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**Phase I - Environmental Site Assessment**

144 Renfrew Avenue  
Ottawa, Ontario

Prepared For

TC United Group

March 29, 2017

Report: PE4003-1

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## **EXECUTIVE SUMMARY**

### **Assessment**

A Phase I – Environmental Site Assessment was carried out for the residential property addressed 144 Renfrew Avenue, in the City of Ottawa, Ontario. The purpose of this environmental assessment was to research the past and current use of the subject site and neighbouring properties and identify any environmental concerns with the potential to have impacted the subject property.

Based on a review of historical sources, the subject property has always been utilized as a residential property since its development circa 1946. No sources of potentially contaminating activities were identified with respect to the historical land use of the subject site.

The historical review identified various potentially contaminating activities within the Phase I study area. These included former rail way lines and lumber/rail yard to the north; former and current retail fuel outlets along Bronson Avenue to the north and south; former autobody shops and automotive service garages, on Bell Street South and Bronson Avenue, located to the west, south and north; a minor PCB storage site and bottling plant on Bronson Avenue, located to the north; a hydro electric sub station on Glebe Avenue, to the south; and the former road maintenance depot properties located on Carling Avenue, located to the south of the subject site. None of the PCAs were identified within 50 m of the subject property. Based on the separation distance, and information contained in our files, none of these potentially contaminating activities identified on these properties are considered to have the potential to generate areas of potential environmental concern on the subject property.

Following the historical review a site visit was conducted. The site is occupied by a two and a half storey residential dwelling with a single basement level. An asphalt driveway is present on the southern portion of the property and the remainder of the subject property is grassed with trees. At the time of the site visit, no environmental concerns were observed. The current use of the subject property is not considered to have the potential to have impacted the subsurface soil or groundwater and therefore does not represent an area of potential environmental concern.

Surrounding land use consists of residential and commercial properties. The potentially contaminating activities that were identified within the Phase I study area were not considered to represent areas of potential environmental concern for the subject site based on their locations with respect to the subject site.

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

## **Recommendations**

It is our understanding that the existing building is being considered for demolition. Based on the age of the building, asbestos-containing materials and other designated substance are potentially present. A designated substances survey (DSS) must be completed on the subject building prior to commencing the demolition activities.

## **1.0 INTRODUCTION**

At the request of TC United Group, Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of 144 Renfrew Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Ryan Rutherford of TC United Group. The offices of TC United Group are located at 800 Industrial Avenue, Ottawa, Ontario. Mr. Rutherford can be reached by telephone at (613) 680-5582.

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

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

## **2.0 PHASE I PROPERTY INFORMATION**

Address:	144 Renfrew Avenue, Ottawa, Ontario.
Legal Description:	Part of Lot 37, Registered Plan 189959, City of Ottawa.
Property Identification Number:	04135-0056.
Location:	The subject site is located at the southeast corner of Renfrew Avenue and Bronson Avenue, in the City of Ottawa, Ontario. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	45° 24' 11" N, 75° 42' 02" W.
<b>Site Description:</b>	
Configuration:	Irregular.
Site Area:	403.5 square meters.
Zoning:	TM[2224] – Traditional Mainstreet Zone.
Current Use:	The subject site is currently utilized as four unit residential apartment.
Services:	The subject site is located 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 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

## **4.0 RECORDS REVIEW**

### **4.1 General**

#### **Phase I-ESA Study Area Determination**

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

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

The subject property was observed to be first listed in the city directories in 1946, addressed 142 and 144 Renfrew Avenue at that time. The subject property was listed with two family names, indicating the property was utilized as a residential dwelling. The residential use of the subject property is considered to be the first use of the subject property.

#### **Fire Insurance Plans**

Fire insurance plans (FIPs) from 1902 and 1956 were reviewed as part of this assessment. Sheet 72 of Volume I and Sheets 127, 128 and 129 of Volume II from the 1902 (revised to 1912) City of Ottawa FIPs were reviewed. The subject property is not covered by the 1902 FIPs. The subject property was identified in the 1956 FIPs as a two and a half storey residential dwelling addressed 142 and 144 Renfrew Avenue. The 1956 FIPs also indicate a private garage was located on the south end of the property, next to the hydro-easement.

The review of the 1902 FIPs identified the former railway line present further to the north of the subject site, in the area currently occupied by Highway 417. The review also identified a Lumber Yard (Concession Street Yard; J.R. Booth) approximately 125 m north, on the east side of Bronson Avenue.

Sheets 119-2, 119-4, 134-1, 134-2, 134-3 and 134-4 of Volume I from the 1956 City of Ottawa FIPs were reviewed. The immediate vicinity of the subject site appears generally residential. The review of the 1956 FIPs identified the following properties associated with potentially contaminating activities: the rail line to the north at Highway 417 (as identified in the 1902 FIPs); two (2) automotive service garages, located at 316 Bell Street and 360 Bell Street; the Ottawa Suburban Roads Commission property (considered to store, maintain and fuel road maintenance vehicles/equipment) was identified at 279 Carling Avenue; an automotive service garage and retail fuel outlet with four (4)



underground storage tanks (USTs), was identified at 609 Bronson Avenue; a retail fuel outlet with three USTs, was identified at 770 Bronson Avenue; a hydro-electric sub station, was identified at 247 Carling Avenue; and the Coca-Cola Ltd. bottling facility with a rail spur line and an UST located at 601 Bronson Avenue.

These listings are all considered to represent potentially contaminating activities (PCAs), however, based on their distance from the subject site (greater than 100 m) these properties are not considered to represent areas of potential environmental concern (APECs) for the subject site.

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

City directories at the National Archives were reviewed in approximate 10 year intervals from 1936 to 2011 as part of the Phase I ESA. The subject property (142 and 144 Renfrew Avenue) was first listed in the 1946 directories, with two family name listings. Since 1946 the property has always been listed as residential. In 2001, the property began being listed as a multi-unit dwelling with multiple listings.

Neighbouring properties in the area of the subject site were first listed in the 1905 directories. Neighbouring properties were predominantly listed as residential, with schools and various commercial and storage yard properties. The following properties associated with potentially contaminating activities were identified within the Phase I study area:

- ☐ An autobody shop and retail fuel outlet was identified at 117 Carling Avenue and 748 Bronson Avenue, located 160 m to the south of the subject site, in the 1950 to 1970 directories.
- ☐ An automotive service garage, auto body shop and retail fuel outlet were identified between 1941 and 2010, at 609 Bronson Avenue, located approximately 120 m north of the subject site.
- ☐ A retail fuel outlet at 644 Bronson Avenue, located approximately 40 m northwest of the subject site (with the tanks and pump islands being located further than 60 m to the northwest of the subject site), was identified in the 1970 to 2002 in the city directories.
- ☐ A retail fuel outlet at 635 Bronson Avenue, located approximately 50 m northeast of the subject site, was identified in the 1970 to 2002 in the city directories.

- ❑ A Coca-Cola Ltd. bottling plant (as identified in the FIPs) was identified in the 1950 and 1960 city directories, at 605 Bronson Avenue, located approximately 150 m north of the subject site.
- ❑ An automotive service garage was identified at 316 Bell Street South, located approximately 230 m west of the subject site, in the directories from 1930, 1941, 1970 and 1980.
- ❑ A hydro electric sub station was identified in the city directories from 1930 to 2010, at 247 Glebe Avenue (previously 247 Carling Avenue), located approximately 175 m south of the subject site.

### **Environmental Reports**

Paterson has conducted various ESA reports in the vicinity of the subject site. These reports include a subsurface investigation between the subject site and the retail fuel outlet located at 635 Bronson Avenue, located approximately 50 m to the north of the subject site. This investigation included the installation of a groundwater monitoring well and analytical testing of soil and groundwater samples for petroleum parameters – benzene, toluene, ethylbenzene, xylenes (BTEX) and petroleum hydrocarbons fractions 1 through 4 (PHCs F1-F4). None of the parameters were detected above the laboratory method detection limits, in either the soil or groundwater sample. As a result, the retail fuel outlet at 635 is not considered to represent an area of potential environmental concern for the subject site.

Paterson conducted a geotechnical investigation of the subject property in October, 2016. The investigation consisted of digging two test pits to the northwest and southwest of the subject building to a maximum depth of 2.25 m. No visual or olfactory evidence of contamination was identified in either of the test pits.

### **Plan of Survey**

Paterson was provided with a copy of the Surveyor's Real Property Report Plan (Part 1), dated February 2016, prepared by Annis, O'Sullivan, Vollebekk Ltd. The plan depicts the subject site in its present day configuration. The plan describes the building as a two and a half storey brick multi unit building. The building is situated on the eastern property boundary, with an asphalt driveway near the southern property boundary. The remainder of the site is vacant with three deciduous trees on the west and north sides of the site. A copy of the plan is included in Appendix 1 of this report.

## **4.2 Environmental Source Information**

### **Environment Canada**

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on March 24, 2017. The subject site is not listed in the NPRI database. There are no properties registered in the NPRI database within the study area.

### **PCB Inventory**

A search of national PCB waste storage sites was conducted. One (1) PCB waste storage site was identified within the Phase I study area. The property addressed 605 Bronson Avenue located approximately 150 m north of the subject site, was listed as the Ottawa Board of Education PCB storage site. The site was listed as a minor storage site, containing 0.247 liquid tonnes of PCB containing/contaminated material. The site was considered to be a minor PCB site. This property has since been demolished, no PCB storage is considered to be on-going at the vacant property.

### **Ontario Ministry of Environment and Climate Change (MOECC) Instruments**

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

### **MOECC Coal Gasification Plant Inventory**

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

### **MOECC Incident Reports**

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

### **MOECC Waste Management Records**

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. Applicable information of current and historical waste storage locations, waste generators and waste receivers pursuant to Ontario Regulation 347 was considered in this review. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

### **MOECC Submissions**

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

### **MOECC Brownfields Environmental Site Registry**

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No RSCs were filed for properties within the Phase I ESA study area.

### **MOECC Waste Disposal Site Inventory**

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

### **Areas of Natural Significance**

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

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

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on March 23, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. The response from the TSSA indicated that there were no records for the subject site. The response also indicated that there are records for tanks at 635 Bronson Avenue, the retail fuel outlet property, located approximately 50 m to the north of the subject site. No other records were identified for the neighbouring lands.

As discussed above, this retail fuel outlet is not considered to represent an area of potential environmental concern for the subject property. A copy of the TSSA correspondence is included in Appendix 2.

### **City of Ottawa Landfill Document**

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

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

A request for information from the City’s Historical Land Use Inventory (HLUI 2005) database for the subject property was submitted to the City of Ottawa. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

## **4.3 Physical Setting Sources**

### **Aerial Photographs**

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

1933	The subject site appears to be vacant, however, due to the poor scale of the photograph specific details pertaining to the subject site cannot be described. Residential properties are present to the south, further to the east of the subject and to the west, across Bronson Avenue. Land to the north of the subject site appears
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vacant, with a few roadways or roadways under construction. A railway is present further to the north of the subject site.

- 1950      The subject site appears to be developed, however, due to the poor scale of the photograph specific details pertaining to the subject site cannot be described. Neighbouring properties to the north appear to also have been developed with residential and commercial properties (along Bronson Avenue). To the south of the subject site, various properties along Bronson Avenue appear to be occupied by commercial properties.
- 1969      The subject site can clearly be viewed as a residential property, with a single residential structure. The three retail outlets further to the north at 609, 635 and 644 Bronson Avenue and the two retail fuel outlets further to the south at 748 and 770 Bronson Avenue, are present. The railway lines to the north have been removed and Highway 417 is present in their place.
- 1987      No significant changes appear to have been made to the subject site. The retail fuel outlet at 748 Bronson Avenue appears to have been redeveloped with a residential or commercial tower. No other significant changes appear to have been made to the neighbouring lands.
- 2002      The aerial photograph is of poor scale, as a result, no accurate details can be drawn from the photograph. There does not appear to have been any significant changes to the subject site or neighbouring properties.
- 2007      (City of Ottawa Website) No significant changes appear to have been made to the subject site. The retail fuel outlet at 644 Bronson Avenue has been demolished. The pump islands at 609 and 770 Bronson Avenue have been removed, and the sites no longer appears to be utilized as retail fuel outlets. A new commercial or residential tower has been constructed, further to the south of the subject site, on the west side of Bronson Avenue. No other significant changes appear to have been made to the neighbouring properties.
- 2014      (City of Ottawa Website) A private garage is present on the southern portion of the subject site. No other significant changes appear to have been made to the subject or neighbouring properties.

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

### **Topographic Maps**

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic map depicts the subject site in a residential area, near Nanny Goat Hill, with an approximate elevation of 80 m above sea level (asl). The topographic maps indicate that the subject site is located in a relatively flat area, that slopes down gently to the northeast, away from Nanny Goat Hill. According to the map, the nearest water body is Dow's Lake, located approximately 700 m to the south of the subject site. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

### **Physiographic Maps**

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." Mapping shows the subject site as situated in an area of limestone or 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 interbedded limestone and shale of the Verulam Formation. The site is located in an area of shallow overburden soils, consisting of offshore marine sediments (clay and silty), with a drift thickness of 1 to 2 m.

### **Water Well Records**

A search request was submitted on March 24, 2017, to the MOECC's well records office for all drilled well records within 250 m of the subject site. The search identified three (3) well records, one of which is a cluster record for wells installed along First Avenue (out of the Phase I study area). The other two records are for single monitoring wells installed at 265 Carling Avenue and 487 Cambridge Street South. The records are for wells located further than 100 m away from the subject site and are not considered to represent a concern for the



subject site. No drinking water wells were identified within the Phase I study area.

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

The closest body of water is Dow's Lake, located approximately 700 m south of the subject property. There are no areas of natural significance within the Phase I study area.

## **5.0 INTERVIEWS**

### **Property Owners**

Mr. Ryan Rutherford, of TC United Group, discussed the property via email and phone correspondence. Mr. Rutherford was unable to provide significant detail pertaining to the subject site. It is understood that TC United Group took ownership of the property in early 2016. No other information was available from TC United Group.

## **6.0 SITE RECONNAISSANCE**

### **6.1 General Requirements**

A site visit to the subject property was conducted by Sean Moggridge from the Environmental Department of Paterson Group, on March 28, 2017 at 11:00 AM to 12:00 PM. Weather conditions at the time of the site visit were 5 °C with light rain. In addition to the site, the uses of neighbouring properties were also assessed at the time of the site visit.

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

#### **Buildings and Structures**

The subject site was occupied by a two and a half storey residential dwelling with a single basement level. No other buildings or structures are present at the subject site. It is understood that a private garage was present at the subject site (as recently as 2014), however, this garage has been demolished or removed.

The residence is a wood framed structure with a stone foundation and a sloped shingle roof. The exterior of the building is finished with brick and siding. The building is considered to have been constructed between 1930 and 1950.



The interior of the building is finished with linoleum, vinyl floor tiles, ceramic tiles, carpet, hardwood and concrete floors. The walls throughout the building consisted of drywall and plaster. The unfinished portion of the basement had parging over the stone foundation walls. The ceilings throughout the building are finished with drywall, plaster and decorative plaster. Lighting in the building was provided by incandescent and fluorescent fixtures. The building is currently heated by a natural gas fired furnace.

No tanks remain at the subject site, however, holes for vent/fill pipes in the foundation wall and the fuel lines in the floor slab remain as evidence of the former fuel oil heating system at the subject site. No visual or olfactory indications of spills or leaks of the former tank were noted in the basement. The previous use of fuel oil at the subject site is not considered to represent a concern for the subject site. Chemical storage in the building was limited to a few cans of paint and household cleaning supplies. No concerns were identified with respect to fuel and chemical storage at the subject property.

### **Site Features**

The subject building is situated on the eastern property boundary. Grassed areas with three mature trees are present on the north and west sides of the building. An asphalt concrete strip and the slab of the former private garage make up a driveway on the southern portion of the subject site.

Site topography is flat. Regional topography slopes down gently towards the north and east, and south (beyond Carling Avenue). Site drainage consists primarily of sheet flow to catch basins located on Bronson Avenue.

No evidence of current or former railway or spur lines on the subject property was observed at the time of the site inspection. One pole mounted transformer was observed to the south of the subject site in the hydro easement, no evidence of stains or leaks were noted with regard to the transformer. There were no unidentified substances observed on the subject site at the time of the assessment. The above-noted site features are shown on Drawing PE4003-1 – Site Plan.

### **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 – Renfrew Avenue, followed by a restaurant (Cantina Sur).
- South – Residential dwelling, followed by Powell Avenue;
- East – Residential dwellings;
- West – Bronson Avenue, followed by a restaurant (McDonald's).

No environmental concerns were identified with the present use of the neighbouring properties.

## 7.0 REVIEW AND EVALUATION OF INFORMATION

### 7.1 Land Use History

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

<b>Table 1 - Land Use History</b>				
<b>Year</b>	<b>Name of Owner</b>	<b>Description of Property Use</b>	<b>Property Use</b>	<b>Other Observations from Aerial Photos, FIPs, etc.</b>
Prior to 1936	Vacant	Vacant	Vacant	Vacant land observed in aerial photographs
Circa 1936 to 2016	Various Owners	Used as a residential dwelling and multi-unit residential dwelling	Residential	Residential listings in city directories and dwelling observed in aerial photographs.
2016 to Present	TC United	Residential (multi-unit) dwelling	Residential	No changes observed to the property since 2014 aerial photograph.

### Potentially Contaminating Activities

The following Potentially Contaminating Activities were identified within the Phase I study area:

- Item 8, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: "Chemical Manufacturing, Processing and Bulk Storage"

This PCA was identified based on the former use of 605 Bronson Avenue as the Ottawa Board of Education PCB storage site. Based on the distance from the subject site, the use of the property as a PCB storage site is not considered to represent an APEC for the subject site.

- Item 10 and 27, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Commercial Autobody Shops” and “Garages and Maintenance of Vehicles”

This PCA was identified based on the existing and former autobody shops and automotive garages identified within the Phase I study area. The existing and former automotive garages are not considered to represent an APEC for the subject site based on their separation distance.

- Item 28, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Gasoline and Associated Products Storage in Fixed Tanks”

This PCA was identified based on the use of USTs at the existing and former retail fuel outlets at 609, 635, 644, 748 and 770 Bronson Avenue, the former automotive service garage at 316 Bell Street South, and the former Coca-Cola Ltd. bottling plant at 601 Bronson Avenue.

The existing and former retail/private fuel outlets and USTs identified in the Phase I study area are not considered to have had the potential to have impacted the subject site due to their separation distances and previous investigations. As such, they are not considered to represent APECs for the subject site.

- Item 46, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Rail Yards, Tracks and Spurs”

This PCA was identified based on the former railway tracks, interchanges, spur lines located to the north in the area now occupied by Highway 417, and the former rail/lumber yard located to the north, on the east side of Bronson Avenue.

The former rail features identified in the Phase I study area is not considered to have had the potential to have impacted the subject site due to its separation distances. As such, it is not considered to represent an APEC for the subject site.

- Item 52, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems.”

This PCA was identified based on the former use of 279 Carling Avenue as the Ottawa Suburban Roads Commission. This site is not considered to have had the potential to have impacted the subject site due to its separation distance. As such, it is not considered to represent an APEC for the subject site.

- Item 55, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Transformer manufacturing, processing and use.”

This PCA was identified based on the former use of 247 Glebe Avenue (formerly 247 Carling Avenue) as a hydro electric sub station. This site is not considered to have had the potential to have impacted the subject site due to its separation distance. As such, it is not considered to represent an APEC for the subject site.

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

As discussed above, there are no PCAs that are considered to have the potential to generate areas of potential environmental concern for the subject site.

### **Contaminants of Potential Concern**

No Contaminants of Potential Concern (CPCs) were identified, since no APECs were on the subject site.

## **7.2 Conceptual Site Model**

### **Geological and Hydrogeological Setting**

Based on information from the Geological Survey of Canada, drift thickness is in the range of 1 to 2 m, overburden soils consist of till or fractured bedrock and bedrock consists of interbedded limestone. Hydrogeological conditions are considered to mimic the topographic setting, as a result, groundwater is expected to flow towards the northeast.

### **Contaminants of Potential Concern**

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

### **Existing Buildings and Structures**

At the time of the site visit, a two and a half storey residential dwelling occupied the eastern portion of the subject site. No other structures are present at the subject site.

## **Water Bodies**

The closest body of water to the subject site is Dow's Lake, located approximately 700 m to the south of the subject site. No water bodies are present within the Phase I study area.

## **Areas of Natural Significance**

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

## **Drinking Water Wells**

No drinking water well records were identified with the Phase I study area.

## **Neighbouring Land Use**

Neighbouring land use in the Phase I study area consists of residential usage, various commercial enterprises (including a retail fuel outlet and autobody shops/automotive service garages), transport corridors and parkland. Based on the distance of the retail fuel outlets and automotive service garages, these land uses are not considered to represent a concern for the subject site. Land use is shown on Drawing PE4003-2 - Surrounding Land Use Plan.

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

As per Section 7.1 of this report, no Potentially Contaminating Activities were identified on the subject site. PCAs identified on neighbouring properties consisted of retail fuel outlets, automotive service garages, autobody shops, a former PCB waste storage site, former rail lines and rail/lumber yard, a former road maintenance depot, a former bottling facility and hydro electric sub station. Based on the distances from the subject site, none of these PCAs are considered to represent areas of potential environmental concern on the subject site.

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

The presence of PCAs within the Phase I study area was confirmed by a variety of independent sources, none of which were identified in close proximity or at the subject site. As such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

## **8.0 CONCLUSIONS**

### **Assessment**

A Phase I – Environmental Site Assessment was carried out for the residential property addressed 144 Renfrew Avenue, in the City of Ottawa, Ontario. The purpose of this environmental assessment was to research the past and current use of the subject site and neighbouring properties and identify any environmental concerns with the potential to have impacted the subject property.

Based on a review of historical sources, the subject property has always been utilized as a residential property since its development circa 1946. No sources of potentially contaminating activities were identified with respect to the historical land use of the subject site.

The historical review identified various potentially contaminating activities within the Phase I study area. These included former rail way lines and lumber/rail yard to the north; former and current retail fuel outlets along Bronson Avenue to the north and south; former autobody shops and automotive service garages, on Bell Street South and Bronson Avenue, located to the west, south and north; a minor PCB storage site and bottling plant on Bronson Avenue, located to the north; a hydro electric sub station on Glebe Avenue, to the south; and the former road maintenance depot properties located on Carling Avenue, located to the south of the subject site. None of the PCAs were identified within 50 m of the subject property. Based on the separation distance, and information contained in our files, none of these potentially contaminating activities identified on these properties are considered to have the potential to generate areas of potential environmental concern on the subject property.

Following the historical review a site visit was conducted. The site is occupied by a two and a half storey residential dwelling with a single basement level. An asphalt driveway is present on the southern portion of the property and the remainder of the subject property is grassed with trees. At the time of the site visit, no environmental concerns were observed. The current use of the subject property is not considered to have the potential to have impacted the subsurface soil or groundwater and therefore does not represent an area of potential environmental concern.

Surrounding land use consists of residential and commercial properties. The potentially contaminating activities that were identified within the Phase I study area were not considered to represent areas of potential environmental concern for the subject site based on their locations with respect to the subject site.

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

## **Recommendations**

It is our understanding that the existing building is being considered for demolition. Based on the age of the building, asbestos-containing materials and other designated substance are potentially present. A designated substances survey (DSS) must be completed on the subject building prior to commencing the demolition activities.

## 9.0 STATEMENT OF LIMITATIONS

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

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

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

### **Paterson Group Inc.**



Sean Moggridge, B.Eng.



Mark S. D'Arcy, P.Eng.



### **Report Distribution:**

- TC United Group
- Paterson Group



## **10.0 REFERENCES**

### **Federal Records**

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

### **Provincial Records**

MOE Freedom of Information and Privacy Office.  
MOE Municipal Coal Gasification Plant Site Inventory, 1991.  
MOE document titled “Waste Disposal Site Inventory in Ontario”.  
MOE Brownfields Environmental Site Registry.  
Office of Technical Standards and Safety Authority, Fuels Safety Branch.  
MNR Areas of Natural Significance.  
MOE Water Well Inventory.

### **Municipal Records**

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

### **Local Information Sources**

Chain of Title obtained through Read Abstracts Limited, August 2013.  
Current Plan of Survey, prepared by Farley, Smith & Denis Surveying Ltd.  
Current Plan of Survey, prepared by Annis, O’Sullivan, Vollebekk Ltd.  
Personal Interviews.  
Previous Engineering Reports

### **Public Information Sources**

Google Earth.  
Google Maps/Street View.

# **FIGURES**

**FIGURE 1 – KEY PLAN**

**FIGURE 2 – TOPOGRAPHIC MAP**

**DRAWING PE4003-1 – SITE PLAN**

**DRAWING PE4003-2 – SURROUNDING LAND USE PLAN**

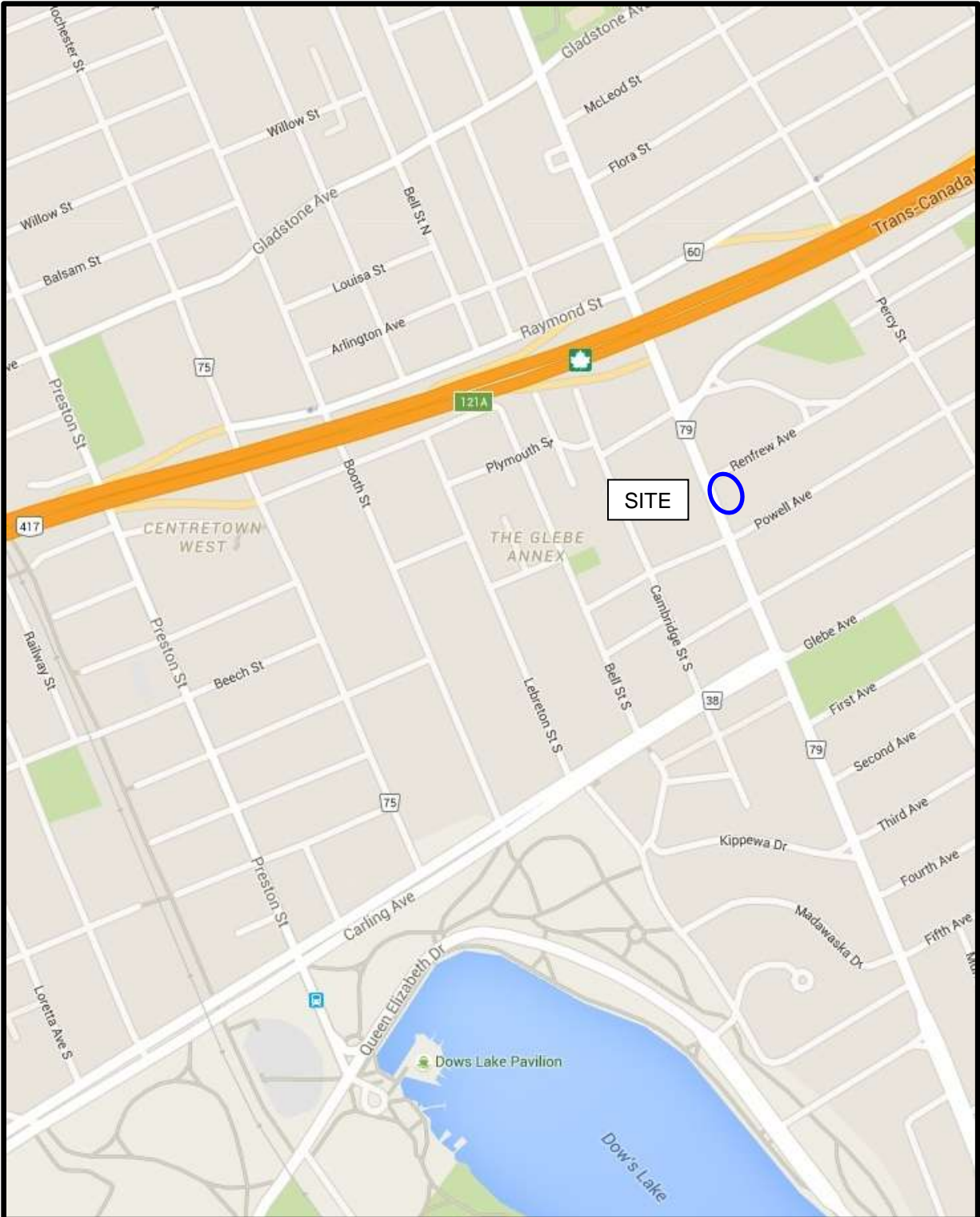


FIGURE 1  
KEY PLAN

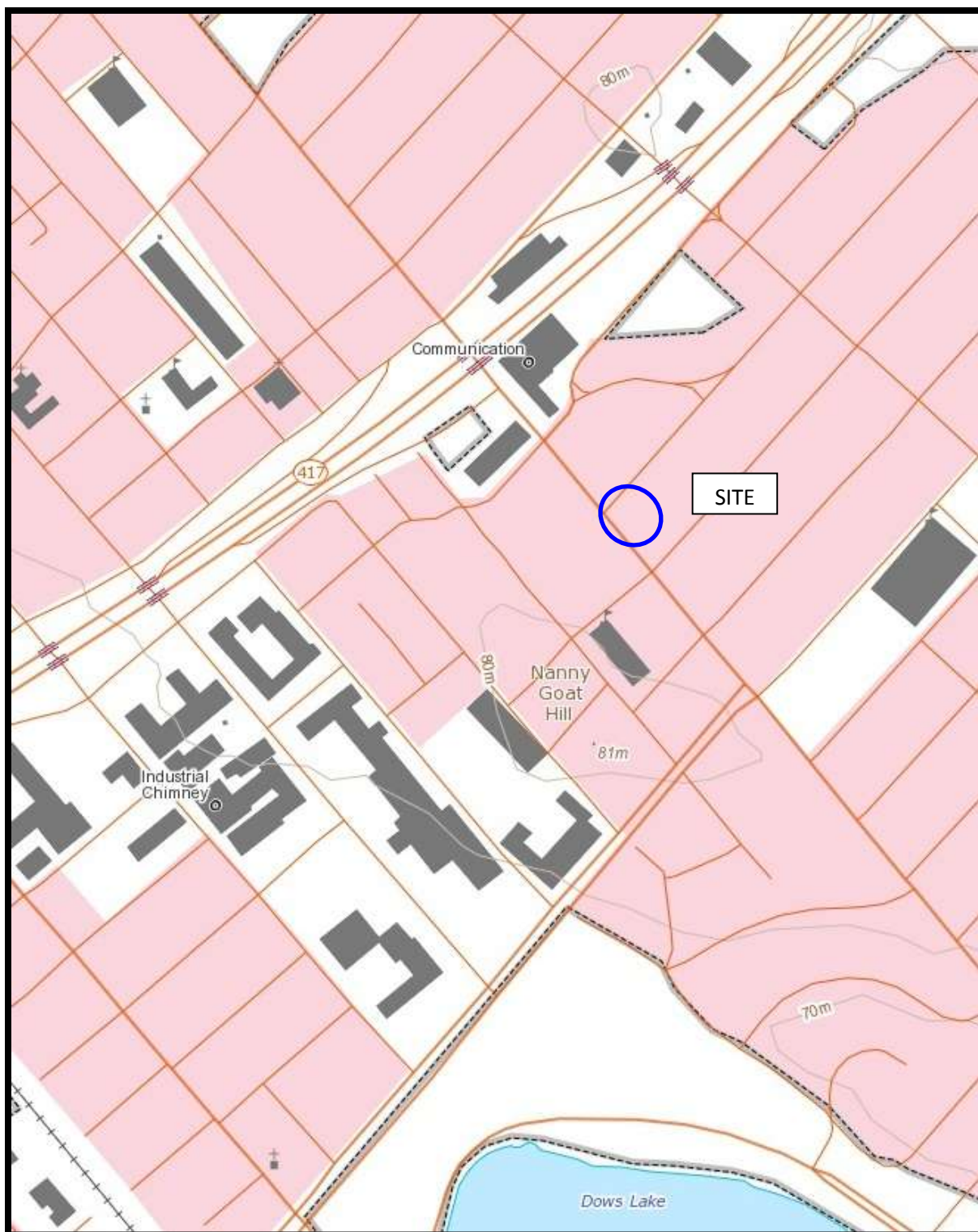
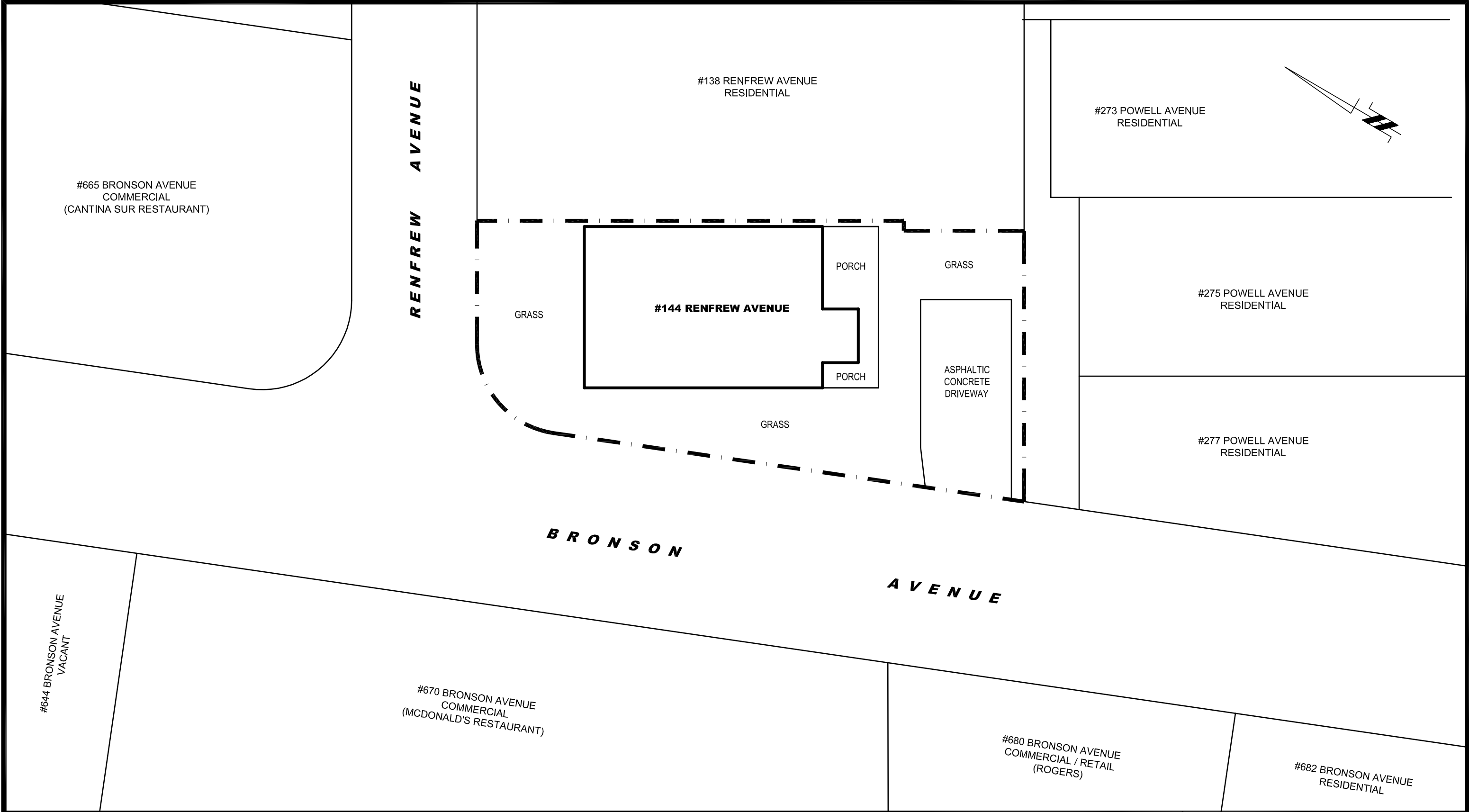


FIGURE 2  
TOPOGRAPHIC MAP



<div><div>patersongroup</div><div>consulting engineers</div></div> <div>154 Colonnade Road South Ottawa, Ontario K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344</div>					TC UNITED GROUP PHASE I - ENVIRONMENTAL SITE ASSESSMENT 144 REFREW AVENUE OTTAWA, ONTARIO Title: <b>SITE PLAN</b>	Scale:	1:200	Date:	03/2017
						Drawn by:	MPG	Report No.:	PE4003-1
						Checked by:	SM	Dwg. No.:	<b>PE4003-1</b>
	0					Approved by:	MSD	Revision No.:	
	NO.	REVISIONS	DATE	INITIAL					





**PHASE I ENVIRONMENTAL SITE ASSESSMENT STUDY AREA**

POTENTIALLY CONTAMINATING ACTIVITIES:

1. FORMER RAIL LINES
2. 601-605 BRONSON AVENUE - COCA COLA LTD. BOTTLING PLANT (WITH UNDERGROUND STORAGE TANK); OTTAWA BOARD OF EDUCATION PCB STORAGE SITE; FORMER CONCESSION STREET LUMBER YARD
3. 609 BRONSON AVENUE - FORMER AUTO SERVICE GARAGE (1940-CURRENT)
4. 635 BRONSON AVENUE - RETAIL FUEL OUTLET (1970-CURRENT)
5. 644 BRONSON AVENUE - FORMER RETAIL FUEL OUTLET (1970-2000)
6. 117 CARLING AVENUE / 748 BRONSON AVENUE - FORMER RETAIL FUEL OUTLET (1960's-1970's); FORMER AUTO BODY SHOP (1960's)
7. 279 CARLING AVENUE - OTTAWA SUBURBAN ROAD'S COMMISSION
8. 360 BELL STREET S. - FORMER AUTOMOTIVE SERVICE GARAGE (1956)
9. 316 BELL STREET S. - FORMER AUTOMOTIVE SERVICE GARAGE WITH 2 UNDERGROUND STORAGE TANKS (1930's-2000's)
10. 770 BRONSON AVENUE - RETAIL FUEL OUTLET (CIRCA 1956)
11. 247 GLEBE AVENUE (FORMERLY 247 CARLING AVENUE) - HYDRO ELECTRIC SUB-STATION (1930-CURRENT)

**patersongroup**  
consulting engineers

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

0			
NO.	REVISIONS	DATE	INITIAL

TC UNITED GROUP	
PHASE I - ENVIRONMENTAL SITE ASSESSMENT	
144 RENFREW AVENUE	
OTTAWA,	ONTARIO
Title:	
SURROUNDING LAND USE PLAN	

Scale:	1:3000	Date:	03/2017
Drawn by:	MPG	Report No.:	PE4003-1
Checked by:	SM	Dwg. No.:	PE4003-2
Approved by:	MSD	Revision No.:	



# **APPENDIX 1**

**PLAN OF SURVEY**

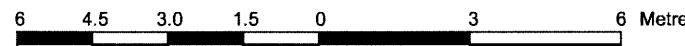
**AERIAL PHOTOGRAPHS**

**SITE PHOTOGRAPHS**

**PART 1** Plan of  
**PART OF LOT 37**  
**REGISTERED PLAN 189959**  
**CITY OF OTTAWA**

Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

Scale 1 : 150



**Metric**

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND  
CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

**Surveyor's Certificate**

I CERTIFY THAT:

- This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act and the Land Titles Act and the regulations made under them.
- The survey was completed on the 3rd day of February, 2016.

Feb 5/16  
Date

V. Andrew Shelp  
Ontario Land Surveyor

**PART 2**

THIS PLAN MUST BE READ IN CONJUNCTION WITH  
SURVEY REPORT DATED: FEBRUARY 5, 2016

ANNIS, O'SULLIVAN, VOLLEBEKK LTD. grants to  
TC United ("The Client"), their solicitors,  
mortgagees, and other related parties, permission to use original, signed, sealed  
copies of the Surveyor's Real Property Report in transactions involving The Client.

Topographic data was collected under Winter Conditions.  
Snow cover and ice preclude determining location and  
elevation of some topographical data that is otherwise visible.

**Notes & Legend**

Denotes	
—□—	Survey Monument Planted
—■—	Survey Monument Found
SIB	Standard Iron Bar
SSIB	Short Standard Iron Bar
IB	Iron Bar
*	Survey Monument 0.3 metres Long
(WIT)	Witness
Meas.	Measured
(AOG)	Annis, O'Sullivan, Vollebekk Ltd.
(PI)	Registered Plan 189959
(P2)	Plan 4R-1681
(P3)	Plan 5R-5679
(P4)	(857) Plan January 18, 1990 (Ref. 12-189959)
(DI)	Inst. CR350554
(NI)	(AOG) Field Notes February 26, 1981
○ MH-S	Maintenance Hole (Sanitary)
⊗ VC	Valve Chamber (Watermain)
○ MH-H	Maintenance Hole (Hydro)
— S —	Underground Combined Sewer
— W —	Underground Water
— P —	Underground Power
— G —	Underground Gas
— OHW —	Overhead Wires
○ UP	Utility Pole
○ AN	Anchor
T/G	Top of Grate
□ GM	Gas Meter
BF	Board Fence
△ S	Sign
∅	Diameter
+ 65.00	Location of Elevations
+ 65.00	Top of Concrete Curb Elevation
C/L	Centreline
—	Property Line
⊙	Deciduous Tree
⊙	Coniferous Tree
□ AC	Air Conditioner
Fdn.	Foundation

**ELEVATION NOTES**

- Elevations shown are geodetic and are referred to the CGVD28 geodetic datum.
- It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that its 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.
- A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.
- Underground utility services are taken from City of Ottawa Engineering Drawings F-10-16 and F-11-15.

ASSOCIATION OF ONTARIO  
LAND SURVEYORS  
PLAN SUBMISSION FORM  
1965528

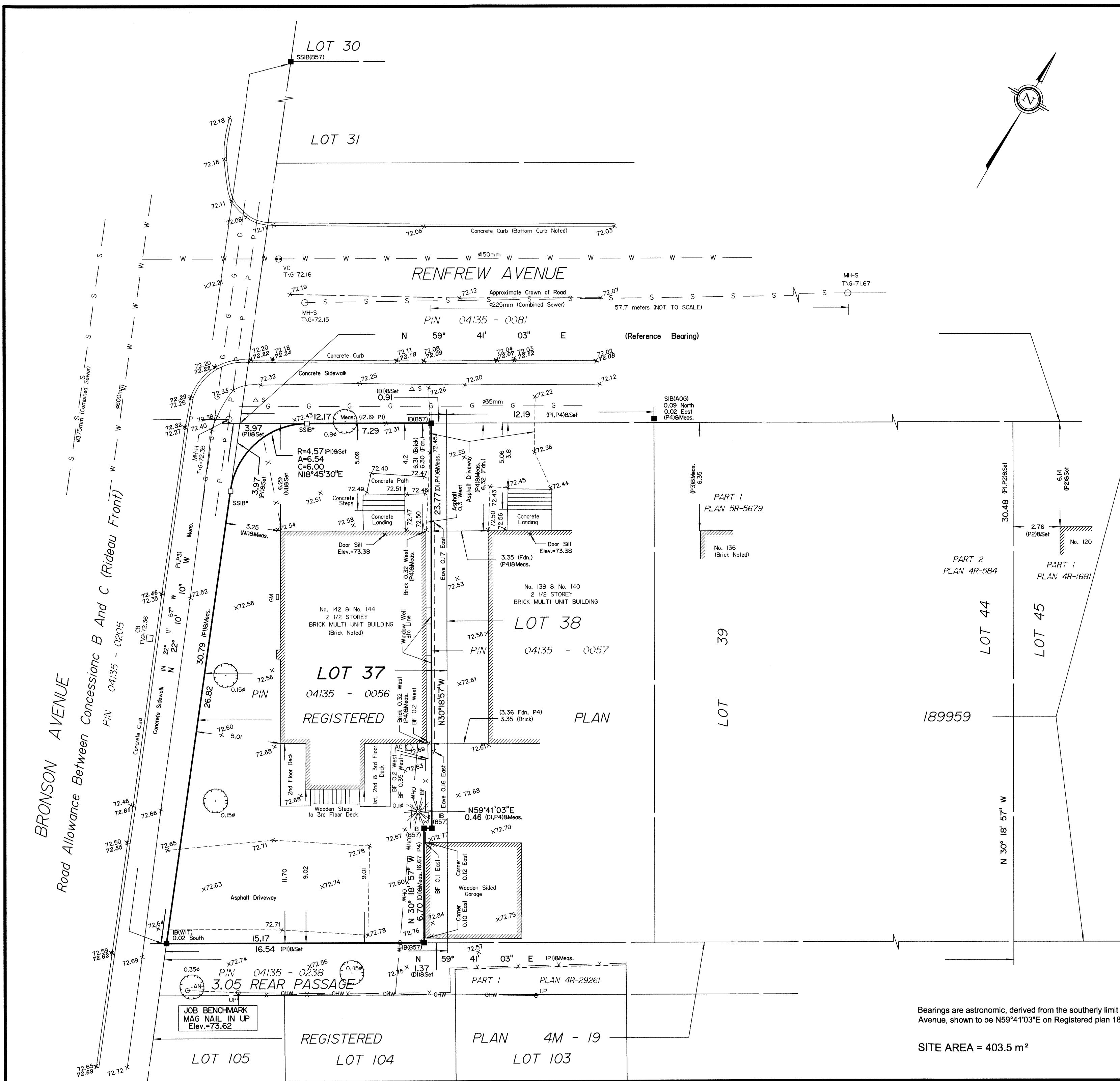


THIS PLAN IS NOT VALID UNLESS  
IT IS AN EMBOSSED ORIGINAL  
COPY ISSUED BY THE SURVEYOR  
In accordance with  
Regulation 1026, Section 29 (3).

© Annis, O'Sullivan, Vollebekk Ltd. 2016. "THIS PLAN IS PROTECTED BY COPYRIGHT"  
**ANNIS, O'SULLIVAN, VOLLEBEKK LTD.**  
14 Concourse Gate, Suite 500  
Nepean, Ont. K2E 7S6  
Phone: (613) 727-0850 / Fax: (613) 727-1079  
Email: Nepean@asvlltd.com  
Ontario  
Land Surveyors Job No. 16564-16TC United Lt 37 PL 189959 T F

Bearings are astronomic, derived from the southerly limit of Renfrew  
Avenue, shown to be N59°41'03"E on Registered plan 189959.

SITE AREA = 403.5 m<sup>2</sup>







AERIAL PHOTOGRAPH  
1933





AERIAL PHOTOGRAPH  
1950

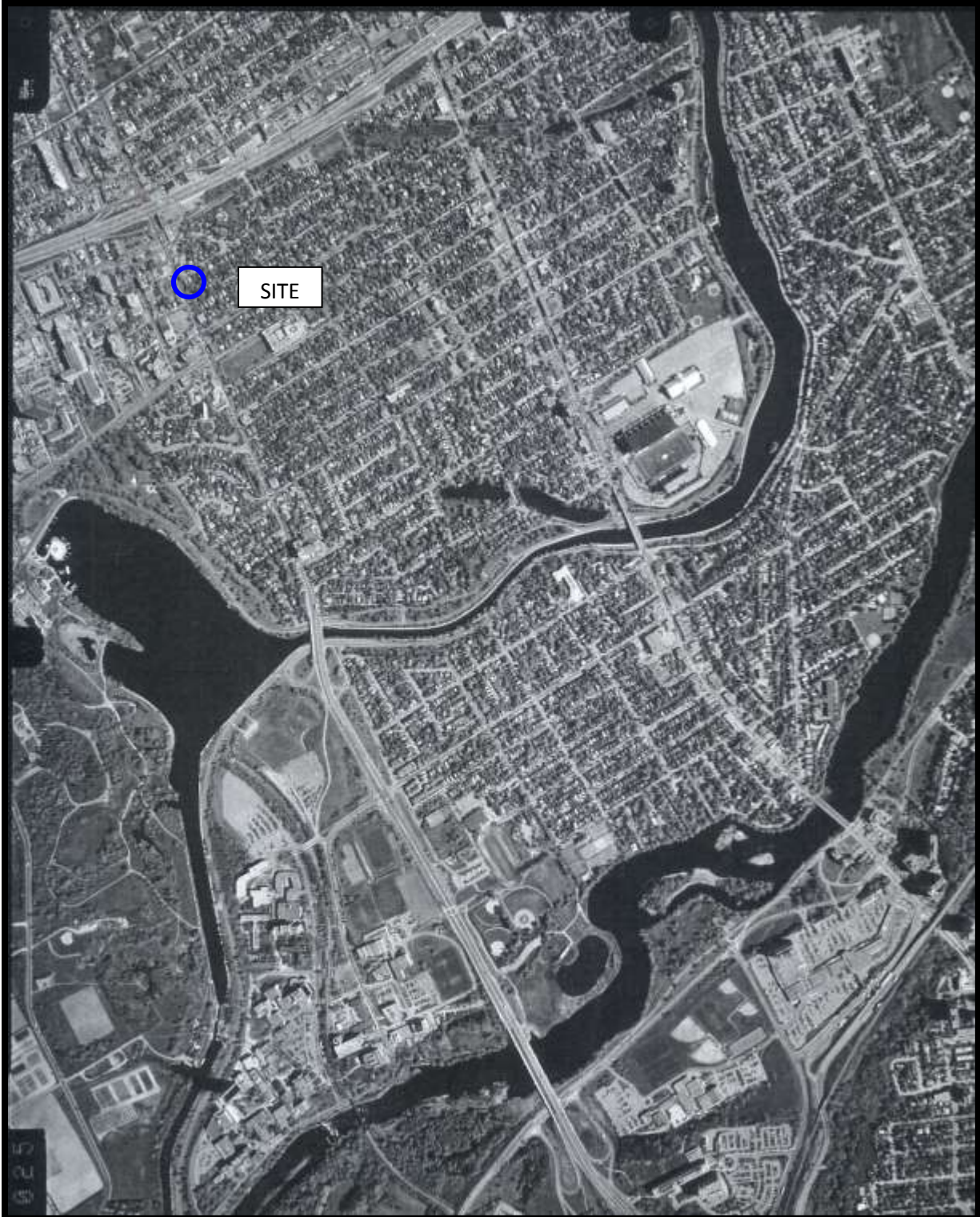


AERIAL PHOTOGRAPH  
1969





AERIAL PHOTOGRAPH  
1987



AERIAL PHOTOGRAPH  
2002



## Site Photographs

PE4003

144 Renfrew Avenue, Ottawa, Ontario

March 28, 2017



Photograph 1: View of former aboveground storage tank area in unfinished portion of the basement. Moisture on walls and floor are from weeping foundation. No oil staining or odour was observed.



Photograph 2: View of furnace, water heaters and remnant fuel line from historical oil system.

## Site Photographs

PE4003

144 Renfrew Avenue, Ottawa, Ontario

March 28, 2017



Photograph 3: View of former vent/fill pipe holes in foundation. Moisture from meltwater and rain dripping from the roof. No sheen was observed or petroleum odours were identified in the vicinity of the holes.



Photograph 4: View of neighbouring restaurant property to the north of the subject property, across Renfrew Avenue.

## Site Photographs

PE4003

144 Renfrew Avenue, Ottawa, Ontario

March 28, 2017



Photograph 5: View of neighbouring restaurant property to the west of the subject property, across Bronson Avenue.



Photograph 6: View of the subject property and the neighbouring property to the east, facing south, across Renfrew Avenue.



# **APPENDIX 2**

**MOECC FREEDOM OF INFORMATION REQUEST**


**CITY OF OTTAWA HLUI REQUEST**

**TSSA CORRESPONDENCE**

**MOECC WELL RECORDS**

## Freedom of Information Request

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

Requester Data			For Ministry Use Only	
<small>Name, Company Name, Mailing Address and Email Address of Requester</small> <b>Sean Moggridge</b> <b>Paterson Group Inc.</b> <b>154 Colonnade Road</b> <b>Ottawa, ON K2E 7J5</b> <b>Email address: smoggridge@patersongroup.ca</b>			<small>FOI Request No.</small>  <small>Fee Paid</small>  <input type="checkbox"/> ACCT <input type="checkbox"/> CHQ <input type="checkbox"/> VISA/MC <input type="checkbox"/> CASH	<small>Date Request Received</small>  
<small>Telephone/Fax Nos.</small> <b>Tel. 613-226-7381</b> <b>Fax 613-226-6344</b>	<small>Your Project/Reference No.</small> <b>PE4003</b>	<small>Signature/Print/Name of Requester</small> <b>Sean Moggridge</b> 		
<b>Request Parameters</b>				
<small>Municipal Address / Lot, Concession, Geographic Township (Municipal address essential for cities, towns or regions)</small> <b>142/144 Renfrew Avenue, Ottawa, Ontario - Part of Lot 3, Registered Plan 189959, City of Ottawa (PIN - 04135-0056)</b>				
<small>Present Property Owner(s) and Date(s) of Ownership</small> <b>TC United Group (Since 2016)</b>				
<small>Previous Property Owner(s) and Date(s) of Ownership</small> <b>Unknown</b>				
<small>Present/Previous Tenant(s), (if applicable)</small> <b>Residential tenants</b>				
<b>Search Parameters</b>				<b>Specify Year(s) Requested</b>
<small>Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.</small>				
Environmental concerns (General correspondence, occurrence reports, abatement)				1986-present
Orders				1986-present
Spills				1986-present
Investigations/prosecutions ➤ Owner AND tenant information must be provided				1986-present
Waste Generator number/classes				1986-present
<b>Certificates of Approval ➤ Proponent information must be provided</b>				
<small>1985 and prior records are searched manually. Search fees in excess of \$300.00 could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). If supporting documents are also required, mark SD box and specify type e.g. maps, plans, reports, etc.</small>				
				<b>SD</b> <b>Specify Year(s) Requested</b>
air - emissions				1986-present
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)				1986-present
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations				1986-present
waste water - industrial discharges				1986-present
waste sites - disposal, landfill sites, transfer stations, processing sites, incinerator sites				1986-present
waste systems - PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste				1986-present
pesticides - licenses				1986-present

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

**Office Use Only**

Application Number: _____	Ward Number: _____	Application Received: (dd/mm/yyyy): _____
Client Service Centre Staff: _____	Fee Received: \$	<input type="text"/>



# Historic Land Use Inventory

## Application Form

### Notice of Public Record

All information and materials required in support of your application shall be made available to the public, as indicated by Section 1.0.1 of *The Planning Act*, R.S.O. 1990, C.P.13.

### Municipal Freedom of Information and Protection Act

Personal information on this form is collected under the authority the *Planning Act*, RSO 1990, c. P. 13 and will be used to process this application. Questions about this collection may be directed by mail to Manager, Business Support Services, Planning Infrastructure and Economic Development Department, 110 Laurier Avenue West, Ottawa, K1P 1J1, or by phone at (613) 580-2424, ext. 24075

**Background Information**

**\*Site Address or Location:**

*\* Mandatory Field*

### Applicant/Agent Information:

Name:	<input type="text"/>		
Mailing Address:	<input type="text"/>		
Telephone:	<input type="text"/>	Email Address:	<input type="text"/>

### Registered Property Owner Information:

☐ Same as above

Name:	<input type="text"/>		
Mailing Address:	<input type="text"/>		
Telephone:	<input type="text"/>	Email Address:	<input type="text"/>

### Site Details

Legal Description  
and PIN:

What is the land  
currently used for?

Lot frontage:

m

Lot depth:

m

Lot area:

m<sup>2</sup>

**OR**

Lot area: (irregular lot)

m<sup>2</sup>

Does the site have Full Municipal Services:

☐ Yes

☐ No

### Required Fees

Please don't hesitate to visit [the Historic Land Use Inventory website](#) more information. Fees must be paid in full at the time of application submission.

Planning Fee

### Submittal Requirements

The following are required to be submitted with this application:

- 1. Consent to Disclose Information:** Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, **the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner.** This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.
- 2. Disclaimer:** Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, Infrastructure and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3.** A site plan or key plan of the property, its location and particular features.
- 4.** Any significant dates or time frames that you would like researched.

**Disclaimer**  
**For use with HLUI Database**

CITY OF OTTAWA ("the City") is the owner of the Historical Land Use Inventory ("HLUI"), a database of information on the type and location of land uses within the geographic area of Ottawa, which had or have the potential to cause contamination in soil, groundwater or surface water.

The City, in providing information from the HLUI, to Paterson Group Inc. ("the Requester") does so only under the following conditions and understanding:

1. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.
2. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information provided by the City to the Requester is provided on the assumption that it will not be relied upon by any person whatsoever. The City denies all liability to any such persons attempting to rely on any information provided from the HLUI database.
3. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
4. Copyright is reserved to the City.
5. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
6. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
7. All information collected under this request and all records provided in response to this request are subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56, as amended.

Signed: 

Dated (dd/mm/yyyy): 28/03/2017

Per: Sean Moggridge

(Please print name)

Title: Consultant

Company: Paterson Group Inc.

## Sean Moggridge

---

**From:** Public Information Services [publicinformationsservices@tssa.org]  
**Sent:** March-23-17 2:21 PM  
**To:** Sean Moggridge  
**Subject:** RE: TSSA Records Search, PE4003 - 144 Renfrew Avenue, Ottawa

Thank you for your inquiry.

I have searched the below noted address (addresses) and I have located the existence of tanks at:

635 Bronson Ave, Ottawa

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

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



**Suman Guram | Coordinator**

Records

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-6203 | Fax: +1-416-231-6183 | E-Mail: [sguram@tssa.org](mailto:sguram@tssa.org)

[www.tssa.org](http://www.tssa.org)



---

**From:** Sean Moggridge [<mailto:SMoggridge@Patersongroup.ca>]  
**Sent:** Thursday, March 23, 2017 1:27 PM  
**To:** Public Information Services <[publicinformationsservices@tssa.org](mailto:publicinformationsservices@tssa.org)>  
**Subject:** TSSA Records Search, PE4003 - 144 Renfrew Avenue, Ottawa

Good afternoon,

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

**138, 139, 141, 142, 144 Renfrew Avenue;**

**635, 665, 670 Bronson Avenue;**

**275, 277 Powell Avenue.**

Thank you for your time and effort.

Sean Moggridge, B.Eng.

**patersongroup**

**solution oriented engineering**

154 Colonnade Road South

Ottawa, Ontario, K2E 7J5

Tel: (613) 226-7381 Ext. 206

Fax: (613) 226-6344

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



Measurements recorded in: ☒ Metric ☐ Imperial

Page 1 of 1

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner	
	Taggart Realty Management			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
708-225 Metcalfe St.	Ottawa	ON	K2P1P9	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession		
265 Carling Ave					
County/District/Municipality	City/Town/Village	Province	Postal Code		
Ottawa-Carleton	Ottawa	Ontario			
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD	83	18	445155	5027756	

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)
Black	Asphalte	—	Asphaltic concrete	0 0.075
Grey	Crushed Stone	—	Crushed stone	0.075 0.3
Brown	Silty Sand	trace gravel	Fill	0.3 0.69
Brown	Silty Sand	gravel, cobbles & trace boulders	Fill	0.69 1.17
Grey	Limestone	Shale partings	Bedrock	1.17 15.39

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 11.6	Bentonite	

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

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5	PVC	Schedule 40	0 12.4	<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

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
5.1	PVC	10	12.4 15.39

Water Details		Hole Diameter	
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft)	Diameter (cm/in)
3.4 (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		From To	
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	0 1.17 20	
(m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		1.17 15.39 7.69	
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
(m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify			

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Eastern Ontario Diamond Drilling Ltd.	7328		
Business Address (Street Number/Name)	Municipality		
3780 County Rd 17, P.O. Box 33	Hawkesbury		
Province	Postal Code	Business E-mail Address	
ON	K6A2R4	ontariodiamond@hawkesbury.igs.net	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
6136327769	Stephen Downing		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3326		20140425	

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	
	3		3	
Pumping rate (l/min / GPM)	4		4	
	5		5	
Duration of pumping hrs + min	10		10	
	15		15	
Final water level end of pumping (m/ft)	20		20	
	25		25	
If flowing give rate (l/min / GPM)	30		30	
	40		40	
Recommended pump depth (m/ft)	50		50	
	60		60	
Recommended pump rate (l/min / GPM)				
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 <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered	Ministry Use Only Audit No. 2171269 Received MAY 27 2014
	Date Work Completed	
	20120507	





**Well Record for Well Cluster - Part 1 of 3**  
(Only for Multiple Test Holes or Dewatering Wells)  
Regulation 903 Ontario Water Resources Act

All measurements recorded in: ☒ Metric ☐ Imperial

Follow instructions on the front and back of this form. Print or Type

Well Tag No. of Deepest Well: (Print Well Tag No.)

A136688 - 13-02  
Well # on Drawing of Deepest Well:

Page 1 of 1

**Well Cluster Location Information**

Address of Well Location (Street Number(s)/Name(s), RR, if available)		Lot(s)	Concession(s)	Geographic Township	County/District/Upper Tier Municipality
First Avenue & Percy Street					Ottawa-Carleton
City, Town, Village or Hamlet		Province	GPS Unit Make	Model	Unit Mode of Operation <input type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged
Ottawa		Ontario	Garmin	Etrex	<input type="checkbox"/> Differentiated, specify: _____

**Mandatory Attachments/Additional Information**

- ☒ Land Owner Consent Form must be attached.  
☒ Detailed Drawing of All Well Locations must be attached.

I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed.

Signature of Technician/Contractor

2013/06/25  
Date (yyyy/mm/dd)

**Well Details**

Well # on Drawing	UTM Coordinates		Hole Depth (m/ft)	Hole Diameter (cm/in)	Method of Construction	Casing Material; Diameter (cm/in)	Casing (m/ft)		Screen Interval (m/ft)		Annular Space Material (m/ft)		Overburden/Bedrock or Abandonment Filling Material Intervals (m/ft)	Static Water Level (m/ft)	Date of Completion (yyyy/mm/dd)		
	Zone	Easting					From	To	From	To	From	To				Material:	
13-02	18	445395	5027911	7.19	20	H.S.A / NR Coring	3.175	0	5.6	5.6	7.19	0.6	4.6	bentonite	asphalt, sand & gravel, fill, sand & gravel, med to coarse sand, fine sand, silty sand, sandy silt, glacial till, limestone	3.2	13/04/30
13-05	18	445669	5027911	6.10	20	H.S.A.	5.1	0	4.5	4.5	6.10	0.6	4.1	bentonite	asphalt, sand & gravel (base), sand & gravel (subbase), fine sand, clayey silt, fine sand	2.6	13/04/30
13-12	18	445616	5027782	3.05	20	H.S.A.	5.1	0	1.5	1.5	3.05	0.6	1.2	bentonite	asphalt, sand & gravel (base), fine to med sand (fill), organic material, med sand	2.8	13/04/29
13-13	18	446307	5028260	6.10	20	H.S.A.	5.1	0	4.6	4.6	6.10	0.6	4.2	bentonite	asphalt, sand & gravel (base), sand & gravel (subbase), fine to med sand, silty clay (weathered), silty clay	4.9	13/04/29

**Well Contractor and Well Technician Information**

Business Name of Well Contractor		Business Address (Street Number/Name, RR)		Municipality	Province
George Downing Estate Drilling Ltd		410, rue Principale		Grenville-sur-la-Roche	QC
Postal Code	Bus. Telephone No.	Well Contractor's Licence No.	Business E-mail Address		
J0V 1B0	819-242-6469	1844	downing@hawk.igs.net		
Name of Well Technician (First Name, Last Name)		Well Technician's Licence No.	Signature of Well Technician		Date Submitted (yyyy/mm/dd)
Stephen Downing		3326			2013/06/25

Date First Well in Cluster Constructed  
or Abandoned (yyyy/mm/dd)

2013/04/29

Date Last Well in Cluster  
Completed (yyyy/mm/dd)

2013/04/30

**Ministry Use Only**

Date Received (yyyy/mm/dd)

SEP 10 2013

Audit No.

C 21280

Comments:

**Well Abandonment**

Person Abandoning the Wells:

Name

(Print or Type) - See instruction 11 on the back of this form



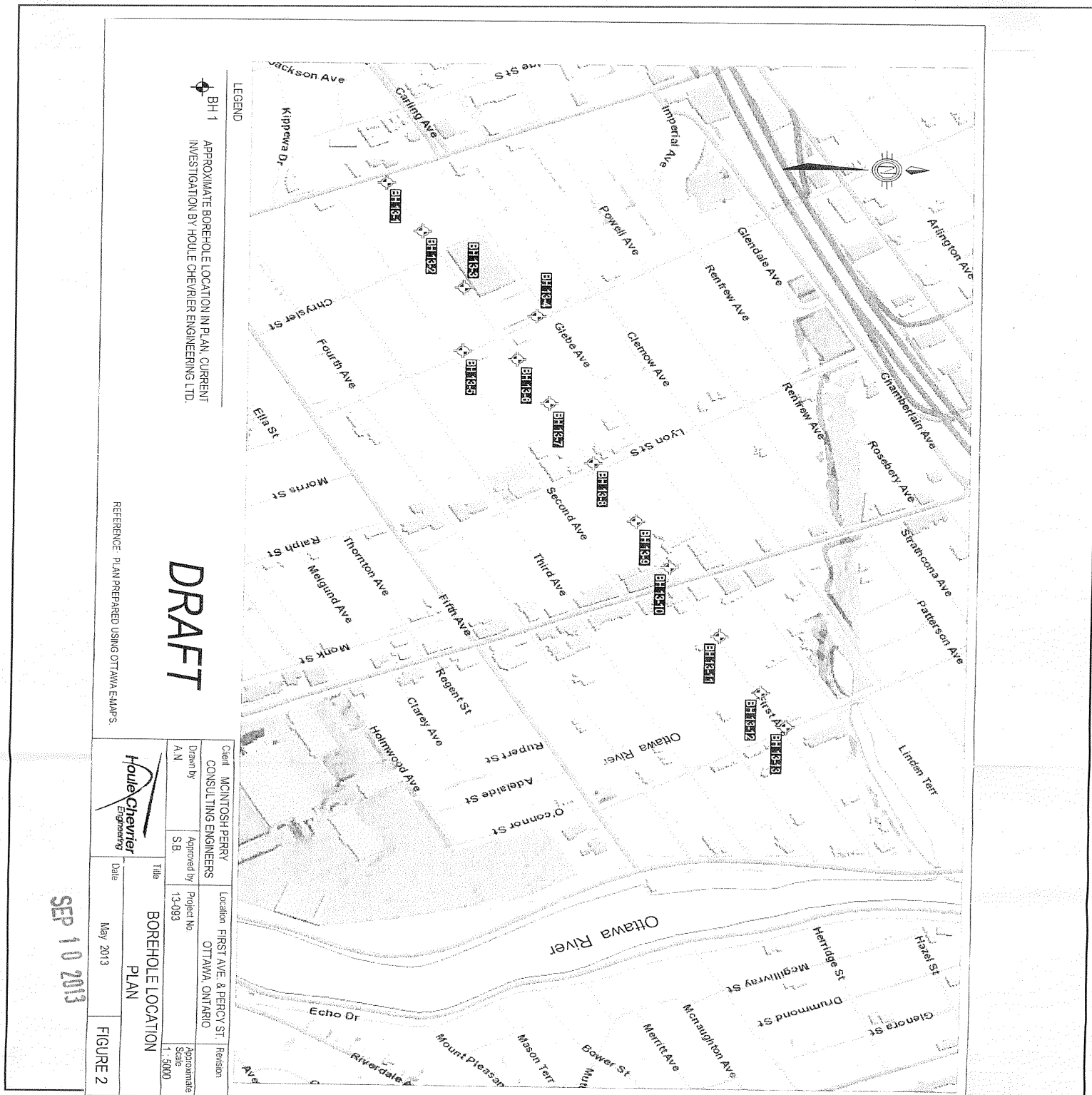


**Note:** This Well Record for Well Cluster Part 3 - Detailed Drawing of all Well Locations, must be attached to Parts 1 and 2. The drawing must include all property boundaries, an arrow indicating the North direction, all named roads and sufficient measurements to locate all wells in the cluster in relation to fixed points. The drawing must show the location of each well and each well must be numbered on the drawing to match number used for that well on the Well Record for Well Cluster Parts 1 and 2. The well with the well tag must be clearly identified on the Drawing.

UTM coordinates should appear beside each well, if space permits. Additional comments on wells can be included on the drawing

Well Tag Number: # A136688

"Well Record for Well Cluster" Form Audit Number: # C 21280



Measurements recorded in: ☒ Metric ☐ Imperial

A178469

Tag #: A 178469

Station 903 Ontario Water Resources Act

S-18584

Page of

## Well Owner's Information

First Name	Last Name / Organization Cambridge Company	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) 9 Coupa St.	Municipality Ottawa	Province ON	Postal Code K1L6A8
Telephone No. (inc. area code)			

## Well Location

Address of Well Location (Street Number/Name) 487 Cambridge St S.	Township	Lot	Concession
County/District/Municipality	City/Town/Village Ottawa	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 18	Easting 445048	Northing 5027879
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)
BLK	asphalt	gravel	dance	0 .31
BRN	sand	gravel	100cc	.31 .91
GRY	limestone	shale	1/yard	.91 9.14

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 .31	concrete/flush mount		
.31 5.79	bentonite		
5.79 9.14	litter 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 checked="" type="checkbox"/> Air Percussion		<input type="checkbox"/> Industrial	
<input type="checkbox"/> Other, specify		<input type="checkbox"/> Other, specify	

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
4.03	PVC	.368	0 6.1	

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
4.82	PVC	10	6.1 9.14	

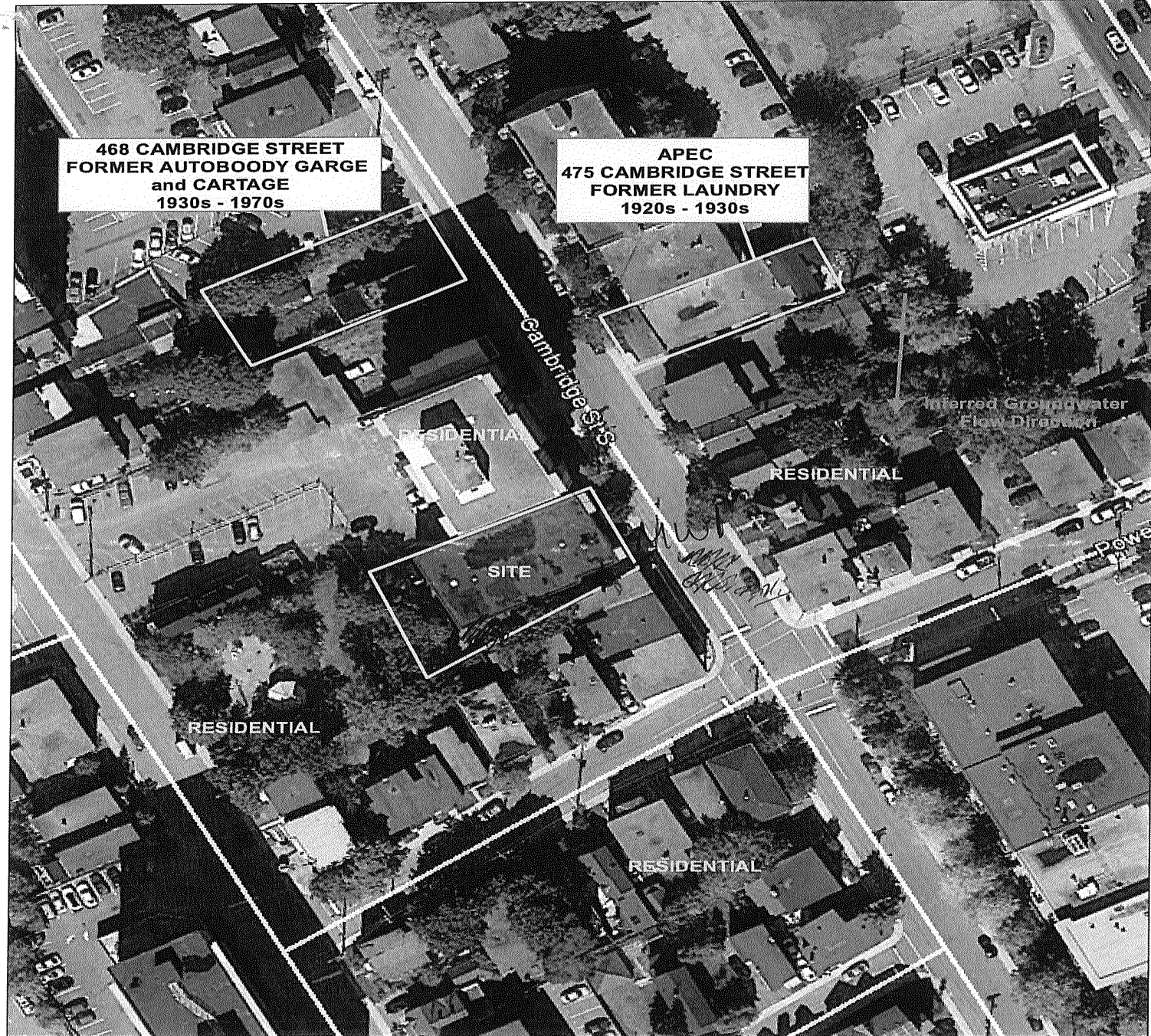
Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Depth (m/ft)	Diameter (cm/in)
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	0 1.22	11.43
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	1.22 9.14	7.62

Business Name of Well Contractor Strata Drilling Group		Well Contractor's Licence No. 72411
Business Address (Street Number/Name) 165 Shields Court		Municipality Markham
Province ON	Postal Code L3R9V2	Business E-mail Address wrecords@stratasoil.com
Bus. Telephone No. (inc. area code) 9059402919	Name of Well Technician (Last Name, First Name) M. Coy	
Well Technician's Licence No. 3656	Signature of Technician and/or Contractor	Date Submitted 20160516

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
<input type="checkbox"/> Clear and sand free		Time (min)	Water Level (m/ft)
<input type="checkbox"/> Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
<input type="checkbox"/> Yes <input type="checkbox"/> No		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	Date Package Delivered
<input type="checkbox"/> Yes <input type="checkbox"/> No	Y Y Y Y M M D D
Date Work Completed	20160513
Ministry Use Only	
Audit No.	222237
Received	JUN 15 2016





468 CAMBRIDGE STREET  
FORMER AUTOBODY GARAGE  
and CARTAGE  
1930s - 1970s

APEC  
475 CAMBRIDGE STREET  
FORMER LAUNDRY  
1920s - 1930s

RESIDENTIAL

RESIDENTIAL

SITE

RESIDENTIAL

RESIDENTIAL

Inferred Groundwater  
Flow Direction

Power

0 5 10 20 30 40 50 Meters

APEC - Area of Potential Environmental Concern



**exp Services Inc.**  
100-2650 Queensview Drive  
Ottawa, Ontario  
K2B 8H6  
T - (613) - 688-1899  
F - (613) - 225-7337

PROJECT TITLE:  
PHASE I  
ENVIRONMENTAL SITE ASSESSMENT  
487 Cambridge Street South  
Ottawa, Ontario

DRAWING TITLE:  
SITE PLAN

PROJECT No.: OTT-00232064-A0	DWN: TG
SCALE: AS SHOWN	CHKD: CK
DATE: April 2016	FIG. No.: 2

C-7241 7222287 JUN 15 2016

# **APPENDIX 3**

## **QUALIFICATIONS OF ASSESSORS**

**Sean Moggridge**  
**B.Eng.**

**paterson**group

## **POSITION**

Junior Environmental Engineer

## **EDUCATION**

Dalhousie University, B.Eng., 2010  
Environmental Engineering

## **EXPERIENCE**

*2011 to Present:*

**Paterson Group Inc.**

Consulting Engineers  
Environmental Division  
Junior Engineer

## **SELECT LIST OF PROJECTS**

Remediation Supervision of Former Alcan Plant – Kingston  
Remediation Supervision of Bulk Fuel Depot Site – Ottawa  
Remediation Supervision of Biohazard Site – Ottawa  
Post-construction Impact Monitoring – Ottawa, Cornwall  
Designated Substance and Asbestos Surveys – Various Locations, Ottawa  
Asbestos Air Testing – Various Locations, Ottawa  
Groundwater Monitoring and Sampling – Various Location, Ottawa  
Phase I & II ESA – Various Locations, Ontario and West Quebec

**Environmental  
Engineering**

**Geotechnical  
Engineering**

**Materials Testing  
Quality Control**

**Building Sciences**

**Hydrogeology**

**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  
Consulting Engineers of Ontario

## EXPERIENCE

*1991 to Present*

### **Paterson Group Inc.**

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

## SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island  
Rideau Centre Expansion project - Ottawa  
Agricultural Supply Facilities - Eastern Ontario  
Laboratory Facility – Edmonton (Alberta)  
Ottawa International Airport - Contaminant Migration Study - Ottawa  
Investigation and Remediation – Cotton Mill Redevelopment, Cornwall  
Billings Hurdman Interconnect - Ottawa  
Bank Street Reconstruction - Ottawa  
Environmental Review – Various Laboratories across Canada - CFIA  
Dwyer Hill Training Centre – Ottawa  
Nortel Networks Environmental Monitoring - Carling Campus – Ottawa  
Remediation Program - Block D Lands – Kingston  
Investigation of former landfill sites – City of Ottawa  
Record of Site Condition for Railway Lands – North Bay  
Assessment and Remediation - North Bay Airport  
Commercial Properties – Guelph and Brampton  
Brownfields Remediation – Alcan Site - Kingston  
PWGSC Building – 90 Elgin Street - Ottawa  
Remediation Program - Ottawa Train Yards  
MHLH Facility – CFB Petawawa  
Ottawa Congress Centre  
Lansdowne Park Redevelopment - Ottawa

**Environmental  
Engineering**

**Geotechnical  
Engineering**

**Materials Testing  
Quality Control**

**Building Science**

**Hydrogeology**

**Archaeological  
Services**