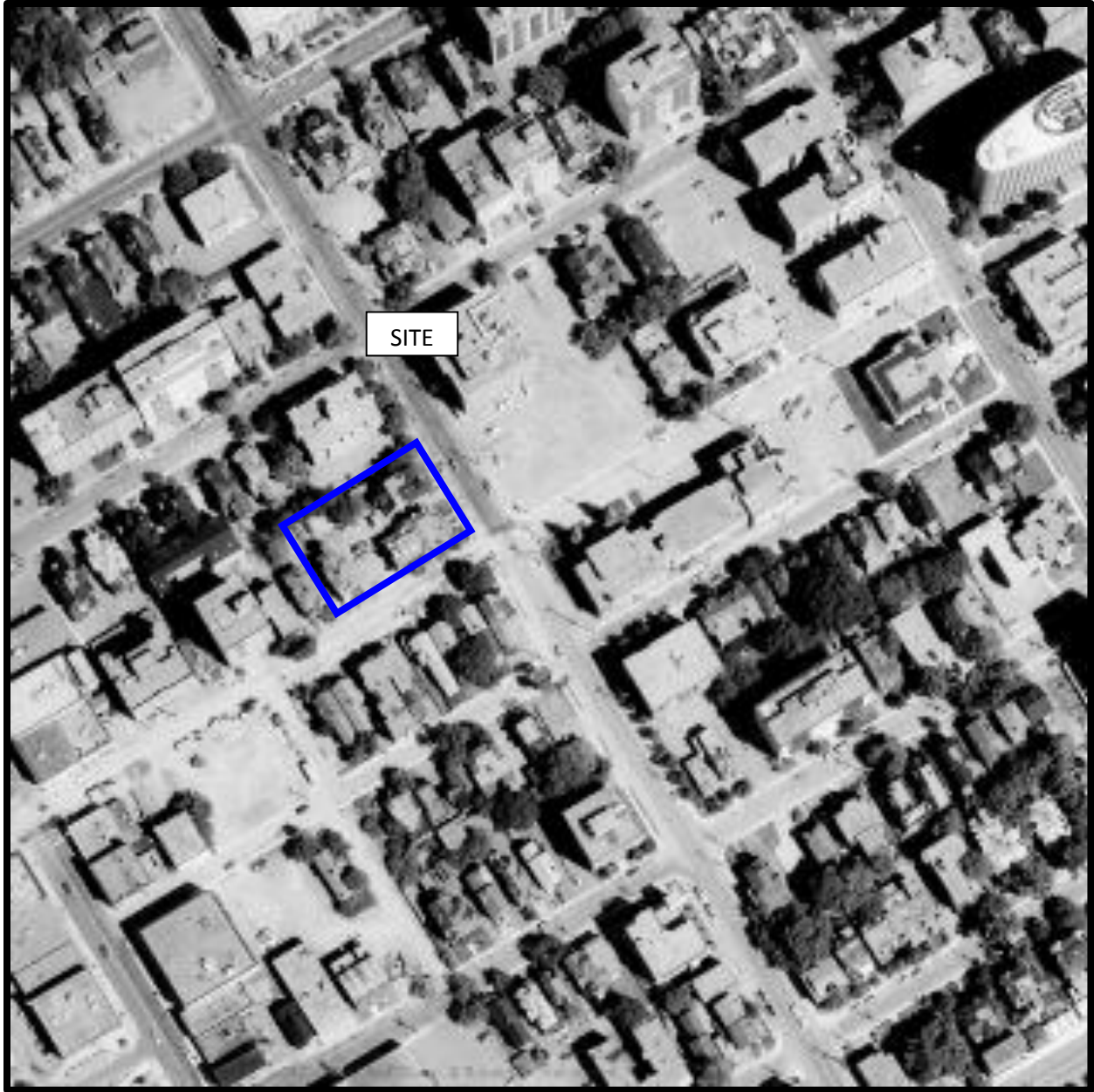
AERIAL PHOTOGRAPH
1958



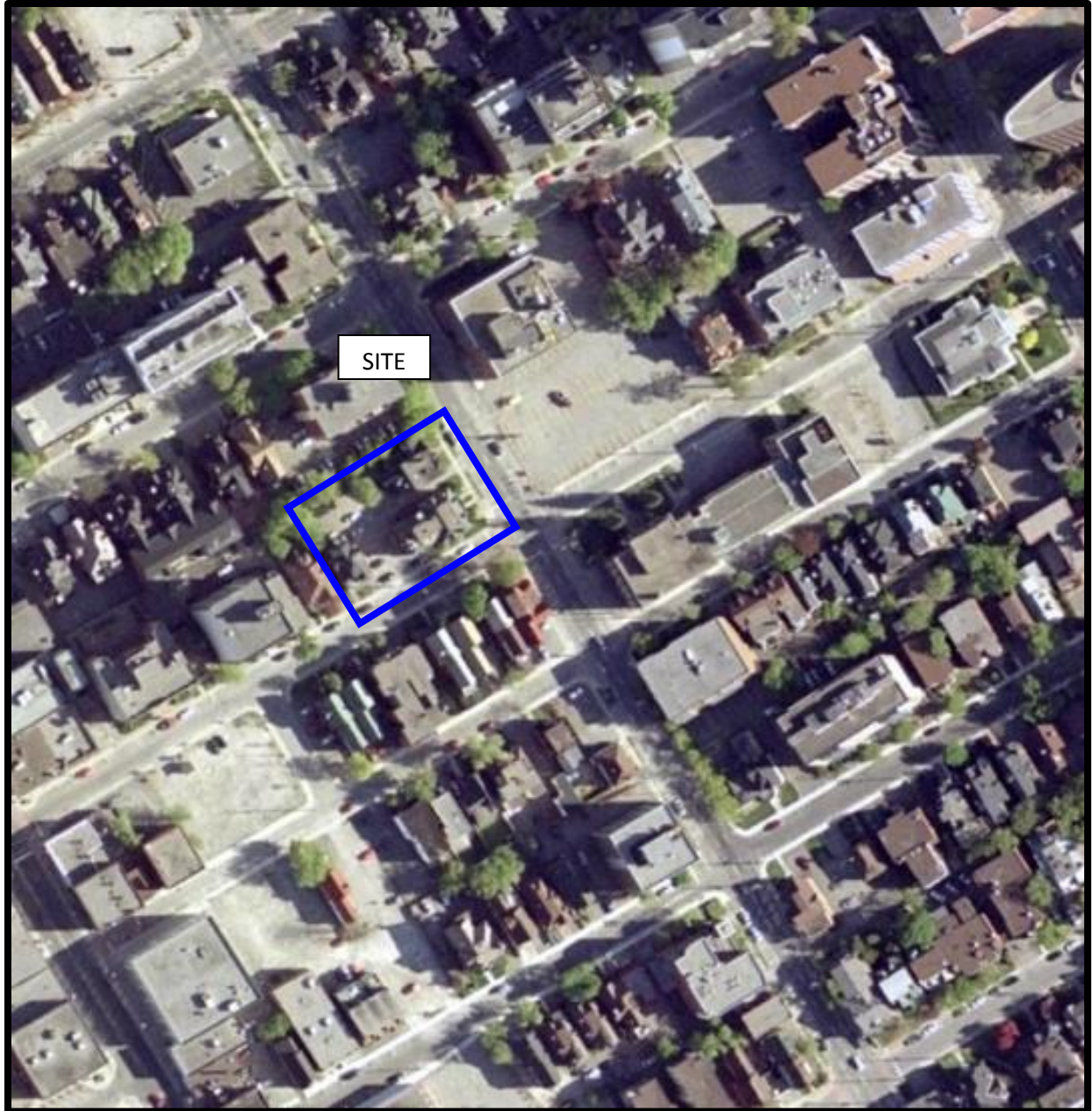
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1965



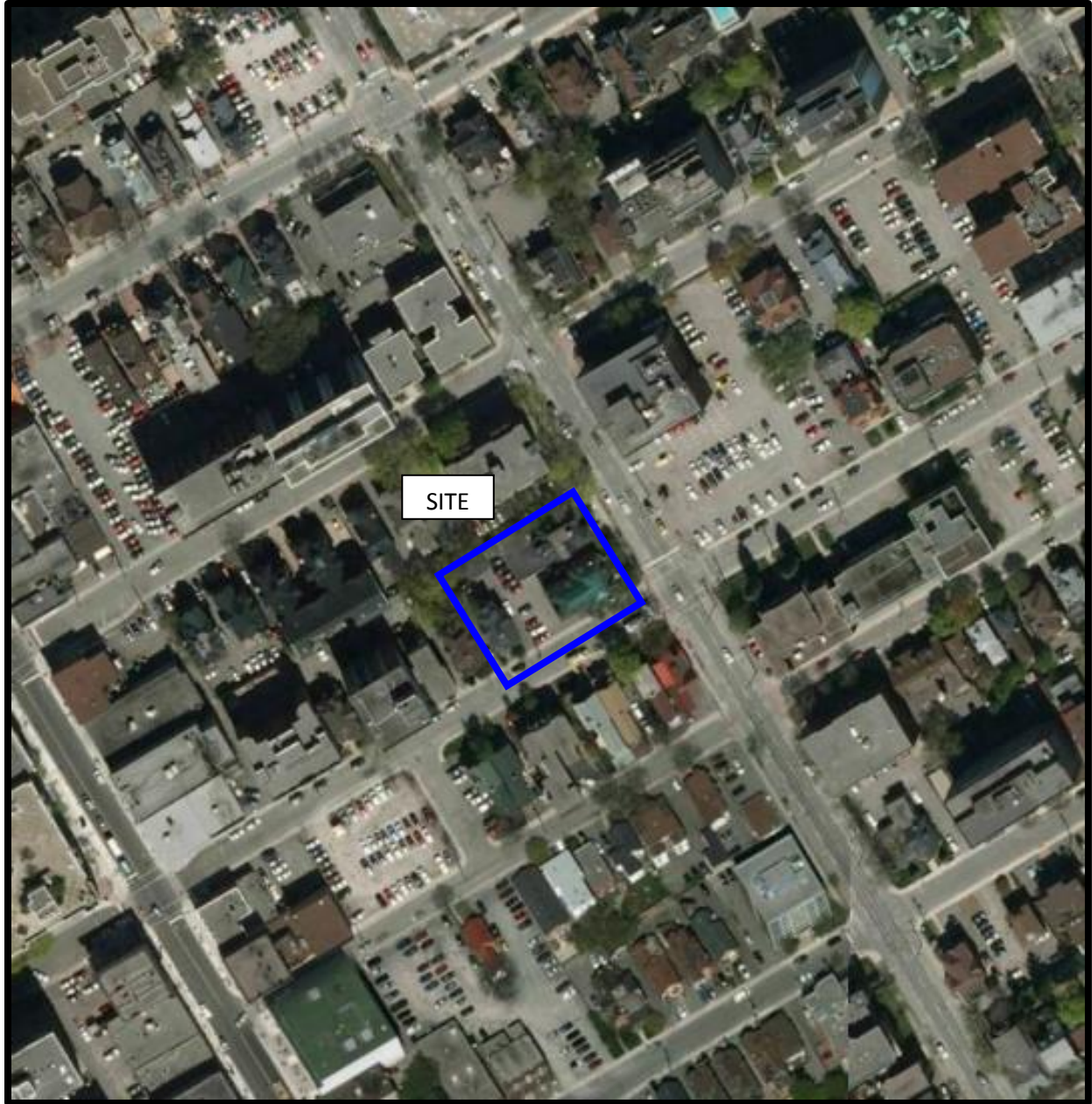
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1976



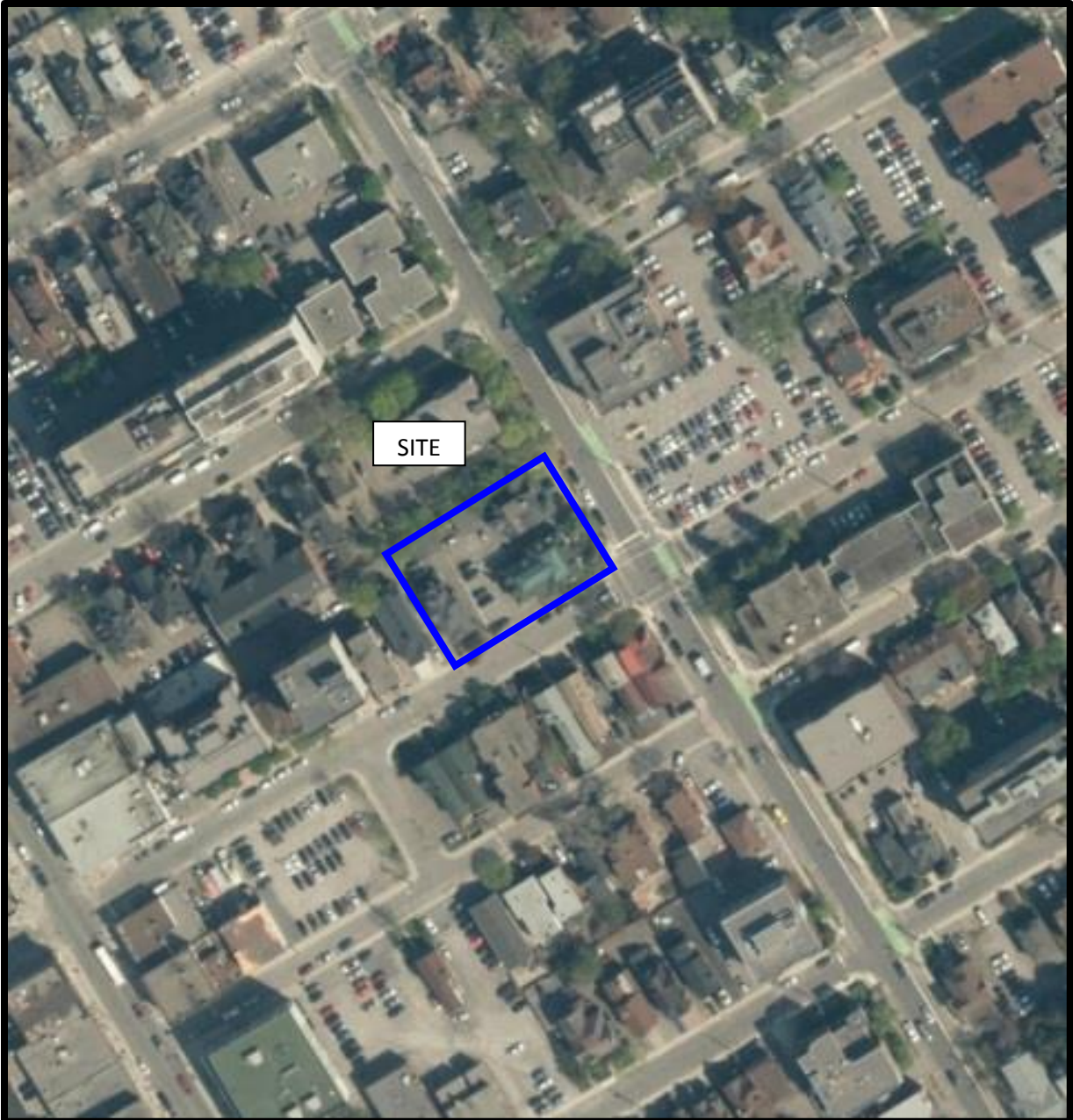
AERIAL PHOTOGRAPH
1991



AERIAL PHOTOGRAPH
2002



AERIAL PHOTOGRAPH
2011



AERIAL PHOTOGRAPH
2017

Site Photographs

PE4530

June 20, 2019

347 Gilmour Street, 278, 280, and 282 O'Connor Street – Ottawa, ON



Photograph 1: Front view of 278 O'Connor, photograph taken from O'Connor Street.



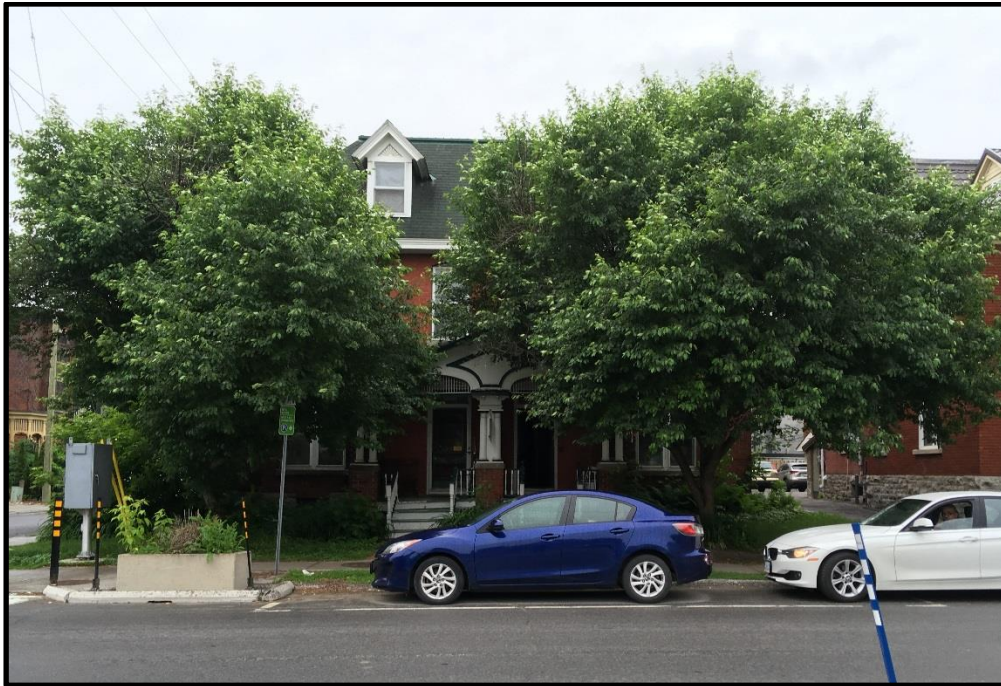
Photograph 2: Rear view of the 278 O'Connor Street, looking east.

Site Photographs

PE4530

June 20, 2019

347 Gilmour Street, 278, 280, and 282 O'Connor Street – Ottawa, ON



Photograph 3: Front view of 280 and 282 O'Connor, taken from O'Connor Street.



Photograph 4: Rear view of 280 and 282 O'Connor Street, looking east.

Site Photographs

PE4530

June 20, 2019

347 Gilmour Street, 278, 280, and 282 O'Connor Street – Ottawa, ON



Photograph 5: View between 278 and 282 O'Connor Street, looking east onto O'Connor Street.



Photograph 6: View of 347 Gilmour Street, looking northwest.

APPENDIX 2

MECP FREEDOM OF INFORMATION

MECP WELL RECORDS

TSSA CORRESPONDENCE

CITY OF OTTAWA HLUI

Ministry of the Environment,
Conservation and Parks

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



Access and Privacy Office

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

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

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

January 28, 2019

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

Dear Mandy Witteman:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2019-00215, Your Reference PE4530

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 347 Gilmore Street and 278 and 282 O'Connor Street, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Assessment and Permissions Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, no records were located responsive to your request. To provide you with this response and in accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, the fee owed is \$30.00 for 1 hour of search time @ \$30.00 per hour. **We have applied the \$30.00 for this request from your initial payment. This file is now closed.**

You may request a review of my decision by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, ON M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a \$25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Junyi Cai at 416-314-4075 or junyi.cai@ontario.ca.

Yours truly,

41 Janet Dadufalza
Manager, Access and Privacy

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.

Well Location

Address of Well Location	
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445732.00 Northing: 5029042.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

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

Annular Space/Abandonment Sealing Record

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

Method of Construction & Well Use

Method of Construction	Well Use
------------------------	----------

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
-----------------	-----------------------	------------	----------

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
------------------	----------	------------	----------

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7328

Results of Well Yield Testing

After test of well yield, water was

If pumping discontinued, give reason

Pump intake set at

Pumping Rate

Duration of Pumping

Final water level

If flowing give rate

Recommended pump depth

Recommended pump rate

Well Production

Disinfected?

Draw Down & Recovery

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

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
------------	----------	----------

Audit Number: C19500

Date Well Completed: March 08, 2012

Date Well Record Received by MOE: April 02, 2015

Updated: June 28, 2018

Rate [Rate](#)

Share [facebook](#) [twitter](#) [Print](#)

Tags

- [Environment and energy.](#)
- [Drinking water.](#)
- [Environment maps.](#)

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

Address of Well Location	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	Depth To	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

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

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

Construction Record - Screen

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

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
0 m	5.79 m	8.25 cm

Audit Number: Z206495

Date Well Completed: August 10, 2017

Date Well Record Received by MOE: September 29, 2017

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
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	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 From	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

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

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

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth 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
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

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

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
0 m	5.49 m	8.25 cm

Audit Number: Z206494

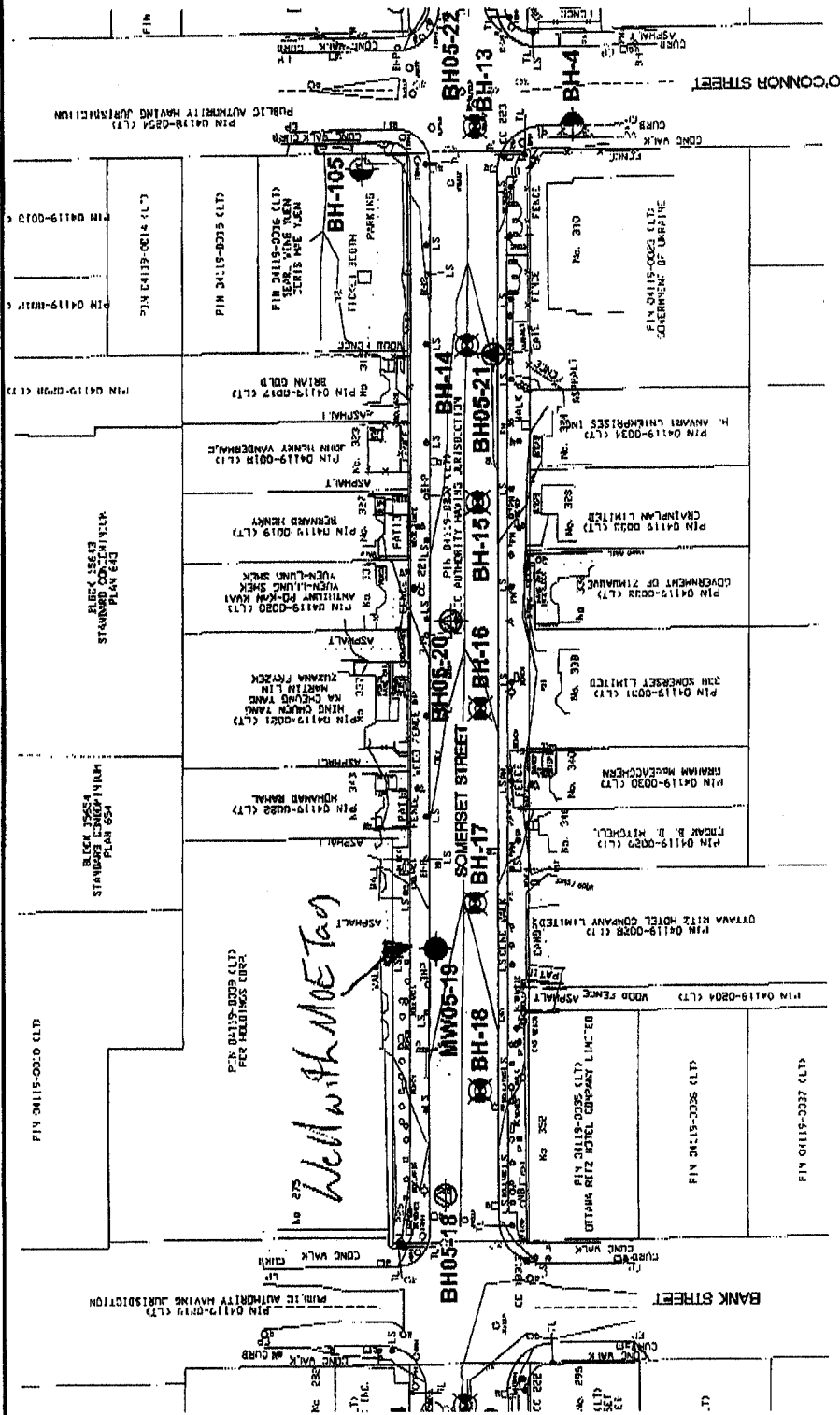
Date Well Completed: August 10, 2017

Date Well Record Received by MOE: September 29, 2017

230507

1844

JUN 24 2005



LEGEND:

BH-106 APPROXIMATE BOREHOLE LOCATION, PREVIOUS INVESTIGATION BY GOLDER (REPORT NO. 991-2211)

BH-25 APPROXIMATE BOREHOLE LOCATION, PREVIOUS INVESTIGATION BY TROW (REPORT NO. TA 12105A)

BH-4

APPROXIMATE BOREHOLE LOCATION, PREVIOUS INVESTIGATION BY OTHERS (PLAN 1526, EXISTING COMBINED SEWER, O'CONNOR STREET)

BH05 APPROXIMATE BOREHOLE LOCATION BY JACQUES WHITFORD, 2005

BH05 APPROXIMATE BOREHOLE LOCATION BY JACQUES WHITFORD, 2005 (ASPHALT OVERLAID CONCRETE PAVEMENT)

MW05 APPROXIMATE MONITORING WELL LOCATION BY JACQUES WHITFORD, 2005

DELCAN CORPORATION
SOMERSET STREET
FROM BANK STREET TO O'CONNOR STREET
BOREHOLE AND MONITORING WELL LOCATION PLAN

OTTAWA,

ONTARIO

Scale:

1:1000

Date:

05/05/12

Proj. No.:

ON063588-1

Dwg. by:

GBB

Dwg. No.:

1

Appd.:

Instructions for Completing Form

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

Well Owner's Information and Location of Well

Address of Well Location (County, District/Municipality)				Township				Lot				Concession			
RR#/Street Number/Name				City/Town/Village				Site/Compartment/Block/Tract etc.							
GPS Reading		NAD	Zone	Easting	Northing	Unit Make/Model		Mode of Operation:		<input type="checkbox"/> Undifferentiated		<input type="checkbox"/> Averaged			
		83	18	445641	5029106	GARMIN GPS		MAP 7G		<input checked="" type="checkbox"/> Differentiated, specify		3D			

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
LT BROWN	SAND		SAND	0	0.2
DK BROWN	SAND	SILT, GRAVEL	SAND, SILTY TRACE GRAVEL	0.2	2.0
GREY	CLAY	SILT	CLAY, SILTY	2.0	5.4

Hole Diameter Depth From To Metres Diameter Centimetres 0 5.4 10			Construction Record <table border="1"> <tr> <th>Inside diam centimetres</th> <th>Material</th> <th>Wall thickness centimetres</th> <th>Depth From To Metres</th> </tr> <tr> <td>5cm</td> <td> <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized </td> <td>0.5</td> <td>0 2.2</td> </tr> <tr> <td colspan="4"> Casing <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized </td> </tr> <tr> <td colspan="4"> Screen <table border="1"> <tr> <th>Outside diam</th> <th>Material</th> <th>Slot No.</th> <th>Depth From To Metres</th> </tr> <tr> <td>6</td> <td> <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized </td> <td>10</td> <td>2.2 5.4</td> </tr> </table> </td> </tr> <tr> <td colspan="4"> No Casing or Screen <input type="checkbox"/> Open hole </td> </tr> </table>				Inside diam centimetres	Material	Wall thickness centimetres	Depth From To Metres	5cm	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	0.5	0 2.2	Casing <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Screen <table border="1"> <tr> <th>Outside diam</th> <th>Material</th> <th>Slot No.</th> <th>Depth From To Metres</th> </tr> <tr> <td>6</td> <td> <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized </td> <td>10</td> <td>2.2 5.4</td> </tr> </table>				Outside diam	Material	Slot No.	Depth From To Metres	6	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	10	2.2 5.4	No Casing or Screen <input type="checkbox"/> Open hole				Test of Well Yield <table border="1"> <tr> <th rowspan="2">Pumping test method</th> <th colspan="2">Draw Down</th> <th colspan="2">Recovery</th> </tr> <tr> <th>Time min</th> <th>Water Level Metres</th> <th>Time min</th> <th>Water Level Metres</th> </tr> <tr> <td>Pump intake set at - (metres)</td> <td>Static Level</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pumping rate - (litres/min)</td> <td>1</td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>Duration of pumping ____ hrs + ____ min</td> <td>2</td> <td></td> <td>2</td> <td></td> </tr> <tr> <td>Final water level end of pumping ____ metres</td> <td>3</td> <td></td> <td>3</td> <td></td> </tr> <tr> <td>Recommended pump type. <input type="checkbox"/> Shallow <input type="checkbox"/> Deep</td> <td>4</td> <td></td> <td>4</td> <td></td> </tr> <tr> <td>Recommended pump depth. ____ metres</td> <td>5</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>Recommended pump rate. (litres/min)</td> <td>10</td> <td></td> <td>10</td> <td></td> </tr> <tr> <td>If flowing give rate - (litres/min)</td> <td>15</td> <td></td> <td>15</td> <td></td> </tr> <tr> <td></td> <td>20</td> <td></td> <td>20</td> <td></td> </tr> <tr> <td></td> <td>25</td> <td></td> <td>25</td> <td></td> </tr> <tr> <td>If pumping discontinued, give reason.</td> <td>30</td> <td></td> <td>30</td> <td></td> </tr> <tr> <td></td> <td>40</td> <td></td> <td>40</td> <td></td> </tr> <tr> <td>TEST HOLE</td> <td>50</td> <td></td> <td>50</td> <td></td> </tr> <tr> <td></td> <td>60</td> <td></td> <td>60</td> <td></td> </tr> </table>				Pumping test method	Draw Down		Recovery		Time min	Water Level Metres	Time min	Water Level Metres	Pump intake set at - (metres)	Static Level				Pumping rate - (litres/min)	1		1		Duration of pumping ____ hrs + ____ min	2		2		Final water level end of pumping ____ metres	3		3		Recommended pump type. <input type="checkbox"/> Shallow <input type="checkbox"/> Deep	4		4		Recommended pump depth. ____ metres	5		5		Recommended pump rate. (litres/min)	10		10		If flowing give rate - (litres/min)	15		15			20		20			25		25		If pumping discontinued, give reason.	30		30			40		40		TEST HOLE	50		50			60		60	
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Plugging and Sealing Record <input type="checkbox"/> Annular space <input type="checkbox"/> Abandonment Depth set at - Metres From To Material and type (bentonite slurry, neat cement slurry) etc. Volume Placed (cubic metres) 0 0.8 BENTONITE 0.01 m ³		
Method of Construction <input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (air) <input type="checkbox"/> Diamond <input type="checkbox"/> Digging <input type="checkbox"/> Rotary (conventional) <input type="checkbox"/> Air percussion <input type="checkbox"/> Jetting <input type="checkbox"/> Other <input type="checkbox"/> Rotary (reverse) <input checked="" type="checkbox"/> Boring <input type="checkbox"/> Driving		
Water Use <input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Public Supply <input type="checkbox"/> Other <input type="checkbox"/> Stock <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Not used <input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input type="checkbox"/> Cooling & air conditioning		
Final Status of Well <input type="checkbox"/> Water Supply <input type="checkbox"/> Recharge well <input type="checkbox"/> Unfinished <input type="checkbox"/> Abandoned, (Other) <input type="checkbox"/> Observation well <input type="checkbox"/> Abandoned, insufficient supply <input type="checkbox"/> Dewatering <input checked="" type="checkbox"/> Test Hole <input type="checkbox"/> Abandoned, poor quality <input type="checkbox"/> Replacement well		
Well Contractor/Technician Information Name of Well Contractor Business Address (street name, number, city etc.) GEORGE DOWNING ESTATE DRILLING 410 RUE PRINCIPAL GRENVILLE SUR LA ROUEE. Name of Well Technician (last name, first name) Signature of Technician/Contractor J L WARNER Well Contractor's Licence No. 1844 Well Technician's Licence No. 3236 Date Submitted YYYY MM DD 2005 12 23		

Location of Well In diagram below show distances of well from road, lot line, and building. Indicate north by arrow. FLORENCE	
Audit No. Z 19282 Was the well owner's information package delivered? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Well Completed YYYY MM DD 2005 12 09 Date Delivered YYYY MM DD 2005 12 23
Ministry Use Only Data Source Contractor Date Received YYYY MM DD JAN 06 2006 Date of Inspection YYYY MM DD Remarks Well Record Number 1844	

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.

Well Location

Address of Well Location	296 BANK ST.
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445519.00 Northing: 5029299.00
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 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 (Material and Type)	Volume Placed
0 ft	1 ft	CONCRETE/FLUSHMOUNT	
1 ft	9 ft	BENSEAL	
9 ft	20 ft	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

Status of Well

Observation Wells

Construction Record - Casing

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

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth 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
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

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

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 ft	20 ft	2.375 inch

Audit Number: Z208884

Date Well Completed: July 17, 2015

Date Well Record Received by MOE: August 24, 2015

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.

Well Location

Address of Well Location	296 BANK ST.
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445519.00 Northing: 5029299.00
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 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 (Material and Type)	Volume Placed
0 ft	1 ft	CONCRETE/FLUSHMOUNT	
1 ft	9 ft	BENSEAL	
9 ft	20 ft	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

Status of Well

Observation Wells

Construction Record - Casing

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

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth 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
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

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

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 ft	20 ft	2.375 inch

Audit Number: Z208884

Date Well Completed: July 17, 2015

Date Well Record Received by MOE: August 24, 2015

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.

Well Location

Address of Well Location	296 BANK ST.
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 445519.00 Northing: 5029299.00
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		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

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

Status of Well

Observation Wells

Construction Record - Casing

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

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth 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 & Recovery

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

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 ft	10 ft	2.375 inch

Audit Number: Z208885

Date Well Completed: July 17, 2015

Date Well Record Received by MOE: August 24, 2015

Updated: June 28, 2018

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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.

Well Location

Address of Well Location	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: 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	Depth To	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

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

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

Construction Record - Screen

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

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 m	5.79 m	8.25 cm

Audit Number: Z206496

Date Well Completed: August 10, 2017

Date Well Record Received by MOE: September 29, 2017

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.

Well Location

Address of Well Location	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: 445582.00 Northing: 5029178.00
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	2.74 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	Depth To	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

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

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

Construction Record - Screen

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

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 m	5.79 m	8.25 cm

Audit Number: Z206497

Date Well Completed: August 10, 2017

Date Well Record Received by MOE: September 29, 2017

Instructions for Completing Form

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Help Desk (Toll Free) at 1-888-396-9355.
- All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information

First Name

Last Name

MUN

CON

LOT

Canadian Federation of Students

170 Metcalfe st

County/District/Municipality

Township/City/Town/Village

Province

Postal Code

Telephone Number (include area code)

CARLETON

Ottawa

Ontario

K2P 1P3

Address of Well Location (County/District/Municipality)

Township

Lot

Concession

338 Somerset st. W., CARLETON

RR#/Street Number/Name

City/Town/Village

Site/Compartment/Block/Tract etc.

Ottawa

GPS Reading

NAD

Zone

Easting

Northing

Unit Make/Model

Mode of Operation:

Undifferentiated

Averaged

Differentiated, specify

8.3

18

045602

50129369

Garmin Etrex

ETREX

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
Brn	Topsoil		Sandy Gravel, soft	0	.91
Brn	silt	Sand / clay	fine Sand, dry, soft	.91	1.5
Brn Grey	silt	clay	Soft, moist	1.5	3.66
Grey	clay	silt	Soft, moist	3.66	6.1
Grey	clay		wet, sticky, soft	6.1	8.23

Hole Diameter

Depth

Metres

Diameter

From

To

Centimetres

0

8.23

8.89

Water Record

Water found at Metres / Kind of Water

Gas

Fresh

Sulphur

Other:

Gas

Fresh

Sulphur

Other:

Gas

Fresh

Sulphur

Other:

After test of well yield, water was

Clear and sediment free

Other, specify

Chlorinated

Yes

No

Construction Record

Inside diam centimetres

Material

Wall thickness centimetres

Depth

Metres

From

To

Casing

Steel

Fibreglass

Plastic

Concrete

Galvanized

3.81

0.25

0

4.88

Screen

Outside diam

Slot No.

Depth

Metres

From

To

Steel

Fibreglass

Plastic

Concrete

Galvanized

10

4.88

8.23

No Casing or Screen

Open hole

Test of Well Yield

Pumping test method

Draw Down

Recovery

Time min

Water Level Metres

Time min

Water Level Metres

Pump intake set at - (metres)

Static Level

1

1

Pumping rate - (litres/min)

2

2

Duration of pumping

hrs + min

2

2

Final water level end of pumping

metres

3

3

Recommended pump type

Shallow

Deep

4

4

Recommended pump depth

metres

5

5

Recommended pump rate

(litres/min)

10

10

If flowing give rate - (litres/min)

15

15

If pumping discontinued, give reason.

20

20

25

25

30

30

40

40

50

50

60

60

Plugging and Sealing Record

Annular space

Abandonment

Depth set at - Metres

From

To

Material and type (bentonite slurry, neat cement slurry) etc.

Volume Placed (cubic metres)

0

.31

Plushmount / concrete

.31

Benseal

Sand

Method of Construction

Cable Tool

Rotary (air)

Diamond

Digging

Rotary (conventional)

Air percussion

Jetting

Other

Rotary (reverse)

Boring

Driving

Geoprobe

Water Use

Domestic

Industrial

Public Supply

Other

Stock

Commercial

Not used

Monitoring well

Irrigation

Municipal

Cooling & air conditioning

Final Status of Well

Water Supply

Recharge well

Unfinished

Abandoned, (Other)

Observation well

Abandoned, insufficient supply

Dewatering

Test Hole

Abandoned, poor quality

Replacement well

Well Contractor/Technician Information

Name of Well Contractor

Well Contractor's Licence No.

Business Address (street name, number, city etc.)

Name of Well Technician (last name, first name)

Well Technician's Licence No.

Signature of Technician/Contractor

Date Submitted

STRATA SOIL SAMPLING

7241

147 WEST BEAVER CREEK, RICHMOND HILL

PENGILUS JOIA T-3069

T-3069

X

2007 06 22

Location of Well

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

Somerset st. W

15m

80m

80

Bank st.

MacLaren

Audit No.

Date Well Completed

Was the well owner's information package delivered?

Yes

No

Z 74024

2017

06

22

Ministry Use Only

Data Source

Contractor

Date Received

Date of Inspection

Remarks

Well Record Number

JUL 17 2007

0506E (08/2006)

Brenton Brian, 1796

Ministry's Copy

Cette formule est disponible en français



Ministry of
the Environment

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

A115780

Well Record

Regulation 903 Ontario Water Resources Act

512067

Well Location

Address of Well Location (Street Number/Name) 320 Gilmour St.		Township	Lot	Concession	
County/District/Municipality		City/Town/Village Ottawa		Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	Northing		Municipal Plan and Sublot Number
NAD 83	18	445564	5029134		Other

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Bm	Gravel	Sand	soft, dry	0 to .91
Gry	Clay	Silt	soft, wet	.91 to 3.96

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 to .31	Concrete / Flushmount	
.31 to .91	Benseal	
.91 to 3.96	Sand	

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

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
3.45	PVC	.356	0 to .91	<input type="checkbox"/> Water Supply
				<input type="checkbox"/> Replacement Well
				<input checked="" type="checkbox"/> Test Hole
				<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well
				<input checked="" type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)
				<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
4.21	PVC	10	.91 to 3.96

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	Depth (m/ft)	Diameter (cm/in)
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	From To	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	0 3.96	5.71
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Business Name of Well Contractor strata Soil Sampling		Well Contractor's Licence No. 7 2 4 1	
Business Address (Street Number/Name) 147-2 W. Beaver creek		Municipality Richmond Hill	
Province ON	Postal Code L4B1C6	Business E-mail Address wrecords@stratasoil.com	
Bus. Telephone No. (inc. area code) 905 764 9304		Name of Well Technician (Last Name, First Name) Beatty Brian	
Well Technician's Licence No. 36 1 6		Signature of Technician and/or Contractor [Signature]	
		Date Submitted 20120124	

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

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	
Well owner's information package delivered <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered Y Y Y Y M M D D 20120124
Date Work Completed 20120124	
Ministry Use Only Audit No. Z145266	
Received: 20120124	



Ministry of
the Environment

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

A106638

A106638

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Measurements recorded in: ☒ Metric ☐ Imp

Well Owner's Information

First Name Minto Apartments	Last Name / Organization [Redacted]	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) 1051 Baxter Rd Suite 22B		Municipality Ottawa	Province ON
		Postal Code K2K 3A2	Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) 320 Gilmour St.		Township	Lot	Concession
County/District/Municipality		City/Town/Village Ottawa	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 18	Easting 445578	Northings 5029119	Municipal Plan and Sublot Number
				Other

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brn	Gravel	Sand	Soft, dry	0	.91
Gr	clay	silt	Soft, wet	.91	3.66

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)
0	.31	Concrete / Flushmount
.31	.61	Benseal
.61	3.66	Sand

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

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
3.45	Pvc	.356	0	3.66
				1.61

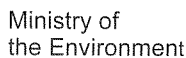
Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
4.21	Pvc	1D	3.66	
			.61	3.66

Water Details		Hole Diameter	
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	Depth (m/ft) From	To
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	0	3.66
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		5.71

Well Contractor and Well Technician Information			
Business Name of Well Contractor Strata Soil Sampling	Well Contractor's Licence No. 7241		
Business Address (Street Number/Name) 147-2 W. Beaver Creek	Municipality Richmond Hill		
Province ON	Postal Code L4B 1C6	Business E-mail Address wrecords@stratasoil.com	
Bus. Telephone No. (inc. area code) 9057649304	Name of Well Technician (Last Name, First Name) Beath Brian		
Well Technician's Licence No. 3616	Signature of Technician and/or Contractor	Date Submitted 20120124	

Results of Well Yield Testing			
After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify		Draw Down	Recovery
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		Time (min)	Water Level (m/ft)
Pumping rate (l/min / GPM)		Time (min)	Water Level (m/ft)
Duration of pumping hrs + min		Time (min)	Water Level (m/ft)
Final water level end of pumping (m/ft)		Time (min)	Water Level (m/ft)
If flowing give rate (l/min / GPM)		Time (min)	Water Level (m/ft)
Recommended pump depth (m/ft)		Time (min)	Water Level (m/ft)
Recommended pump rate (l/min / GPM)		Time (min)	Water Level (m/ft)
Well production (l/min / GPM)		Time (min)	Water Level (m/ft)
Disinfected? <input type="checkbox"/> Yes <input type="checkbox"/> No		Time (min)	Water Level (m/ft)

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	
Well owner's information package delivered <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered 20120124
Date Work Completed 20120124	Ministry Use Only Audit No. 2145264 Received APR 24 2012



Measurements recorded in: ☐ Metric ☐ Imperial

A152341

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Well Owner's Information

First Name	Last Name / Organization		E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner
	City of Ottawa				
Mailing Address (Street Number/Name)		Municipality	Province	Postal Code	Telephone No. (inc. area code)
110 Laurier Ave. West		Ottawa	ON.	K1P1J5	613 580 2424

Well Location

Address of Well Location (Street Number/Name)			Township	Lot	Concession
County/District/Municipality			City/Town/Village	Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD	8	3	184456505029430		

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

[illegible]

Annular Space

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

Results of Well Yield Testing

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

Method of Construction

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

Well Use

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

Construction Record - Casing

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

Status of Well

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

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		<input type="checkbox"/> Abandoned, Poor Water Quality <input checked="" type="checkbox"/> Abandoned, other, specify <u>Removal</u> <input type="checkbox"/> Other, specify
			From	To	


Water Details

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

Hole Diameter

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

Well Contractor and Well Technician Information

Business Name of Well Contractor Marathon Drilling CO. Ltd		Well Contractor's Licence No. 6894	
Business Address (Street Number/Name) 6847 Hiram Dr		Municipality OTT	
Province ON	Postal Code K4P1A2	Business E-mail Address	
Bus. Telephone No. (inc. area code) 6138220571		Name of Well Technician (Last Name, First Name) Wright Terry	
Well Technician's Licence No. 0715	Signature of Technician and/or Contractor 	Date Submitted 20130913	

Map of Well Location

Please provide a map below following instructions on the back.

309/311

Empty Lot

22' 17" 0' corner

Somersetst

Comments:

Well owner's information package delivered

☐ Yes

☐ No

Date Package Delivered

Date Work Completed

[illegible]

Ministry Use Only

Audit No. Z 096856
NOV 14 2013
Printed



A152336

Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization City of Ottawa	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) 110 Lawrence Ave West	Municipality Ottawa	Province ON	Postal Code K1P 1S1
		Telephone No. (inc. area code) 613 580 2474	

Well Location

Address of Well Location (Street Number/Name)		Township	Lot	Concession
County/District/Municipality		City/Town/Village	Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	North	Municipal Plan and Sublot Number
NAD 83	48	445795	5029519	
				Other

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
BH 103	Quick Grout + Cement			57m	0

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)

Results of Well Yield Testing

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

Method of Construction

Well Use

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

Construction Record - Casing

Status of Well

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					<input type="checkbox"/> Water Supply
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Insufficient Supply
					<input type="checkbox"/> Abandoned, Poor Water Quality
					<input checked="" type="checkbox"/> Abandoned, other, specify Removed
					<input type="checkbox"/> Other, specify

Construction Record - Screen

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

Water Details

Hole Diameter

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

Well Contractor and Well Technician Information

Business Name of Well Contractor Marathon Drilling Co Ltd	Well Contractor's Licence No. 6894
Business Address (Street Number/Name) 6847 Hiram Dr	Municipality OTT
Province ON	Postal Code K4P 1A2
Business E-mail Address	
Bus. Telephone No. (inc. area code) 613 822 0571	Name of Well Technician (Last Name, First Name) Wright Terry
Well Technician's Licence No. 0715	Signature of Technician and/or Contractor Terry Wright
	Date Submitted 26130913

Comments:

Well owner's information package delivered <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered Y Y Y Y M M D D Date Work Completed Y Y Y Y M M D D
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Ministry Use Only	
Audit No. 2096855	Received NOV 14 2013

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner	
	District Realty Corporation				
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)	
50 Bauswater Avenue	Ottawa	ON	K1H 2E9		

Well Location

Address of Well Location (Street Number/Name) 384 McLaurin Rd.			Township			Lot		Concession		
County/District/Municipality			City/Town/Village Oxton				Province Ontario		Postal Code 	
UTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number			Other	
NAD 8 3		18	445546	5029231						

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
GRY	concrete	gravel	hard	0	.31
BRN	sand	gravel	loose	.31	2.13
GRY	clay	silt	soft	2.13	6.1

Annular Space

Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
From	To		
0	31	concrete / Plushmount	
31	274	benfonite	
274	61	litter sand	

Method of Construction

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

Well Use

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

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input checked="" type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input checked="" type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned,
			From	To	
3.45	PVC	.356	0	3.1	

Status of Well

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input checked="" type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input checked="" type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned,
			From	To	
3.45	PVC	.356	0	3.1	

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		<input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify
			From	To	
4.21	PVC	10	3.1	6.1	

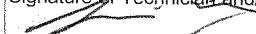
Water Details

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

Hole Diameter

Water found at Depth		Depth (m/ft)		Diameter (cm/in)
(m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	From	To	
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	0	6.1	5.71
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested			
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested			

Well Contractor and Well Technician Information

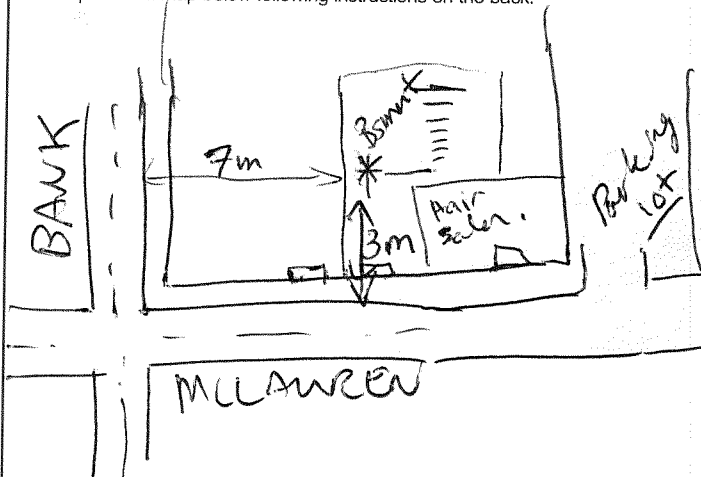
Business Name of Well Contractor Strata Drilling Group		Well Contractor's Licence No. 7247
Business Address (Street Number/Name) 147 West Beaver Creek		Municipality Richmond Hill
Province ON	Postal Code L4B1C6	Business E-mail Address 6wrecords@strataoil.com
Bus. Telephone No. (inc. area code) 905-764-9304	Name of Well Technician (Last Name, First Name) M. Cuy, James	
Well Technician's Licence No. 3656	Signature of Technician and/or Contractor 	Date Submitted 2013/01/25

Results of Well Yield Testing

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

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's
information
package
delivered

☐ Yes

☐ No

Date Package Delivered
Y Y Y Y M M D
Date Work Completed
201310

Ministry Use Only
Audit No. **Z 177968**
NOV 28 2013



Ministry of
the Environment

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

Tag#: A150791 A150791

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization District Realty Corporation	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) 50 Baywater Avenue	Municipality Ottawa	Province ON	Postal Code K1H4E9
Telephone No. (inc. area code)			

Well Location

Address of Well Location (Street Number/Name) 384 McLaren Rd.	Township	Lot	Concession
County/District/Municipality	City/Town/Village Ottawa	Province Ontario	Postal Code
UTM Coordinates NAD 83 184455615029227	Municipal Plan and Sublot Number		Other

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
GRY	concrete	gravel	hard	0	3.1
BRN	sand	gravel	soft, loose	3.1	1.82
GRY	clay	silt	soft	1.82	4.57

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	3.1	concrete/grout	
3.1	2.77	bentonite	
2.77	4.57	filter sand	

Method of Construction

<input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (Conventional) <input type="checkbox"/> Rotary (Reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Air percussion <input checked="" type="checkbox"/> Other, specify Direct Push	<input type="checkbox"/> Diamond <input type="checkbox"/> Jetting <input type="checkbox"/> Driving <input type="checkbox"/> Digging	<input type="checkbox"/> Public <input type="checkbox"/> Domestic <input type="checkbox"/> Livestock <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Other, specify	<input type="checkbox"/> Commercial <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> Test Hole <input type="checkbox"/> Cooling & Air Conditioning <input type="checkbox"/> Dewatering <input checked="" type="checkbox"/> Monitoring
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Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
3.45	PVC	.356	0	3.1

Status of Well

<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input checked="" type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify
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Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
4.24	PVC	10	3.1	4.57

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Hole Diameter Depth (m/ft) From	To	Diameter (cm/in)
		0	5.71	4.57

Well Contractor and Well Technician Information

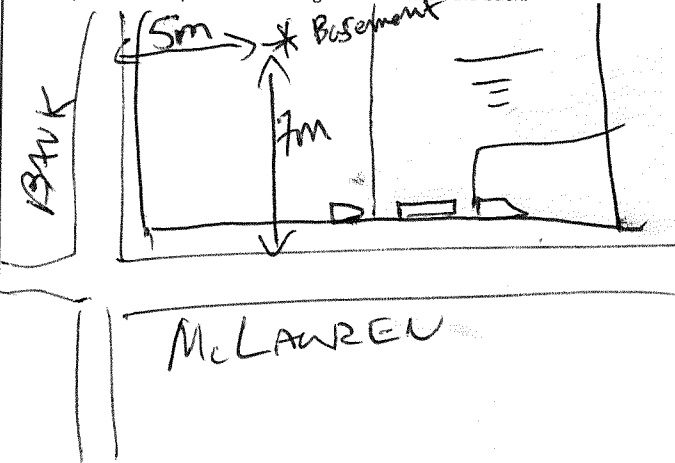
Business Name of Well Contractor Strata Drilling Group	Well Contractor's Licence No. 7241
Business Address (Street Number/Name) 147 West Beaver Creek	Municipality Richmond Hill
Province ON	Postal Code L4B1G6
Business E-mail Address wrecords@stratasol.com	
Bus. Telephone No. (inc. area code) 905-764-4304	Name of Well Technician (Last Name, First Name) McLay, James
Well Technician's Licence No. 3658	Signature of Technician and/or Contractor [Signature]
Date Submitted 20131015	

Results of Well Yield Testing

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

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered YYYYMMDD 20131015	Date Work Completed 20131015	Ministry Use Only Audit No. Z177967 NOV 28 2013
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Ministry of
the Environment

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

Tag#: A152703

A152703

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
University of Ottawa	Code 11 House		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
180 Walker St	Ottawa	ON	K1N9B9
Telephone No. (inc. area code)			

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
180 Walker St.			
County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	18	445563	5029224
Municipal Plan and Sublot Number			
Other			

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brn	Dirt top soil		soft	0.31
brn	sand		silt	1.83
gray	clay	silt	silt	6.1

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0.31	Concrete Flush mount	
0.31	benfointe	
2.79	filter sand	

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

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
3.45	PVC	.356	0	3.1

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
4.21	PVC	10	3.1	6.1

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	Depth (m/ft)	Diameter (cm/in)
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	From To	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	0	6.1
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		8.25
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Business Name of Well Contractor		Well Contractor's Licence No.	
Strata Drilling Group		7241	
Business Address (Street Number/Name)		Municipality	
177 W. Beaver Creek		Richmond Hill	
Province	Postal Code	Business E-mail Address	
ON	L4B1C6	w. record@strata-sil.com	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
905 764 9304		McCoy James	
Well Technician's Licence No.		Signature of Technician and/or Contractor	
3656		2013/10/15	

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

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

Well owner's information package delivered <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered	Ministry Use Only
	Y Y Y Y M M D D	
Date Work Completed	2013/10/15	Audit No. Z 177969 NOV 28 2013

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.

Well Location

Address of Well Location	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: 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	Depth To	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

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

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

Construction Record - Screen

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

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 m	5.79 m	8.25 cm

Audit Number: Z206498

Date Well Completed: August 10, 2017

Date Well Record Received by MOE: September 29, 2017

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
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	2.13 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	Depth To	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

Method of Construction	Well Use
Direct Push	Monitoring Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

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

Construction Record - Screen

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

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
0 m	5.79 m	8.25 cm

Audit Number: Z206499

Date Well Completed: September 10, 2017

Date Well Record Received by MOE: September 29, 2017

Mandy Witteman

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: January-09-19 5:14 PM
To: Mandy Witteman
Subject: RE: Search Records Request (PE4530)

Hello Mandy,

Thank you for your request for confirmation of public information.

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

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

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

Kind regards,

Yalini



Yalini Kanagendran | Public Information Agent

Facilities

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-3449 | Fax: +1-416-231-6183 | E-Mail: publicinformationsservices@tssa.org

www.tssa.org



From: Mandy Witteman <MWitteman@Patersongroup.ca>
Sent: January 9, 2019 11:19 AM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: Search Records Request (PE4530)

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:

O'Connor St: 320, 2778, 280, 267

Gilmour Street: 347, 255, 359, 350, 344, 340,

Thank you.

Best Regards,

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

January 9, 2019
File: PE4530-HLUI

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

Subject: **Authorization Letter, HLUI Search
Phase I-Environmental Site Assessment
347 Gilmour Street, 278&282 O'Connor Street
Ottawa, Ontario**

Dear Sir or Madame,

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:

POLO IV PROPERTIES INC.

Name of Representative

TONY KAZARIAN

Authorization of Representative

VICE PRESIDENT.

Date

JUNE 14, 2019

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Services

POSITION

Environmental Engineer

EDUCATION

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

MEMBERSHIPS & AWARDS

Alberta Professional Engineers and Geoscience Association
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

2014 – 2013

Carleton University

Department of Civil & Environmental Engineering
Research Engineer

2013 - 2009

Carleton University

Department of Civil & Environmental Engineering
Research Assistant and Teachers Assistant

2008 – 2009

SLR Consulting Limited

Contaminated Sites
Junior Environmental Engineer

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