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Phase I Environmental Site Assessment

176 Nepean Street and 293 to 307 Lisgar Street
Ottawa, Ontario

Prepared For

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by the Richcraft Group of Companies to conduct a Phase I Environmental Site Assessment (ESA) of the properties addressed 176 Nepean Street and 293 to 307 Lisgar Street. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I ESA Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

The results of the historical research indicated that the Phase I Property was first developed as early as 1888, with residential buildings addressed as follows: 164, 168-170, 174 and 176 Nepean Street, as well as 293, 297-299, 303-307 and 309 Lisgar Street. Based on the presence of historical structures, it is considered likely that building foundations were backfilled and remain present on-site. The potential for imported fill of unknown quality within the former building foundations is considered to represent an area of potential environmental concern (APEC) on the Phase I Property. No other historical on-site potentially contaminating activities (PCAs) were identified.

Several historical off-site PCAs were present in the immediate vicinity of the Phase I Property: a former drycleaner adjacent to the west (211 Bank Street), a former drycleaner approximately 20m to the northeast (146 Nepean Street), a former printing industry 20m to the north across Nepean Street (171-175 Nepean Street), a former drycleaner approximately 30m to the southwest across Lisgar Street (320 Lisgar Street) and a former plateglass industry 20m to the south across Lisgar Street (300 Lisgar Street).

The former drycleaner located at 211 Bank Street is considered to represent an APEC on the Phase I property based its proximity to the Phase I Property.

Despite the proximity of the remaining off-site PCAs noted above, they are not considered to represent a concern to the Phase I Property based on information contained in our files.

At the time of the site visit, an aboveground furnace oil storage tank (AST), no longer in use, was observed in the basement of the residential dwelling situated on the southwest corner of the Phase I Property. This PCA is considered to represent an APEC on the Phase I Property.

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.

Recommendations

Based on the results of the Phase I ESA, **in our opinion, a Phase II Environmental Site Assessment is required for the property.**

As discussed in Subsection 6.2, based on the age of the residential dwelling, potentially asbestos containing materials that may be present include vinyl floor tiles, linoleum, hard plaster, decorative plaster, drywall joint compound, acoustic ceiling tiles and exterior stucco. Lead based paints may also be present on older original painted surfaces beneath newer paints. It is our understanding that the subject structure will be demolished prior to redevelopment. Prior to any demolition activities, a designated substance survey (DSS) must be conducted for the existing structure, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

1.0 INTRODUCTION

At the request of Richcraft (Lisgar) Ltd., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of the properties located at 176 Nepean Street, 293 and 307 Lisgar Street, in the City of Ottawa, Ontario. It should be noted that 307 Lisgar Street includes civic address 309 Lisgar Street as well. 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 Ms. Fairouz Wahab of Richcraft Group of Companies (Richcraft). The Richcraft offices are located at 2280 St. Laurent Boulevard, Suite 201, Ottawa, Ontario. Ms. Wahab can be reached by telephone at (613) 739-7111.

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: 176 Nepean Street, 293 and 307 Lisgar Street, Ottawa, Ontario. Note that the parcel addressed 307 Lisgar Street also includes civic address 309 Lisgar Street.

Legal Description: Lot 37, Part of Lots 36 and 38 (South Nepean Street) and Lots 37, 38 and Part of Lot 39 (North Lisgar Street) RP 2996, City of Ottawa, Ontario.

Property Identification Numbers:

041150239, 041150242 and 041150249

Location: The Phase I Property is situated between Nepean and Lisgar Streets, approximately 45m east of Bank Street. The subject site is shown on Figure 1 - Key Plan following the body of this report.

Latitude and Longitude: 45° 25' 02" N, 75° 41' 49" W

Site Description:

Configuration: Irregular

Site Area: 0.27 hectares (approximate)

Zoning: R5B – Residential 5th Density Zone.

Current Use: The parcel addressed 176 Nepean Street is currently occupied by a community garden, while the parcel addressed 307 Lisgar Street is occupied by a 3-storey residential dwelling (309 Lisgar Street) and a parking lot. The southeastern portion of 307 Lisgar Street and 293 Lisgar Street are currently used as a storage area by Claridge Homes in conjunction with their residential development under construction at 287 Lisgar Street, immediately east of the Phase I Property.

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

Based on the Fire Insurance Plans for the Phase I Property, it is our interpretation that the Phase I Property was first developed for residential purposes circa 1888.

Fire Insurance Plans

Fire Insurance Plans (FIPs) from 1888, 1912 and 1956 were reviewed for the Phase I Property and Phase I study area. According to the FIPs, the property was previously occupied by the following civic addresses: 162, 164, 174 and 176 Nepean Street, as well as 293, 297, 299, 303, 307 and 309 Lisgar Street. The 1888 FIP identifies seven residential structures on the Phase I Property. A single family residence previously present at 164 Nepean Street has been redeveloped with a larger residential building on the 1912 FIP. The 1912 FIP also identifies 176 Nepean Street as the Capital Blend Tea Company. Otherwise no significant changes were noted from the 1888 FIP. On the 1952 FIPs, the building at 176 Nepean Street is denoted as apartments, the previous dwellings at 168 through 174 Nepean Street have been redeveloped with an apartment building and an apartment building has been constructed at 293 Lisgar Street. The FIP review did not identify any potentially contaminating activities (PCAs) on the Phase I Property.

Adjacent and neighbouring properties within the Phase I Study Area were generally used for residential and commercial purposes with occasional industrial land use. The 1888 and 1912 FIPs did not identify any PCAs considered to result in areas of potential environmental concern (APECs) on the Phase I Property.

The 1956 FIPs identify a dry cleaners at 146 Nepean Street, approximately 20 m northeast of the Phase I Property, a printers (Lowe-Martin Ltd.) at 171 to 175 Nepean Street, approximately 20 m north of the Phase I Property and an industrial property (Pittsburg Plate Glass Company) at 302 Lisgar Street, approximately 20 m to the south of the Phase I Property. Although the former cleaner is in close proximity to the subject land, it is considered to be orientated down-gradient of the Phase I Property based on regional topography in combination with water levels measured during the concurrent Geotechnical Investigation and is not considered to represent a concern to the Phase I Property. As discussed further in this report, a remediation program has been conducted at 302 Lisgar Street and a Record of Site Condition (RSC) filed in the Ministry of the Environment and Climate Change's (MOECC) Environmental Site Registry (ESR). The former industry at this location is therefore not considered to pose a concern to the Phase I Property. Despite its close proximity to the Phase I Property, based on information in our files along with its downgradient orientation with respect to the subject land, the former printers at 171 to 175 Nepean Street is not considered to represent a potential concern on the Phase I Property.

A review of the 1956 FIPs identified a variety of other PCAs within the Phase I Study area. These PCAs, as presented on Drawing PE3651-2 – Surrounding Land Use Plan, are not considered to pose a concern to the Phase I Property, based on their separation distances and/or orientations with respect to the subject land.

City of Ottawa Street Directories

As part of the Phase I ESA, city directories were reviewed at the National Archives in approximate 10 year intervals, between 1900 and 2010. Based on the directories, the subject addresses were first listed between 1875 and 1920, and have always been listed as residential properties.

The directory review did not identify any PCAs on the Phase I Property, although a variety of off-site PCAs were identified within the Phase I Study Area. A former dry cleaners listed at 211 Bank Street (178 Nepean), situated immediately west of the Phase I Property, is considered to represent an APEC on the Phase I Property.

Otherwise, off-site PCAs are not considered to pose an environmental concern to the subject land, based on their respective separation distances and/or orientations with respect to the subject land in combination with information contained in our files (235 to 241 Bank Street and 318 to 320 Lisgar Street).

As noted previously, historical PCAs within the Phase I ESA Study Area are presented on Drawing PE3651-2 – Surrounding Land Use Plan.

Chain of Title

Paterson verified the current land titles for the properties constituting the subject site with Read Abstracts Limited of Ottawa, Ontario. The records review extended back to 1868. The lots were originally owned by Tylee and Moberly and were sold in sections to private individuals between 1874 and 1876. The lots were primarily owned by various individuals and occasional corporations, until purchased by Richcraft (Lisgar) Ltd., the current property owner, between 2011 and 2014. The chain of title did not identify any potentially contaminating activities on the Phase I Property.

Plan of Survey

A sketch prepared by Annis, O'Sullivan, Vollebekk Ltd. and dated April 21, 2011, (revised January 9, 2018), was reviewed as part of this assessment. The survey plan shows the Phase I Property in its current configuration.

Environmental Reports

Paterson has conducted several investigations in the immediate vicinity of the Phase I Property. No potential environmental concerns were identified; several off-site historical PCAs were investigated and addressed.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on August 8, 2017. The subject site and adjacent properties were 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. No PCB waste storage sites are located within the Phase I study area.

Ontario Ministry of Environment and Climate Change (MOECC) Instruments

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOECC issued instruments for the Phase I Property. Based on the MOECC response dated August 18, 2017, no records were identified. A copy of the MOECC response is provided in Appendix 2.

MOECC Coal Gasification Plant Inventory

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

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOE for the site or adjacent properties. Based on the MOECC response dated August 18, 2017, no incident reports were identified. A copy of the MOECC response is provided in Appendix 2.

MOECC Waste Management Records

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. Based on the MOECC response dated August 18, 2017, no waste management records were identified. A copy of the MOECC response is provided in Appendix 2.

MOECC Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions have been submitted to the MOECC. Based on the MOECC response dated August 18, 2017, no reports were identified. A copy of the MOECC response is provided in Appendix 2.

MOECC Brownfields Environmental Site Registry (ESR)

A search of the MOECC Brownfields ESR was conducted for properties within the Phase I Study Area. According to the ESR, no Records of Site Condition (RSCs) have been filed for the Phase I Property.

RSCs were filed for the following properties within the Phase I study area: 300 Lisgar Street (approximately 20m south of the Phase I Property), 324 Laurier Avenue West (approximately 110m to the northwest), 433 Cooper Street (approximately 150m to the southwest) and 235-245 Kent Street (approximately 160 m to the west-southwest). The RSCs were all filed by Paterson Group, with the exception of that filed for 433 Cooper Street. Impacts identified at 300 Lisgar Street were limited to 35 m³ of contaminated soil, which was disposed off-site at a registered landfill site. Based on information in the ESR in combination with information in Paterson's files, this property is not considered to represent a concern to the Phase I Property. Based on information in the ESR and/or our files, in combination with their separation distances and/or orientations, the remaining RSC properties noted above are not considered to represent environmental concerns with respect to the subject land.

MOECC Waste Disposal Site Inventory

The MOECC 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. Based on the available information, no waste disposal sites were present within the Phase I Study Area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on August 8, 2017. The search did not reveal any natural features or areas of natural significance on the Phase I Property or other properties within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on August 8, 2017 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 general area of the site. A copy of the TSSA correspondence is included in Appendix 2.

City of Ottawa Landfill Document

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

City of Ottawa Historical Land Use Inventory (HLUI)

An HLUI application form, requesting information from the City’s Historical Land Use Inventory (HLUI 2005) database for the Phase I Property and adjacent lands, was submitted to the City of Ottawa on August 18, 2017. The City of Ottawa response received on August 28, 2017, identified no activities in the HLUI database for the Phase I Property. There were 24 activities in the HLUI databased for properties within 50m of the Phase I Property. The distances and orientations of each activity with respect to the Phase I Property, as listed in Table 1, are based on depicted locations in the overview map attached by the City. A copy of the City’s response has been included in Appendix 2.

Table 1 Historical Land Use Inventory				
Address	Activity ID	Activity Name	Distance / Orientation from site	Potential Environmental Concern (Y / N)
Lisgar Street				
291	9401	Nathan Sherwood-Taylor (Laundries and Cleaners)	Adjacent to the east	N
300	6618 2998	Hobbs Glass Limited (Glass and Glass Products Industries) Canus Plastics Inc.	20m S	N
317	5385	Fred H. Boughton (Platemaking, Typesetting and Bindery Industry)	25m W	N
318	10759	Pestroy Co. (Services to Buildings and Dwellings)	25m SW	N
319	2200	Brisebois Dental Laboratory (Other Manufactured Products Industries)	15m W	N
320	3218	Cleanaway Laundry and Dry Cleaners (Laundries and Cleaners)	35m SW	N
Gloucester Street				
150	11053	Pook Sheet Metal Works	50m N	N
174	11438	Plus Cleaners	50m N	N
Nepean Street				
146	8796 7912	Monson’s Deluxe Dry Cleaners Koffman Signs	20m NE	N
171-175	8571	Lowe-Martin Company Ltd. (Commercial Printing Industry)	20m N	N
Cooper Street				
355	3537	Christiancurrent Ottawa (Combined Publishing and Printing Industry)	50m SE	N

Table 1 Continued Historical Land Use Inventory				
Address	Activity ID	Activity Name	Distance / Orientation from site	Potential Environmental Concern (Y / N)
375	1594 3021	Bill's Auto Service Capital Audio Technical Services (Record Player, Radio and Television Receiver Industry)	50m S	N
Bank Street				
197	12453	Sherwin Williams Paint Co. of Canada Ltd.	60m NW	N
205	875	A.C. Schlender (Photographers)	20m NW	N
207	3089 1966	Building and Maintenance Industry To Be (Combined Printing and Publishing Industry)	20m NW	N
211	2238	Brown's Cleaners	Adjacent to the west	Y
Table 1 Continued Historical Land Use Inventory				
Address	Activity ID	Activity Name	Distance / Orientation from site	Potential Environmental Concern (Y / N)
Bank Street Continued				
213	1378	Audiomart (Electrical and Electronic Machinery, Equipment and Supplies, Wholesale)	Adjacent to the west	N
235	6498	Jarman Frank (Other Furniture and Fixture Industries)	50m SW	N
246	5219	Empire Imaging Inc. (Photographers)	80m SW	N
O'Connor Street				
190	4419	Department of National Defense (Research Development Branch)	30m NE	N

Based on the results of the HLUI search, PCAs considered to result in APECs on the Phase I Property include the former drycleaners at 211 Bank Street. The remaining activities listed above are not considered to pose an environmental concern to the Phase I Property, based on their nature, their separation distances and orientations with respect to the Phase I Property and/or information contained in our files (Paterson has conducted several environmental investigations in the immediate vicinity of the Phase I Property).

Former Industrial Sites

The report entitled “Mapping and Assessment of Former Industrial Sites, City of Ottawa” was also reviewed. The Phase I Property was not listed in the database of former industrial sites. Three (3) former industrial sites were identified in the vicinity of the Phase I Property, and are summarized in the following table:

Table 2 Former Industrial Site Summary					
Site	Location	Owner	Type of Operation	Time Period	Approx. Distance
40	175 Nepean Street	Lower-Martin Ltd.	Printing, Publishing	1928-1965	20m N
84	300 Laurier Avenue West	Ottawa Photo Engraving Co.	Printing, Publishing & Allied Industries -Lithographers, engravers, stereotypers	1925-1950	110m NW
85	230 Laurier Avenue West	Mutual Press	-Printing, Publishing & Allied Industries	1936-1965	160m N

The former industrial sites presented above are not considered to pose an environmental concern to the Phase I Property based on their separation distances with respect to the subject land.

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:

- 1928 The Phase I Property is occupied by multiple residential buildings. The adjacent and neighbouring properties appear to be used for residential and/or commercial purposes.

- 1950 A lot fronting onto Nepean Street and occupied by a single family residential dwelling in the previous photograph, has been redeveloped with a larger residential building. No other changes to the Phase I Property can be distinguished from the photograph. Adjacent and neighbouring properties appear to remain unchanged.

- 1968 Residential buildings on the south-central portion of the Phase I Property, fronting onto Lisgar Street, have been demolished and a parking lot is present in their place. An apartment building has been constructed to the east of the parking lot.
- The remainder of the Phase I Property is unchanged from the previous photograph. Properties to the north of the Phase I Property, along the east side of Bank Street and north side of Nepean Street, appear to have been redeveloped for residential or commercial purposes. No other significant changes appear to have been made to surrounding properties.
- 1978 Buildings previously fronting onto Nepean Street, on the north-central portion of the Phase I Property, are no longer present and the lot is being used for parking. Three residential buildings remain on the western and southeastern portions of the Phase I Property. No significant changes from the previous photograph, were noted with respect to the adjacent and neighbouring properties.
- 1985 The Phase I Property remains unchanged. No significant changes appear to have been made to the surrounding lands.
- 1994 The Phase I Property remains unchanged. Buildings previously occupying the land to the southeast, across Lisgar Street, have been demolished and replaced with a paved parking lot.
- 2005 (City of Ottawa Website) No significant changes have been made to the subject site or surrounding properties.
- 2014 (City of Ottawa Website) No significant changes have been made to the subject site or surrounding properties.

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

Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the regional topography in the general area of the Phase I Property slopes gradually downward to the north and northwest. According to the maps, the nearest water body is the Ottawa River, located approximately 800 m to the northwest of the Phase I Property. 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.” The subject site is located in the Central St. Lawrence Lowland, which is generally less than 150m above sea level.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of Paleozoic shale of the Billings Formation. Overburden soils are shown as off-shore marine sediments, with a drift thickness on the order of 5 to 15 m.

Water Well Records

A request was made to the MOECC Wells Helpdesk, to provide water well records for all drilled wells within 250 m of the Phase I Property. The MOECC response identified 12 monitoring well records, 2 abandonment records and one domestic well record for properties within the Phase I Study Area; there were no well records identified for the Phase I Property.

Monitoring well and abandonment records were identified for the following properties: 269 Laurier Avenue West, 180 Metcalfe Street, 154 O’Connor Street, 150 Slater Street, 296 Bank Street and Sommerset Street West (between Bank Street and O’Connor Street). These properties are not considered to represent environmental concerns to the Phase I Property based on their separation distances and/or orientations with respect to the subject land.

The domestic well record, dated 1948, is for a property along the north side of Nepean Street, just west of Bank Street. Due to the availability of City water in the Phase I study area, it is our opinion that there are no drinking water wells remaining within the Phase I Study Area. The well records show that subsurface conditions within the Phase I Study Area consist of silty sand and clay with shale bedrock occurring at a depth of between 3 and 7.5 meters below grade. A copy of the MOECC response is provided in the Appendix 2.

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 majority of the study area consists of residential dwellings, apartment buildings and commercial businesses. Past known land use in the study area is residential and commercial. The Ottawa River and Rideau Canal are the closest significant water bodies and are present approximately 850m to the northwest and 900m to the northeast of the site respectively. No areas of natural significance are known to exist within the Phase I study area.

5.0 INTERVIEWS

Property Owner Representatives

Ms. Fairouz Wahab, a senior project manager with Richcraft Group of Companies (Richcraft), the current property owner, was interviewed via email at the time of the site assessment. Ms. Wahab indicated that the property at 307 Lisgar Street was purchased in 2011, while the adjacent parcels at 176 Nepean Street and 293 Lisgar Street were purchased later. Mr. Jean-Francois Lepage, a property manager with Richcraft since 2015, was interviewed during the site visit. Neither Ms. Wahab, nor Mr. Lepage, identified any potential concerns regarding the Phase I Property or surrounding lands.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

A representative from the Environmental Department of Paterson Group conducted a site visit on August 14, 2017. Weather conditions were partly cloudy with a temperature of approximately 25° C. At the time of the site visit, the neighbouring properties within the Phase I study area were also observed, from publicly accessible areas.

6.2 Specific Observations at Phase I Property

Buildings and Structures

A single-family residential dwelling (civic address 309 Lisgar Street) is situated on the southwest corner of the Phase I Property. The dwelling is two stories with a full basement.

The original portion of the dwelling is constructed with a stone and mortar foundation and is finished on the exterior with stucco plaster, while the rear addition is constructed with a concrete block foundation and finished with vinyl siding. The roof of the building is peaked and covered with asphaltic shingles.

The building is considered to have been constructed as early as 1888 based on a review of fire insurance plans (FIPs). The building is considered to have originally been heated with coal-fired equipment prior to conversion to furnace oil and most recently, natural gas. Vent and fill pipes indicating the presence of an existing interior aboveground storage tank (AST) were observed protruding from the west foundation wall of the original portion of the dwelling, while a disconnected gas service was noted at the southeast corner of the building.

Other structures on the Phase I Property include a parking kiosk associated with the parking lot on site. The southeastern portion of the Phase I Property, addressed 293 Lisgar Street, is currently being used by Claridge Homes for storage associated with the residential construction on the adjacent property to the east (287 Lisgar Street). Structures at this location include a waste bin, a portable toilet, two site trailers and building materials.

Underground Utilities

Underground service locates were completed for the subject site in August of 2017, prior to conducting a Geotechnical Investigation. Underground utilities present on the Phase I Property include telephone, hydro and storm sewers. Approximate locations of underground utilities are shown on Drawing PE3651-1 – Site Plan.

Site Features

As noted previously, a residential dwelling occupies the southwestern portion of the Phase I Property and the northwestern portion of the Phase I Property is occupied by a community garden. The remainder of the property is occupied by a paved parking lot. Small treed areas are present along the southwest and northeast property boundaries.

Site drainage consists primarily of sheet flow to a catch basins along Lisgar Street and Nepean Street. No standing water or evidence of surficial staining was observed on the exterior of the Phase I Property at the time of the site visit.

No aboveground storage tanks (ASTs) or evidence of underground storage tanks (USTs) were observed on the exterior of the property at the time of the site visit.

A catch basin was noted on the northwestern portion of the Phase I Property during the concurrent geotechnical investigation. With the exception of buried services discussed above, no other underground structures, drains, pits, or sumps were observed on the exterior of the Phase I Property during the site visit. No wells or private sewage systems were observed onsite, nor are any expected to be present, as the site is located in a municipally-serviced area.

Waste generated on site consists of domestic waste generated from the site trailers situated on the eastern portion of the Phase I Property. The waste is stored in an on-site storage bin and is disposed of by a licenced contractor as necessary. No other waste is currently generated on site.

No evidence of recent excavation was observed on the exterior of the subject property. No evidence of current or former railway or spur lines on the subject land were observed at the time of the site visit. There were no unidentified substances observed on the exterior of the Phase I Property.

The above-noted site features are shown on Drawing PE3651-1 - Site Plan.

Fill Material

No obvious signs of fill material were noted at the time of the site visit. Fill material was identified on the Phase I Property during the concurrent Geotechnical Investigation. The fill material consisted of crushed stone associated with the pavement structure, as well as a silty sand and gravel fill material with brick, concrete and coal fragments. This material was present beneath the pavement structure on the northern and southeastern portions of the site, in the vicinity of former building foundations, to depths ranging from approximately 1.0 to 1.5 m below grade.

Interior Assessment

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

- Floors consist of a combination of carpet, vinyl floor tile (small and large), hardwood and poured concrete (basement only).
- The walls consist of a combination of lathe and plaster and drywall joint compound with paint or paper finishes. Stone and mortar or concrete block walls were present in the basement.
- The ceilings consist of a combination of lathe and plaster, gypsum board, decorative plaster, acoustic ceiling tile, and a pressboard material. Basements in the ceiling were unfinished.
- Lighting is provided by fluorescent and incandescent fixtures.

The most recent heating system consists of a natural gas fired furnace. Prior to conversion to natural gas the dwelling was originally heated with oil-fired equipment. There was no evidence of an underground storage tank (UST) observed at the time of the site visit, although a domestic-sized aboveground storage tank (AST) was observed in the basement.

The AST was situated on a concrete pad along the exterior west wall, at the time of the site visit. The tank appeared to be in fair to good condition with no obvious pitting or pinholes. The age of the tank is unknown as no tag was present on the AST. No hydrocarbon odours or signs of leakage or staining were noted at the time of the site visit. It should be noted that the basement floor was largely covered with miscellaneous items at the time of the site visit.

Other chemicals observed within the dwelling were limited to commercially available cleaning and maintenance products including paint. The chemicals were stored on the basement floor along the east wall of the building. No apparent signs of leakage or staining were noted in the vicinity of the storage area. No drains, pits or sumps were noted within the subject building at the time of the site visit. As noted previously, the floors were largely covered with miscellaneous items and debris at the time of the site visit.

Hazardous Building Materials

Based on the age of the residential dwelling (circa 1875), potential asbestos containing materials (ACMs) observed within the structure include a variety of floor tiles, linoleum, decorative plaster, hard plaster, acoustic ceiling tiles, drywall joint compound and exterior stucco.

Based on the age of the dwelling, lead-based paint may also be present on older or original painted surfaces.

Based on the age of the dwelling, urea formaldehyde foam insulation may be present. No signs of UFFI were noted at the time of the site visit at locations where wall cavities were open.

Ozone-depleting substances (ODSs) noted at the time of the site visit included a kitchen refrigerator. No potentially PCB-containing light ballasts were noted at the time of the site assessment.

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 - Parking lot and Nepean Street followed by residential;
- South - Lisgar Street followed by a vacant lot and a residential tower with ground floor commercial;
- East - Parking lot and construction site for residential development; and
- West - Residential and commercial.

The current use of the immediately adjacent properties is not considered to pose an environmental concern to the subject site. Land use within the Phase I Study Area is shown on Drawing PE3651-2 – Surrounding Land Use Plan in the Figures section of this report, following the text.

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.

Table 3 Land Use History				
Year	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
Entire Property				
1868	Tylee and Moberly	Unknown	Agricultural or Other	No information from this time period.
Part of Property				
1874	James Foster	Unknown	Agricultural or Other	No information from this time period.
1881	Mary Duncan			
1887	Duncan McGillivray			
1944	Laura Binks	Residential	Residential	Based on 1888 and 1912 FIPs, property used for residential purposes.
1977	Samuel Palef	Residential and parking lot	Residential	Residential redevelopment has occurred along Nepean Street (1950 aerial, 1956 FIP). Residential dwellings along Lisgar Street have been demolished (1968 aerial) and lot used for parking.
1986	Marilyn Palef Steinburg, Zelma Palef, Donald Ross Palef, Allan Mitchell Palef	Residential and parking lot	Residential	Dwellings fronting Nepean Street no longer present and lot used for parking (1978, 1985 aerials).
2011 to present	Richcraft (Lisgar) Ltd.	Residential and parking lot	Residential	No significant changes to land use in 1994, 2005, 2014 aerials.

Table 3 Continued Land Use History				
Year	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
Part of Property				
1882	James Foster	Unknown	Agricultural or Other	No information from this time period.
1936	Norman Foster	Residential	Residential	Based on 1888 and 1912 FIPs, property used for residential purposes.
1965	Wesley Nicol	Residential and parking lot.	Residential	Residential dwellings along Lisgar Street have been demolished (1956 FIP, 1968 aerial) and lot used for parking.
1972	Samuel Palef			
1986	Marilyn Palef Steinburg, Zelma Palef, Donald Ross Palef, Allan Mitchell	Residential and parking lot.	Residential	Dwellings fronting Nepean Street no longer present and lot used for parking (1978, 1985 aerials).
2011, 2014	Richcraft (Lisgar) Ltd.	Residential and parking lot.	Residential	No significant changes to land use in 1994, 2005, 2014 aerials.
Part of Property				
1874	Edward Roofe	Unknown	Agricultural or Other	No information from this time period.
1885	Christina Foster			
1899	James Foster	Residential	Residential	Based on 1888 and 1912 FIPs, property used for residential purposes.
1903	Mary and Eli			
1909	Adam Ballantyne			
1910	Frank Jarman			
1911	George Waterhouse			
1912	Benjamin Stapleton			
1916	Theresa Stapleton			
1937	Norway Realty			
1960	Donn Stapleton	Residential and parking lot.	Residential	Residential redevelopment has occurred along Nepean Street (1950 aerial, 1956 FIP). Residential dwellings along Lisgar Street have been demolished (1968 aerial) and lot used for parking.
1967	Mary Stein Holdings			
1969	Margaret Yeung			
1998	Sophal and Korany Hardy	Residential and parking lot.	Residential	Dwellings fronting Nepean Street no longer present and lot used for parking (1978, 1985 aerials). No changes to land use noted in 1994 aerial.
May 2011	1590522 Ontario Inc.	Residential and parking lot.	Residential	No significant changes to land use in 2005, 2014 aerials.
July 2011	Richcraft (Lisgar) Ltd.			
Part of Property				
1876	James MacLaren and Charles Magee	Unknown	Agricultural or Other	No information from this time period.

Table 3 Continued Land Use History				
Year	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
1883	Freehold Association of Ottawa	Unknown	Agricultural or Other	No information from this time period.
1885	James Foster	Unknown	Agricultural or Other	No information from this time period.
1936	Norman Foster	Residential	Residential	Based on 1888 and 1912 FIPs, property used for residential purposes.
1965	Wesley Nicol	Residential and parking lot	Residential	Residential redevelopment has occurred along Nepean Street (1950 aerial, 1956 FIP). Residential dwellings along Lisgar Street have been demolished (1968 aerial) and lot used for parking.
1972	Samuel Palef			
1986	Marilyn Palef Steinburg, Zelma Palef, Donald Ross Palef, Allan Mitchell Palef	Residential and parking lot	Residential	Dwellings fronting Nepean Street no longer present and lot used for parking (1978, 1985 aerials).
2011, 2014	Richcraft (Lisgar) Ltd.	Residential and parking lot	Residential	No significant changes to land use in 2005, 2014 aerials.
Part of Property				
1874	Daniel Thorburn	Unknown	Agricultural or Other	No information from this time period.
1939	Maude Thorburn	Residential	Residential	Based on 1888 and 1912 FIPs, property used for residential purposes.
1981	464665 Ontario Ltd.	Residential and parking lot	Residential	Residential redevelopment has occurred along Nepean Street (1950 aerial, 1956 FIP). Residential dwellings along Lisgar Street have been demolished (1968 aerial) and lot used for parking. Dwellings fronting Nepean Street no longer present and lot used for parking (1978 aerial).
2011	Richcraft (Lisgar) Ltd.	Residential and parking lot	Residential	No significant changes to land use in 1985, 1994, 2005 and 2014 aerials.
Note: Other observations are with respect to entire property.				

Potentially Contaminating Activities

The following PCAs were identified on the Phase I Property:

- ❑ 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 presence of an interior aboveground storage tank (AST) within the residential dwelling on the southwest portion of the Phase I Property; and
- ❑ Item 30, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Importation of Fill Material of Unknown Quality” - this PCA was identified based on the likelihood of historical building foundations having been infilled.

The following PCAs were identified within the Phase I Study Area:

- ❑ 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 presence former retail fuel outlets at 429 Somerset Street West, 235 Kent Street and 155 O’Connor Street;
- ❑ Item 29, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Glass Manufacturing” – this PCA was identified based on the presence of the Pittsburg Plateglass Company at 300 Lisgar Street;
- ❑ Item 34, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Metal Fabrication” – this PCA was identified based on the presence of a plumbing and sheet metal establishment at 150 Gloucester Street;
- ❑ Item 37, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Operation of Dry Cleaning Equipment (where chemicals are used)” – this PCA was identified based on numerous historical drycleaners situated throughout the Phase I ESA Study Area, as well as several existing drycleaners located at 395 Somerset Street West, 200 Bank Street and 360 Laurier Avenue West;
- ❑ 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 historical automotive service garage/dealerships situated at 348 Lisgar Street and 296 Bank Street, as well as the historical Borden Dairy Company garage and repairs situated at the property currently addressed 395 Somerset Street West.

Several printing industries were also present within the Phase I ESA Study Area. While there is no specific item in Table 2 related to printers, they are considered to be PCAs and are referenced as “Item: Other”.

On-site PCAs noted above and an off-site PCA (former drycleaner) are considered to represent Areas of Potential Environmental Concern (APECs) on the Phase I Property as further discussed in the following section. These PCAs are depicted in red on Drawing PE3651-2 – Surrounding Land use Plan.

Based on their separation distances, orientations with respect to the Phase I Property and/or information contained in our files, the remaining off-site PCAs noted above are not considered to represent APECs on the subject land. These PCAs are depicted in green on Drawing PE3651-2 – Surrounding Land use Plan.

Areas of Potential Environmental Concern (APECs)

The location of the PCAs and resulting APECs as well as the associated contaminants of potential concern (CPCs) and potentially impacted media are presented in the Table 4.

Table 4 Area of Potential Environmental Concern					
Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern with respect to Phase I Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 1	At locations of former building foundations.	30 – Importation of Fill Material of Unknown Quality	On-site	BTEX/PHCs (F ₁ -F ₄) and PAHs	Soil, Groundwater
				Metals	Soil (fill material)
APEC 2	Southwestern portion of Phase I Property	28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	BTEX/PHCs (F ₁ -F ₄)	Soil, Groundwater
APEC 3	Northwestern portion of Phase I Property	37 – Operation of Dry Cleaning Equipment (where chemicals are used)	Off-site	VOCs	Soil, Groundwater

Contaminants of Potential Concern

Based on the past and current uses of the subject site, the following Contaminants of Potential Concern (CPCs) have been identified in the soil and/or groundwater:

- Benzene, ethylbenzene, toluene and xylenes (BTEX);
- Petroleum hydrocarbons fractions (PHCs, F1-F4);
- Polynuclear aromatic hydrocarbons (PAHs);
- Volatile organic compounds (VOCs); and
- Metals, including hydride forming compounds, mercury (Hg), hexavalent chromium (CrVI) and boron hot water soluble (BHWS).

It should be noted that due to their low solubility in water, and the anticipated native soil conditions (low permeability clay) and groundwater conditions (within the bedrock, well below fill materials) potential metal impacts are anticipated in the soil only.

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 Paleozoic shale of the Billings Formation. Overburden soils are shown as off-shore marine sediments, with a drift thickness on the order of 5 to 15 m. During the concurrent Geotechnical Investigation, weathered shale bedrock was encountered at depths ranging from 6.2 to 7.5 m below grade.

Based on site and regional topography, the groundwater flow in the immediate vicinity of the Phase I Property is expected to be in a northerly direction, towards the Ottawa River.

Existing Buildings and Structures

The subject site is currently occupied by a two-storey residential dwelling with a full basement situated on the southwestern portion of the Phase I Property. A parking kiosk is present immediately northeast of the dwelling, while a community garden is situated on the lot addressed 176 Nepean Street, immediately north-northwest of the residential dwelling.

At the time of the site visit, the southeastern portion of the Phase I Property (293 Lisgar Street) was being used as a storage area in association with the ongoing residential construction at 287 Nepean Street, immediately east of the Phase I Property; on-site structures include two site trailers, a waste bin and a portable toilet.

Water Bodies

There are no water bodies on the Phase I Property or within the Phase I Study Area. The closest water bodies are the Ottawa River and the Rideau Canal, located approximately 800 m to the northwest and 900m to the northeast, respectively.

Areas of Natural Significance

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

Drinking Water Wells

According to the MOECC well mapping database, there are no domestic well records for the Phase I Property. One 1948 domestic well record was identified for a property along the north side of Nepean Street, just west of Bank Street, within the Phase I ESA Study Area. Based on the age of the well record and the current municipal services throughout the Phase I ESA Study Area, this domestic well is considered to no longer be in use.

Monitoring Wells

According to the MOECC well mapping database, monitoring well and abandonment records exist for several properties within the Phase I ESA Study Area. These properties are not considered to represent environmental concerns to the Phase I Property based on their separation distances and/or orientations with respect to the subject land.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is currently residential and commercial.

Potential Contaminating Activities and Areas of Potential Environmental Concern

As presented in Table 4 in Section 7.1 of this report, two on-site PCAs and one off-site PCA are considered to have resulted in three APECs on the Phase I Property.

Contaminants of Potential Concern

As noted in Table 4, CPCs associated with the APECs identified in this Phase I ESA include BTEX, PHCs (F₁-F₄), PAHs, VOCs and metals in the soil and/or groundwater beneath 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 areas of potential environmental concern on the subject site.

The presence of potentially contaminating activities 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

Assessment

Paterson Group was retained by the Richcraft Group of Companies to conduct a Phase I Environmental Site Assessment (ESA) of the properties addressed 176 Nepean Street and 293 to 307 Lisgar Street. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I ESA Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

The results of the historical research indicated that the Phase I Property was first developed as early as 1888, with residential buildings addressed as follows: 164, 168-170, 174 and 176 Nepean Street, as well as 293, 297-299, 303-307 and 309 Lisgar Street. Based on the presence of historical structures, it is considered likely that building foundations were backfilled and remain present on-site. The potential for imported fill of unknown quality within the former building foundations is considered to represent an area of potential environmental concern (APEC) on the Phase I Property. No other historical on-site potentially contaminating activities (PCAs) were identified.

Several historical off-site PCAs were present in the immediate vicinity of the Phase I Property: a former drycleaner adjacent to the west (211 Bank Street), a former drycleaner approximately 20m to the northeast (146 Nepean Street), a former printing industry 20m to the north across Nepean Street (171-175 Nepean Street), a former drycleaner approximately 30m to the southwest across Lisgar Street (320 Lisgar Street) and a former plateglass industry 20m to the south across Lisgar Street (300 Lisgar Street).

The former drycleaner located at 211 Bank Street is considered to represent an APEC on the Phase I property based its proximity to the Phase I Property.

Despite the proximity of the remaining off-site PCAs noted above, they are not considered to represent a concern to the Phase I Property based on information contained in our files.

At the time of the site visit, an aboveground furnace oil storage tank (AST), no longer in use, was observed in the basement of the residential dwelling situated on the southwest corner of the Phase I Property. This PCA is considered to represent an APEC on the Phase I Property.

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.

Recommendations

Based on the results of the Phase I ESA, **in our opinion, a Phase II Environmental Site Assessment is required for the property.**

As discussed in Subsection 6.2, based on the age of the residential dwelling, potentially asbestos containing materials that may be present include vinyl floor tiles, linoleum, hard plaster, decorative plaster, drywall joint compound, acoustic ceiling tiles and exterior stucco. Lead based paints may also be present on older original painted surfaces beneath newer paints. It is our understanding that the subject structure will be demolished prior to redevelopment. Prior to any demolition activities, a designated substance survey (DSS) must be conducted for the existing structure, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

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 Richcraft (Lisgar) Ltd. Permission and notification from Richcraft (Lisgar) Ltd. and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Karyn Munch, P.Eng., QP_{ESA}



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



Report Distribution:

- Richcraft (Lisgar) Ltd. (5 copies and 1 PDF copy)
- Paterson Group (1 copy)

10.0 REFERENCES

Federal Records

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

Provincial Records

MOECC Freedom of Information and Privacy Office
MOECC Municipal Coal Gasification Plant Site Inventory, 1991
MOECC document titled “Waste Disposal Site Inventory in Ontario”
MOECC Brownfields Environmental Site Registry
Office of Technical Standards and Safety Authority, Fuels Safety Branch
MNR Areas of Natural Significance
MOECC Water Well Inventory
Chapman, L.J., and Putnam, D.F., 1984: ‘The Physiography of Southern Ontario, Third Edition’, Ontario Geological Survey Special Volume 2

Municipal Records

City of Ottawa Document “Old Landfill Management Strategy, Phase I - Identification of Sites.”, prepared by Golder Associates, 2004
The City of Ottawa Historical Land Use Inventory
Intera Technologies Limited Report “Mapping and Assessment of Former Industrial Sites, City of Ottawa”, 1988
The City of Ottawa eMap website

Local Information Sources

Chain of Title obtained through Read Abstracts Limited, August 2017
Survey Sketch, prepared by Annis, O’Sullivan, Vollebekk Ltd., April 2011 (revised January 2018)
Geotechnical Investigation
Personal Interviews

Public Information Sources

Google Earth
Google Maps/Street View

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE3651-1 – SITE PLAN

DRAWING PE3651-2 – SURROUNDING LAND USE PLAN

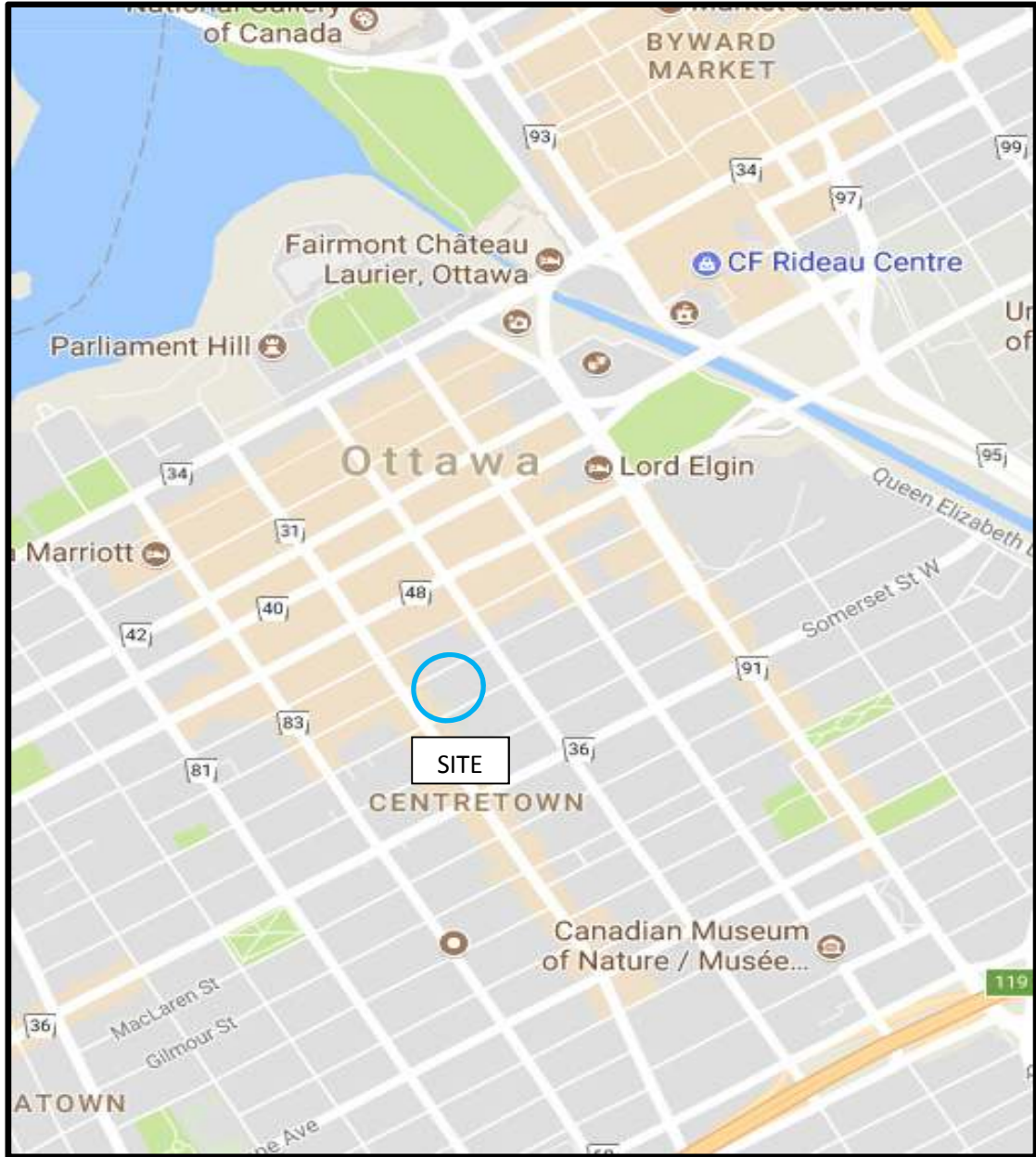


FIGURE 1
KEY PLAN

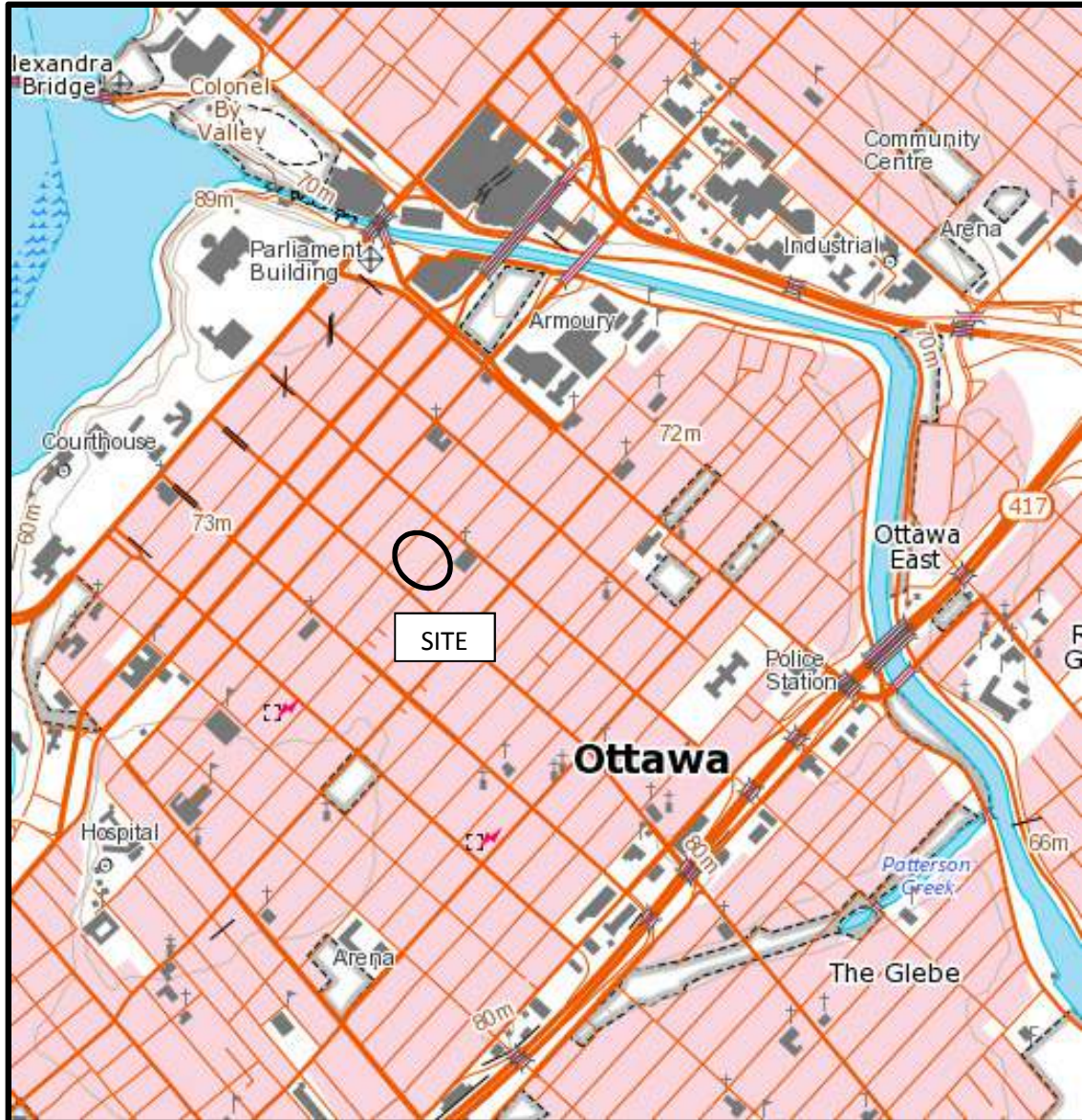
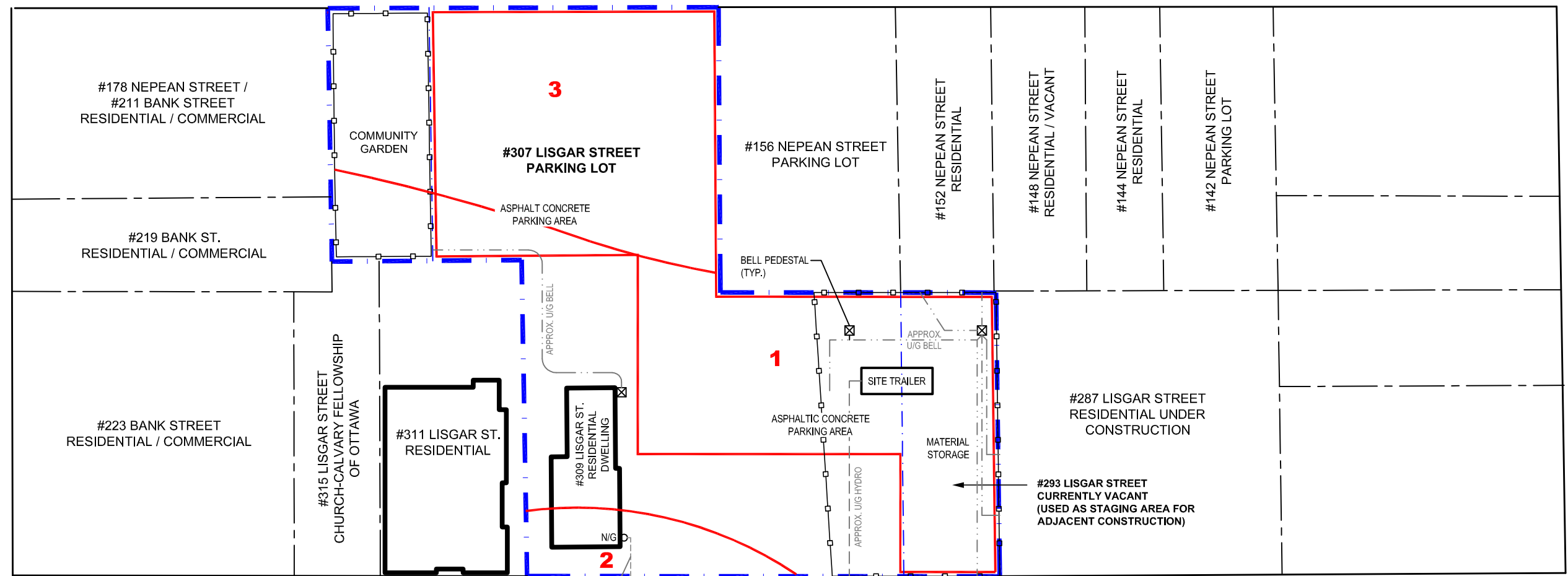
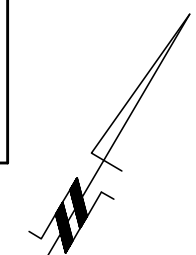


FIGURE 2
TOPOGRAPHIC MAP



NEPEAN STREET



BANK STREET

O'CONNOR STREET

LISGAR STREET

POTENTIALLY CONTAMINATING ACTIVITIES RESULTING IN AREAS OF POTENTIAL CONCERN ON PHASE I PROPERTY

1. FILL MATERIAL WITHIN FORMER BUILDING FOUNDATIONS (ITEM 30)
2. FUEL STORAGE WITHIN AN EXISTING INTERIOR AST (ITEM 28)
3. FORMER OFFSITE DRY CLEANER (ITEM 37)



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NO.	REVISIONS	DATE	INITIAL
0			

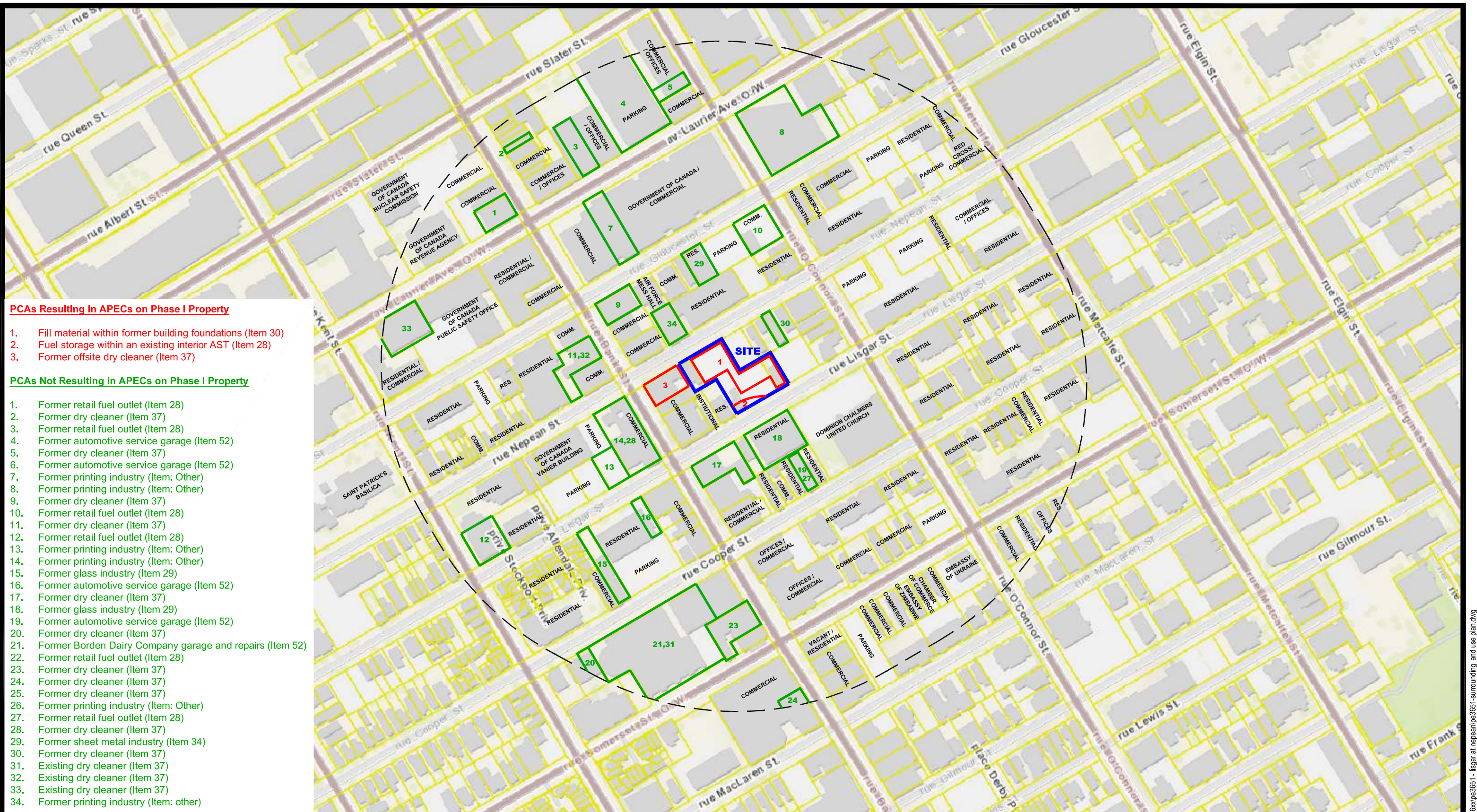
RICHCRAFT HOMES
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
176 NEPEAN STREET AND 293 LISGAR STREET

OTTAWA, ONTARIO

SITE PLAN

Scale:	1:500	Date:	08/2017
Drawn by:	RCG	Report No.:	PE3651-1
Checked by:	KM	Dwg. No.:	PE3651-1
Approved by:	MSD	Revision No.:	0

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PCAs Resulting in APECs on Phase I Property

- 1. Fill material within former building foundations (Item 30)
- 2. Fuel storage within an existing interior AST (Item 28)
- 3. Former offsite dry cleaner (Item 37)

PCAs Not Resulting in APECs on Phase I Property

- 1. Former retail fuel outlet (Item 28)
- 2. Former dry cleaner (Item 37)
- 3. Former retail fuel outlet (Item 28)
- 4. Former automotive service garage (Item 52)
- 5. Former dry cleaner (Item 37)
- 6. Former automotive service garage (Item 52)
- 7. Former printing industry (Item: Other)
- 8. Former printing industry (Item: Other)
- 9. Former dry cleaner (Item 37)
- 10. Former retail fuel outlet (Item 28)
- 11. Former dry cleaner (Item 37)
- 12. Former retail fuel outlet (Item 28)
- 13. Former printing industry (Item: Other)
- 14. Former printing industry (Item: Other)
- 15. Former glass industry (Item 29)
- 16. Former automotive service garage (Item 52)
- 17. Former dry cleaner (Item 37)
- 18. Former glass industry (Item 29)
- 19. Former automotive service garage (Item 52)
- 20. Former dry cleaner (Item 37)
- 21. Former Borden Dairy Company garage and repairs (Item 52)
- 22. Former retail fuel outlet (Item 28)
- 23. Former dry cleaner (Item 37)
- 24. Former dry cleaner (Item 37)
- 25. Former dry cleaner (Item 37)
- 26. Former printing industry (Item: Other)
- 27. Former retail fuel outlet (Item 28)
- 28. Former dry cleaner (Item 37)
- 29. Former sheet metal industry (Item 34)
- 30. Former dry cleaner (Item 37)
- 31. Existing dry cleaner (Item 37)
- 32. Existing dry cleaner (Item 37)
- 33. Existing dry cleaner (Item 37)
- 34. Former printing industry (Item: other)

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RICHCRAFT HOMES
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
176 NEPEAN STREET AND 293 LISGAR STREET

OTTAWA, ONTARIO

SURROUNDING LAND USE PLAN

Scale:	1:3000	Date:	08/2017
Drawn by:	RCG	Report No.:	PE3651-1
Checked by:	KM	Dwg. No.:	PE3651-2
Approved by:	MSD	Revision No.:	0

APPENDIX 1

CHAIN OF TITLE

PLAN OF SURVEY

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS



READ Abstracts Limited

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4

Email: search@readsearch.com

Tel.: 613-236-0664

Fax: 613-236-3677

ENVIRONMENTAL SEARCH

August 24, 2017

Paterson Group
Attn: Karyn Munch

BRIEF DESCRIPTION OF LAND:

761 Lisgar St., Ottawa
Lots 36, 37, 38 South Nepean St., Lots 37, 38 and Part Lot 39 North Lisgar, Plan 2996
PIN: 04115-0342

LAST REGISTERED OWNER: RICHCRAFT (LISGAR) LTD.

CHAIN OF TITLE:

Plan 2996 registered April 3, 1868
By Tylee and Moberly

Deed 10497 registered June 13, 1974
From Tylee and Moberly to James Foster

Deed 10499 registered June 13, 1874
From Tylee and Moberly to Edward Roofe

Deed 11507 registered December 11, 1874
From Tylee and Moberly to Daniel Thorburn

Deed 14345 registered Sept 14, 1876
From Tylee and Moberly to James Maclaren and Charles Magee

Deed 19278 registered May 13, 1881
From James Foster to Mary Duncan

Deed 20471 registered October 26, 1882
From Tylee and Moberly to James Foster

Deed 21486 registered October 1, 1883
From Charles Magee to Freehold Association of Ottawa

Deed 23368 registered March 5, 1885
From Edward Roofe to Christina Foster

Deed 24212 registered October 19, 1885
From Freehold Association of Ottawa to James Foster

Deed 27705 registered December 21, 1887
From Mary Duncan to Duncan McGillivray

Deed 55661 registered September 29, 1899
From Christina Foster to James Foster

Deed 67497 registered May 7, 1903
From James Foster to Mary and Eli Hutchings

Deed 91128 registered July 6, 1909
From Eli Hutchings to Adam Ballantyne

Deed 94018 registered January 5, 1910
From Adam Ballantyne to Frank Jarman

Deed 105475 registered June 26, 1911
From Frank Jarman to George Waterhouse

Deed 112390 registered May 6, 1912
From George Waterhouse to Benjamin Stapleton

Deed 137363 registered November 20, 1916
From Benjamin Stapleton to Theresa Stapleton

Deed 221438 registered May 21, 1937
From Theresa Stapleton to Norway Realty Company Limited.

Deed 218893 registered August 22, 1936
From James Foster, estate to Norman Foster

Deed 228771 registered August 9, 1939
From estate of Eliza Thorburn to Maude Thorburn

Deed 249660 registered November 7, 1944
From Duncan McGillivray, estate to Laura Binks

Deed 414061 registered October 31, 1960
From Norway Realty Company Limited to Donn Stapleton

Deed 353164 registered November 30, 1967
From Donn Stapleton to Myer Stein Holdings Limited

Deed 502165 registered November 4, 1965
From Norman Foster to Wesley Nichol, in trust

Deed 59674 registered December 30, 1969
From Myer Stein Holdings Limited to Margaret Yeung

Deed 609546 registered April 28, 1972
From Wesley Nichol, in trust to Samuel Palef

716709 registered September 15, 1977
From Laura Binks to Samuel Palef

Deed NS115805 registered May 4, 1981
From Maude Thorburn, estate to 464665 Ontario Ltd.

Deed N346705 registered July 25, 1986
From Samuel Palef, estate to Marilyn Palef Steinberg, Zelma Palef, Donald Ross Palef,
Allan Mitchell Palef

Deed N682470 registered January 11, 1994
From Zelma Palef to Marilyn Palef Steinberg

Deed LT1130791 registered June 30, 1998
From Margaret Yeung to Sophal Hardy and Khorany Hardy

Deed OC962605 registered March 24, 2009
From Zelma Palef to Zelma Palef Holdings Limited

Deed OC1229742 registered April 29, 2011
From Sophal Hardy and Khorany Hardy to 1590522 Ontario Inc.

Deed OC1233401 registered May 11, 2011
From Donald Ross Palef, Marilyn Palef Steinberg, Zelma Palef Holdings Limited to
Richcraft (Lisgar) Ltd.

Deed OC1234849 registered May 16, 2011
From 464665 Ontario Ltd. To Richcraft (Lisgar) Ltd.

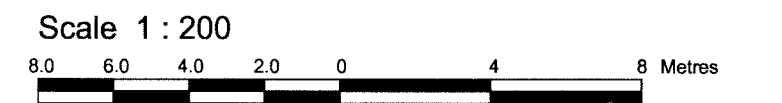
Name Change OC1253137 registered July 4, 2011
From 1590522 Ontario Inc. To Richcraft (Lisgar) Ltd.

Deed OC1636950 registered November 13, 2014
From Allan Mitchell Palef to Richcraft (Lisgar) Ltd.

SKETCH TO ILLUSTRATE

**LOT 37,
PART OF LOTS 36 And 38
(South Nepean Street)
And
LOTS 37, 38 And
PART OF LOT 39
(North Lisgar Street)
REGISTERED PLAN 2996
CITY OF OTTAWA**

Prepared by Annis, O'Sullivan, Vollebakk Ltd.
Field Work Completed April 19, 2011



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

April 21/2011
Date
Edward M. Lancaster
Edward M. Lancaster
Ontario Land Surveyor

SKETCH REVISED JANUARY 9, 2018 TO REFLECT
CONSOLIDATION OF PINS AND THE REMOVAL OF
BUILDINGS ON LOTS 36 AND 39.

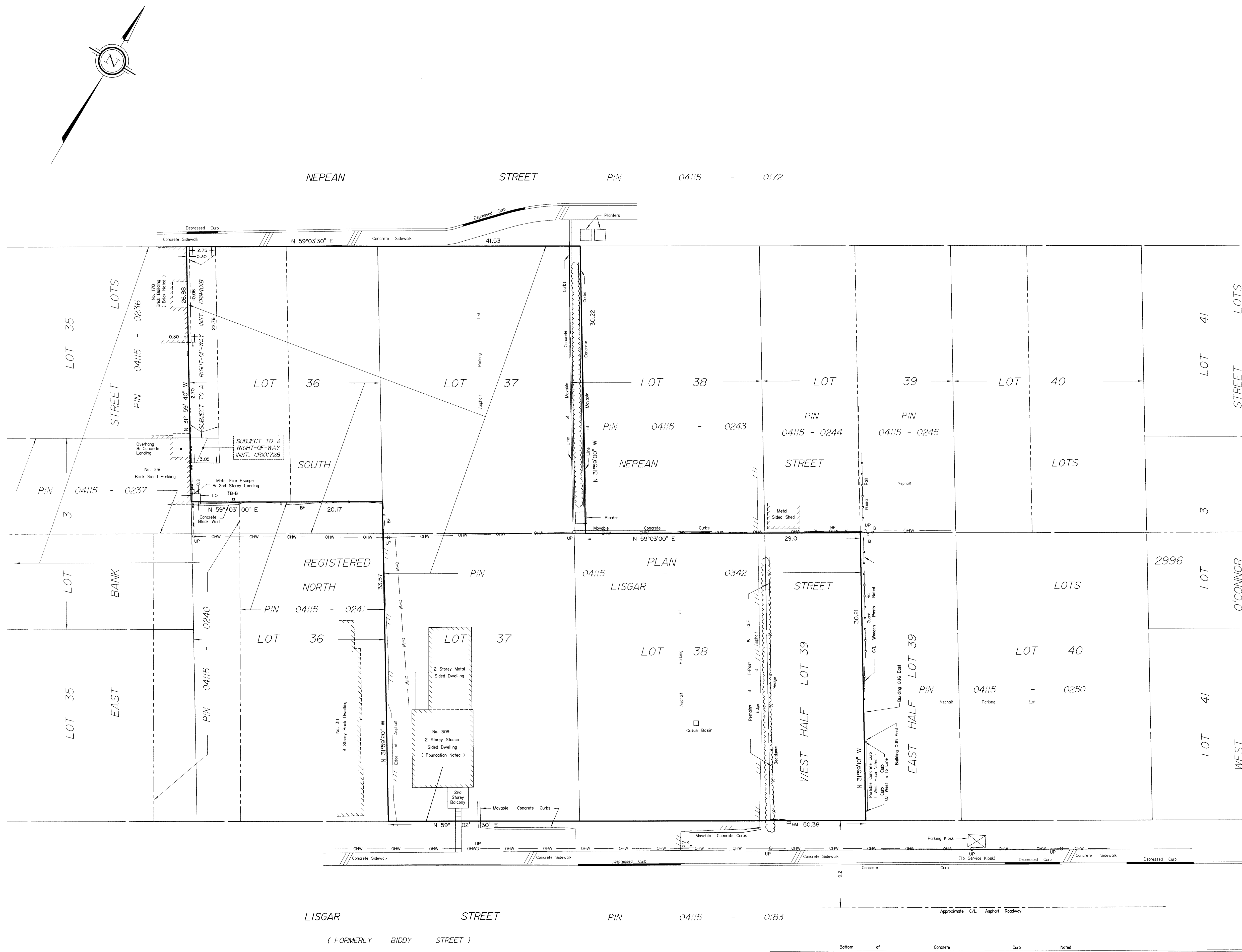
Notes & Legend

□ GM	Denotes	Gas Meter
□ TB-B	•	Bell Terminal Box
○ B	•	Bollard
○ C-S	•	Commercial Sign
BF	•	Board Fence
C/L	•	Centreline
○ UP	•	Utility Pole
○ AN	•	Anchor
— OHW —	•	Overhead Wires
— — —	•	Property Line

SEE INST. CR94018 FOR RIGHT-OF-WAY LIMITATIONS.

SITE AREA = 2710.0 m²

BOUNDARY INFORMATION COMPILED FROM REGISTRY
OFFICE RESEARCH, OFFICE RECORDS AND FIELD SURVEY.





AERIAL PHOTOGRAPH
1928

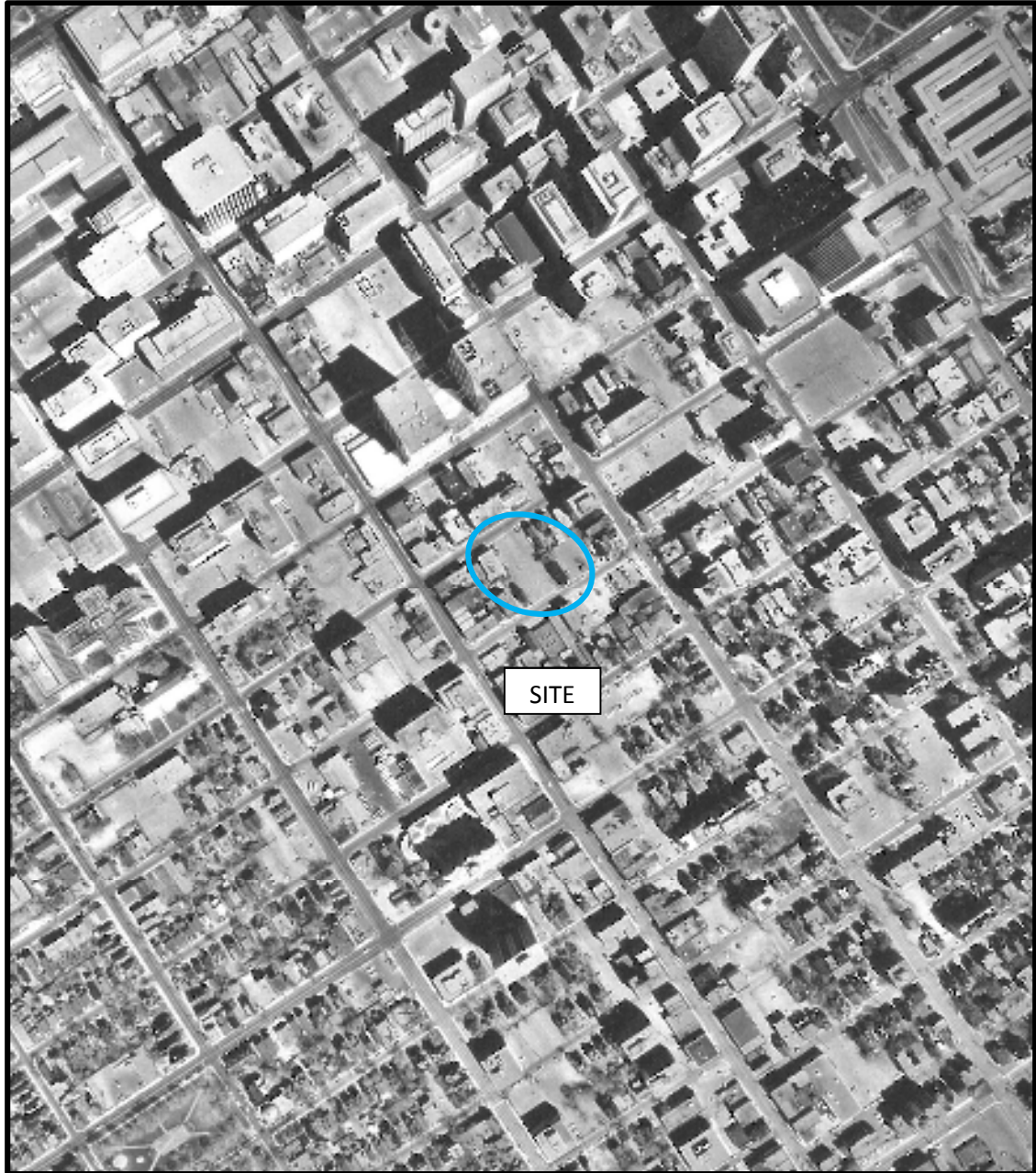


AERIAL PHOTOGRAPH
1950



AERIAL PHOTOGRAPH
1968

patersongroup



AERIAL PHOTOGRAPH
1978



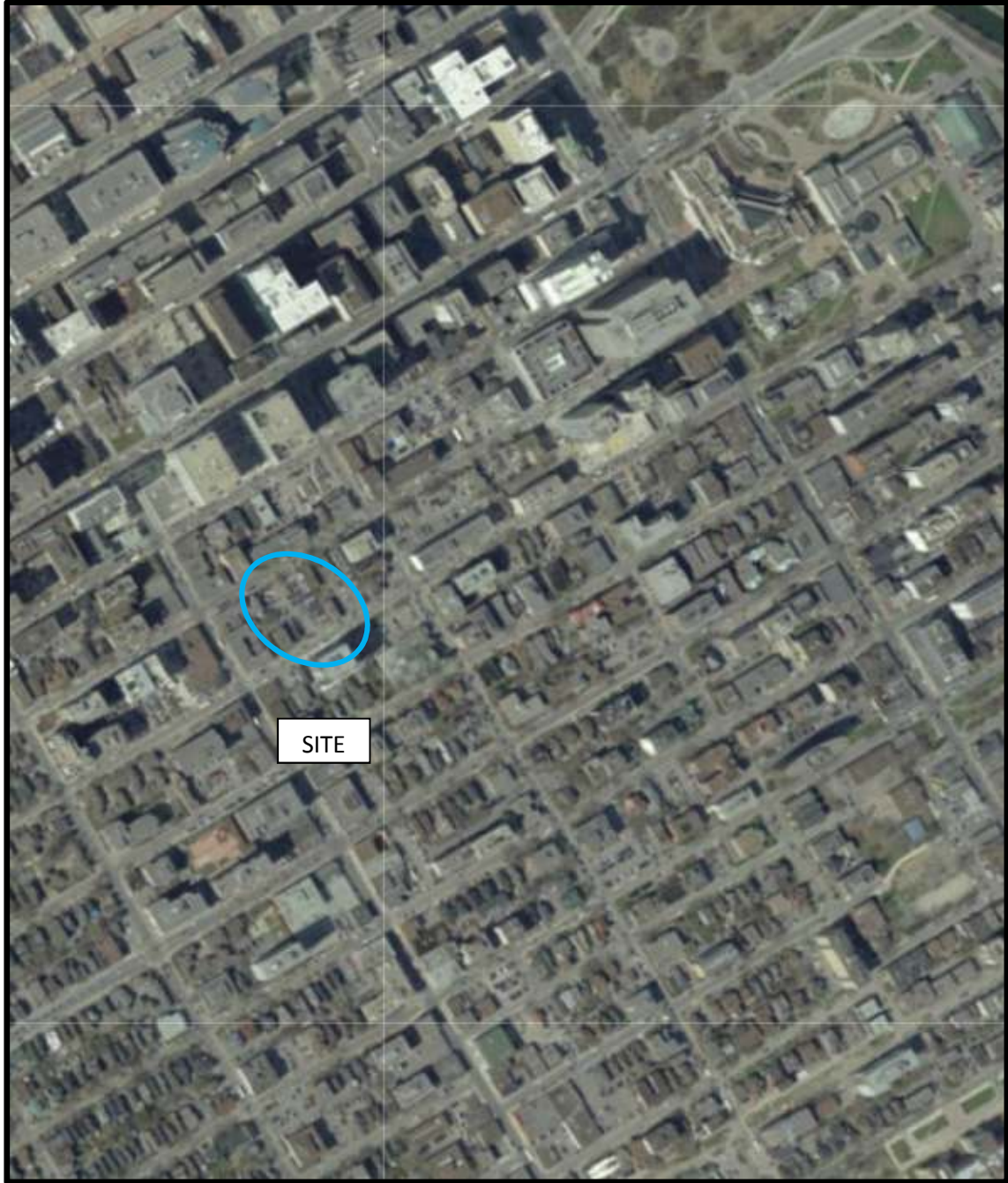
AERIAL PHOTOGRAPH
1985



AERIAL PHOTOGRAPH
1994



AERIAL PHOTOGRAPH
2005



AERIAL PHOTOGRAPH
2014

Site Photographs

PE3651

176 Nepean Street and 293 to 309 Lisgar Street, Ottawa

August 14, 2017



Photograph 1: View of south face of 309 Lisgar Street, facing north.



Photograph 2: View of west face of 309 Lisgar Street, facing northeast. Vent and fill pipes can be seen exiting the foundation of the original portion of the building structure.

Site Photographs

PE3651

176 Nepean Street and 293 to 309 Lisgar Street, Ottawa

August 14, 2017



Photograph 3: View of parking lot on northeastern portion of the Phase I Property, facing north-northwest.



Photograph 4: View of southeastern portion of Phase I Property, facing east. Photograph illustrates use of a portion of 307 Lisgar Street and 293 Lisgar Street as a staging area for the residential construction on the adjacent property to the east (287 Lisgar Street).

Site Photographs

PE3651

176 Nepean Street and 293 to 309 Lisgar Street, Ottawa

August 14, 2017



Photograph 5: View of northwestern portion of Phase I Property, facing southwest. Photograph illustrates community garden at 176 Nepean Street and adjacent residential property to the west.



Photograph 6: View of residential tower immediately south of the Phase I Property across Lisgar Street, facing southwest.

Site Photographs

PE3651

176 Nepean Street and 293 to 309 Lisgar Street, Ottawa

August 14, 2017



Photograph 7: View of parking lot adjacent to the northeast of the Phase I Property, facing south.



Photograph 8: View of residential building to the north of the Phase I Property, across Nepean Street, facing northwest.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

TSSA CORRESPONDENCE

CITY OF OTTAWA HISTORICAL LAND USE INVENTORY SEARCH

MOECC WELL RECORDS SUMMARY

Ministry of the Environment
and Climate Change

Freedom of Information and
Protection of Privacy Office

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

Ministère de l'Environnement et de
l'Action en matière de changement
climatique

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
Télééc.: (416) 314-4285



August 18, 2017

Karyn Munch
Paterson Group Inc.
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Karyn Munch:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2017-05639, Your Reference PE3651

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 176 Nepean St and 293 to 309 Lisgar St (Odd #s), Ottawa .

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Approvals 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 Jasmine Frendo at jasmine.frendo@ontario.ca.

Yours truly,

for A handwritten signature in black ink, appearing to read "Janet Dadufalza".

Janet Dadufalza
FOI Manager

Karyn Munch

From: Public Information Services <publicinformationservices@tssa.org>
Sent: August-21-17 11:46 AM
To: Karyn Munch
Subject: RE: Records Request

Hello Karyn,

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformationservices@tssa.org) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

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

Thank you and have a great day,
Sherees



Sherees Thompson | Public Information Agent

Facilities
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-3363 | Fax: +1-416-231-6183 | E-Mail: sthompson@tssa.org
www.tssa.org



From: Karyn Munch [mailto:KMunch@Patersongroup.ca]
Sent: Tuesday, August 08, 2017 11:34 AM
To: Public Information Services
Subject: Records Request

Good morning,

Could you please search your files for the following addresses in the City of Ottawa?

144, 148, 152, 156, 176, 178 Nepean Street
287, 293, 307, 311 Lisgar Street

Thank-you very much.

Best Regards,

Karyn Munch, P.Eng.

patersongroup
solution oriented engineering

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381 Ext. 217
Fax: (613) 226-6344
Email: kmunch@patersongroup.ca

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

Karyn Munch

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: August-22-17 10:36 AM
To: Karyn Munch
Subject: RE: Records Request

Hi Karyn,

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformationsservices@tssa.org) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

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

Thank you,

Roxana



Roxana Mashtaler | Public Information Agent

Facilities
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-3472 | Fax: +1-416-231-6183 | E-Mail: mashtaler@tssa.org
www.tssa.org



From: Karyn Munch [mailto:KMunch@Patersongroup.ca]
Sent: Tuesday, August 08, 2017 11:39 AM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: Records Request

Good morning,

Would you also be able to check your records for the following City of Ottawa addresses:

219, 223 Bank Street
142, 153, 171 Nepean Street
281, 300, 312, 355 Lisgar Street

Thank-you very much.

Best Regards,

Karyn Munch, P.Eng.

patersongroup
solution oriented engineering

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381 Ext. 217
Fax: (613) 226-6344
Email: kmunch@patersongroup.ca

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



File Number: D06-03-17-0099

August 28, 2017

Karyn Munch
Paterson Group
154 Colonnade Road South
Ottawa, ON
K2E 7J5

Sent via email [kmunch@patersongroup.ca]

Dear Ms. Munch,

**Re: Information Request
176 Nepean Street and 293 and 309 Lisgar Street, Ottawa, Ontario (“Subject Properties”)**

Internal Department Circulation

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

- No information was returned on the Subject Property from Departmental circulation.

Search of Historical Land Use Inventory

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

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Properties.

The HLUI database was also searched for activity associated with properties located within 50m of the Subject Property. The search revealed the following:

- There are 24 activities associated with properties located within 50m of the Subject Property: Activity Numbers 1594, 2998, 3021, 6618, 10759, 3218, 6498, 5385,

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Planning, Infrastructure and Economic
Development Department

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 21690
Fax: (613) 560-6006
www.ottawa.ca

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

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 21690
Télééc: (613) 560-6006
www.ottawa.ca

5219, 11053, 4419, 7912, 8796, 9401, 3537, 2200,1378, 2238, 1966, 3089, 875, 12453, 11438, and 8571.

Please note that Activity Numbers 9401, 1549, 5385, 875, 11438, and 8571 have a PIN Certainty of "2". This identifier acknowledges that there is some uncertainty about the exact location of the land use activity and that the activity may or may not have been located on the Subject Properties. All database entries with a PIN Certainty of "2" require independent verification as to their precise location.

A site map has been included to show the location of the Subject Properties as well as the location of all the activities noted above, including the HLUI database's location of the Activity Number with a PIN Certainty of "2".

Additional information may be obtained by contacting:

Ontario's Environmental Registry

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

The Ontario Land Registry Office

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

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

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

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

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

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

If you have any further questions or comments, please contact Ellen Potts at 613-580-2424 ext. 21690 or HLUI@ottawa.ca

Sincerely,



Ellen Potts

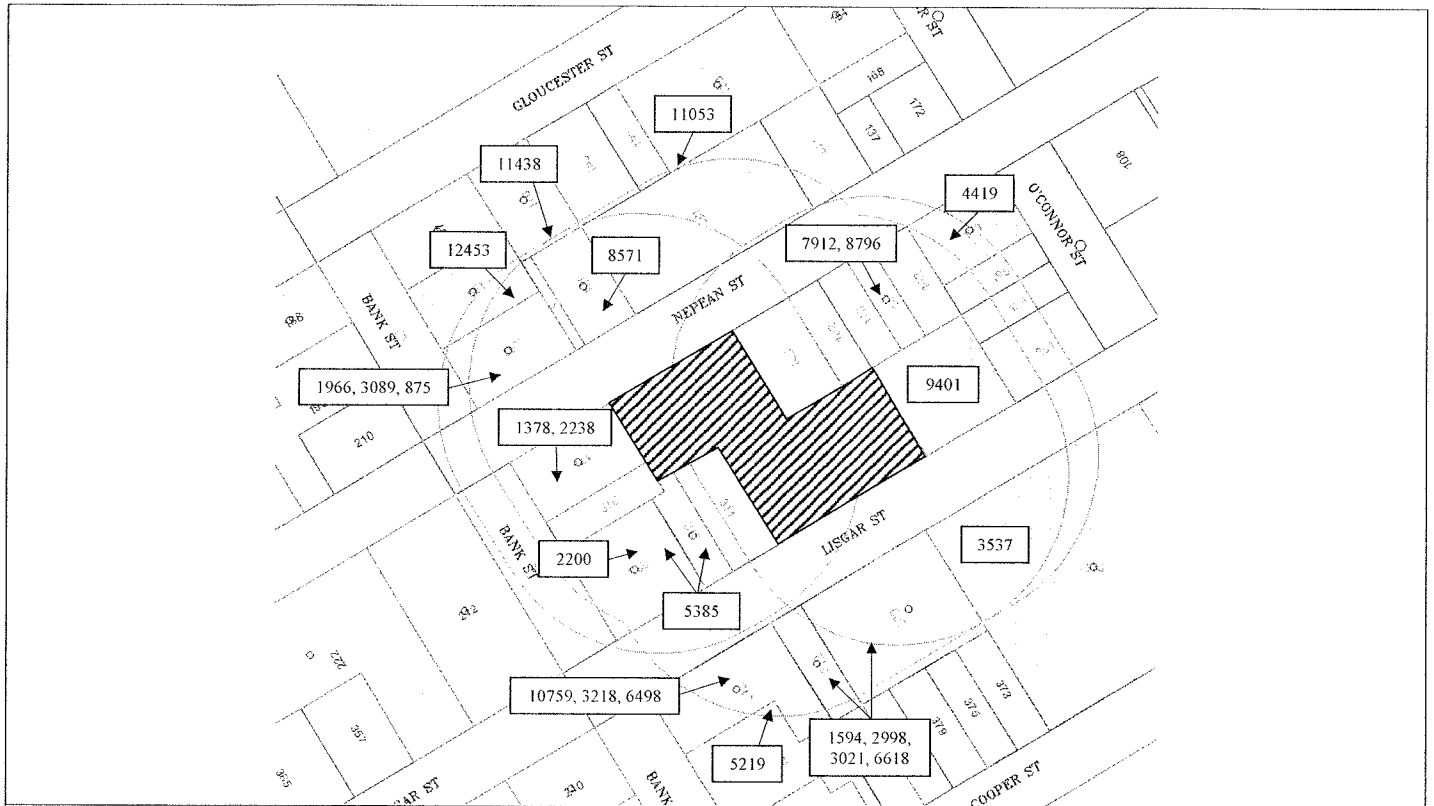
Per:

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


MB/ EP

Attach: 25


cc: File no. D06-03-17-0099



Scale 1: n/a
 176 Nepean Street and 293 and 307 Lisgar Street
 Ottawa, ON
 File # D06-03-17-0099
 Ellen Potts



Overview
 ID# = Activity Identification Number

 = Subject Site



CITY OF OTTAWA

HLUI ID: __679ABY

AREA (Square Metres): 1802.404

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:51:23

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	041150202	Y	Y
2005	041150280	Y	N

Activity ID: 1594 Multiple PINS: N

PIN Certainty: 2 Previous Activity ID(s) : 974

Related PINS: 041150202

Name: BILL'S AUTO SERVICE

Address: 375 COOPER STREET, OTTAWA

Facility Type: Gasoline Service Stations

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950

HL References 2:

HL References 3:

NAICS	SIC
811199	633
447110	633
447190	633

Company Name

Bill's Auto Service

Year of Operation

c. 1940



CITY OF OTTAWA
 HLUI ID: __679ABY

Report: RPTC_OT_DEV0122
 Run On: 21 Aug 2017 at: 15:51:23

AREA (Square Metres): 1802.404

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	041150202	Y	Y
2005	041150280	Y	N

Activity ID: 2998 Multiple PINS: N
 PIN Certainty: 1 Previous Activity ID(s) : 4381
 Related PINS: 041150280
 Name: CANUS PLASTICS INC.
 Address: 300 LISGAR STREET,
 Facility Type: Other Plastic Products Industries
 Comments 1:
 Comments 2:
 Generator Number:
 Storage Tanks:
 HL References 1: SC98
 HL References 2:
 HL References 3: 2005 Select Phone

NAICS	SIC
326114	163
339950	0
337215	169
326122	162
326111	169
326130	169
326160	169
326191	169
326198	169
326121	162
326198	0

Company Name	Year of Operation
CANUS PLASTICS INC.	c. 2005
Canus Plastics Inc	c. 1998
CANUS PLASTICS INC.	c. 2001



CITY OF OTTAWA
HLUI ID: __679ABY

Report: RPTC_OT_DEV0122
Run On: 21 Aug 2017 at: 15:51:23

AREA (Square Metres): 1802.404

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	041150202	Y	Y
2005	041150280	Y	N

Activity ID: 3021 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 041150202

Name: CAPITAL AUDIO TECHNICAL SERVICES

Address: 375 COOPER STREET,

Facility Type: Record Player, Radio and Television Receiver Industry

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2005 Select Phone

NAICS	SIC
811210	0
334310	0

Company Name	Year of Operation
CAPITAL AUDIO TECHNICAL SERVICES	c. 2001
CAPITAL AUDIO TECHNICAL SERVICES	c. 2005



CITY OF OTTAWA
HLUI ID: __679ABY

Report: RPTC_OT_DEV0122
Run On: 21 Aug 2017 at: 15:51:23

AREA (Square Metres): 1802.404

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	041150202	Y	Y
2005	041150280	Y	N

Activity ID: 6618 Multiple PINS: N
PIN Certainty: 1 Previous Activity ID(s) : 1066

Related PINS: 041150202

Name: HOBBS GLASS LIMITED
Address: 300 LISGAR STREET, OTTAWA
Facility Type: Glass and Glass Products Industries

Comments 1:
Comments 2:
Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950

HL References 2:

HL References 3:

NAICS	SIC
327214	356

Company Name	Year of Operation
Hobbs Glass Ltd	c. 1930-1950



CITY OF OTTAWA

HLUI ID: __670H5S

AREA (Square Metres): 993.933

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:53:38

Study Year
1998

PIN
041150200

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 10759 Multiple PINS: N
PIN Certainty: 1 Previous Activity ID(s) : 1068

Related PINS: 041150200

Name: PESTROY CO.
Address: 318 LISGAR STREET, OTTAWA
Facility Type: Services to Buildings and Dwellings

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950

HL References 2:

HL References 3:

NAICS	SIC
561799	995
561710	995
561791	995
561721	995

Company Name

Pestroy Co.

Year of Operation

c. 1940



CITY OF OTTAWA
HLUI ID: __670H5S

Report: RPTC_OT_DEV0122
Run On: 21 Aug 2017 at: 15:53:38

AREA (Square Metres): 993.933

Study Year 1998 PIN 041150200 Multi-NAIC Y Multiple Activities Y

Activity ID: 3218 Multiple PINS: N
PIN Certainty: 1 Previous Activity ID(s) : 5145
Related PINS: 041150200
Name: CLEANAWAY LAUNDRY AND DRY CLEANERS
Address: 320 LISGAR STREET, OTTAWA
Facility Type: Laundries and Cleaners
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3:

NAICS	SIC
812310	972
812320	972
812330	972
561740	972

Company Name	Year of Operation
Cleanaway Laundry and Dry Cleaners	c. 1998



CITY OF OTTAWA

HLUI ID: __670H5S

AREA (Square Metres): 993.933

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:53:38

Study Year
1998

PIN
041150200

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 6498 Multiple PINS: N
 PIN Certainty: 1 Previous Activity ID(s) : 496
 Related PINS: 041150200
 Name: JARMAN FRANK
 Address: 235 BANK STREET, OTTAWA
 Facility Type: Other Furniture and Fixture Industries
 Comments 1:
 Comments 2:
 Generator Number:
 Storage Tanks:
 HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
 HL References 2:
 HL References 3:

NAICS	SIC
337910	269
336360	269
339940	269

Company Name

Jarman Frank

Year of Operation

c. 1920



CITY OF OTTAWA
 HLUI ID: __679CB5
 AREA (Square Metres): 293.385

Report: RPTC_OT_DEV0122
 Run On: 21 Aug 2017 at: 15:54:56

Study Year 1998	PIN 041150240	Multi-NAIC Y	Multiple Activities N
---------------------------	-------------------------	------------------------	---------------------------------

Activity ID: 5385 Multiple PINS: Y
 PIN Certainty: 2 Previous Activity ID(s) : 809

Related PINS: 041150238

Name: FRED H. BOUGHTON
 Address: 317 LISGAR STREET, OTTAWA
 Facility Type: Platemaking, Typesetting and Bindery Industry

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950; FIP1901-38-234,vol2. FIP1912-38-234,vol1. FIP1922-38-234,vol1. M.1921.

HL References 2:

HL References 3:

NAICS	SIC
812921	282
323119	281
323115	281
323120	282
323114	281
323116	281

Company Name	Year of Operation
Fred H. Boughton	c. 1922
Sampson Office Service Ltd.	c. 1920
Heliotype	c. 1920



CITY OF OTTAWA

HLUI ID: __679BXG

AREA (Square Metres): 1023.849

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:56:02

Study Year
2005

PIN
041150201

Multi-NAIC
N

Multiple Activities
N

Activity ID: 5219

Multiple PINS: N

PIN Certainty: 1

Previous Activity ID(s) :

Related PINS: 041150201

Name: EMPIRE IMAGING INC.

Address: 246 BANK STREET,

Facility Type: Photographers

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2005 Select Phone

NAICS SIC

541920 0

Company Name

EMPIRE IMAGING INC.

Year of Operation

c. 2005



CITY OF OTTAWA

HLUI ID: __679FQ6

AREA (Square Metres): 1522.648

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:40:47

Study Year
1998

PIN
041150144

Multi-NAIC
N

Multiple Activities
N

Activity ID: 11053

Multiple PINS: N

PIN Certainty: 1

Previous Activity ID(s) : 688

Related PINS: 041150144

Name: POOK SHEET METAL WORKS

Address: 150 GLOUCESTER STREET, OTTAWA

Facility Type: Plumbing, Heating and Air Conditioning, Mechanical Work

Comments 1: Edge Limited -Heating Contractors and Capital Insulating Co. ltd in 1930 and 1950 (use of asbestos products)

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1948, M.1950, M.1955; FIP1901-38-233,Vol2; FIP1912-38-233,Vol1; FIP1922-38-233,Vol1; FIP1948-122-233; FIP1956-122-233,Vol1

HL References 2:

HL References 3:

NAICS	SIC
238220	424

Company Name

Year of Operation

Pook Sheet Metal Works

c. 1940

W. G. Edge Ltd.

c. 1948-1956



CITY OF OTTAWA

HLUI ID: __679AH3

AREA (Square Metres): 606.822

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:41:57

Study Year
2005

PIN
041150248

Multi-NAIC
N

Multiple Activities
N

Activity ID: 4419 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 041150248

Name: DEPT. OF NATIONAL DEFENCE

Address: 190 O'CONNOR STREET, OTTAWA

Facility Type: Defence Services

Comments 1: DEFENCE RESEARCH DEVELOPMENT BRANCH

Comments 2:

Generator Number: ON0046540

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2000 PID

NAICS SIC

911110 0

Company Name

Year of Operation

DEPT. OF NATIONAL DEFENCE

c. 2000

DEPT. OF NATIONAL DEFENCE

c. 2001



CITY OF OTTAWA

HLUI ID: __679C46

AREA (Square Metres): 242.782

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:43:08

Study Year
1998

PIN
041150246

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 7912 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 041150246

Name: KOFFMAN SIGNS

Address: 146 NEPEAN STREET,

Facility Type: Sign and Display Industry

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2005 Select Phone

NAICS	SIC
339950	0

Company Name

Year of Operation

KOFFMAN SIGNS

c. 2005

KOFFMAN SIGNS

c. 2001



CITY OF OTTAWA

HLUI ID: __679C46

AREA (Square Metres): 242.782

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:43:08

Study Year
1998

PIN
041150246

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 8796 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 213
Related PINS: 041150246

Name: MONSON'S DELUXE DRY CLEANERS
Address: 146 NEPEAN STREET, OTTAWA
Facility Type: Laundries and Cleaners

Comments 1:
Comments 2:

Generator Number:
Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1948, M.1950, M.1955, M.1960, M.1970, M.1980;
FIP1901-38-234,vol2; FIP1912-38-234,vol1; FIP1922-38-234,Vol1; FIP1948-122-234; FIP1956-122-234,Vol1

HL References 2:

HL References 3:

NAICS	SIC
812330	972
812320	972
561740	972
812310	972

Company Name

Monson's Deluxe Dry Cleaners

Year of Operation

c. 1948-1960



CITY OF OTTAWA
 HLUI ID: __679EDW

Report: RPTC_OT_DEV0122
 Run On: 21 Aug 2017 at: 15:44:07

AREA (Square Metres): 913.930

Study Year 1998	PIN 041150250	Multi-NAIC Y	Multiple Activities N
---------------------------	-------------------------	------------------------	---------------------------------

Activity ID: 9401 Multiple PINS: N
 PIN Certainty: 2 Previous Activity ID(s) : 5900

Related PINS: 041150250

Name: NATHAN SHERWOOD -TAILOR

Address: 291 LISGAR STREET, OTTAWA

Facility Type: Laundries and Cleaners

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1948, M.1955; FIP1901-38-234,Vol2; FIP1912-38-234,Vol1; FIP1922-38-234,Vol1; FIP1948-122-234;
 FIP1956-122-234,Vol1

HL References 2:

HL References 3:

NAICS	SIC
812330	972
812320	972
561740	972
812310	972

Company Name

Nathan Sherwood -Tailor

Year of Operation

c. 1948-1956



CITY OF OTTAWA

HLUI ID: __679BUP

AREA (Square Metres): 4958.660

Report: RPTC_OT_DEV0122

Run On: 21 Aug 2017 at: 15:44:41

Study Year
2005

PIN
041150289

Multi-NAIC
N

Multiple Activities
N

Activity ID: 3537 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 041150289

Name: CHRISTIANCURRENT OTTAWA

Address: 355 COOPER STREET,

Facility Type: Combined Publishing and Printing Industries

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2005 Select Phone

NAICS SIC

511110 0

Company Name

CHRISTIANCURRENT OTTAWA

Year of Operation

c. 2005



CITY OF OTTAWA

HLUI ID: __679EDR

AREA (Square Metres): 912.055

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:06:01

Study Year
1998

PIN
041150238

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2200 Multiple PINS: N
PIN Certainty: 1 Previous Activity ID(s) : 197

Related PINS: 041150238

Name: BRISEBOIS DENTAL LABORATORY
Address: 319 LISGAR STREET, OTTAWA
Facility Type: Other Manufactured Products Industries

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950

HL References 2:

HL References 3:

NAICS SIC
334610 399

Company Name

Brisebois Dental Laboratory

Year of Operation

c. 1950



CITY OF OTTAWA

HLUI ID: __679E4P

AREA (Square Metres): 685.296

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:08:28

Study Year
1998

PIN
041150236

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 1378 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 041150236

Name: AUDIOMART

Address: 213 BANK STREET, OTTAWA

Facility Type: Electrical and Electronic Machinery, Equipment and Supplies, Wholesale

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2001 Employment Survey

NAICS SIC

811210 0

Company Name

AUDIOMART

Year of Operation

c. 2001



CITY OF OTTAWA

HLUI ID: __679E4P

AREA (Square Metres): 685.296

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:08:28

Study Year
1998

PIN
041150236

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2238 Multiple PINS: N
 PIN Certainty: 1 Previous Activity ID(s) : 5166
 Related PINS: 041150236
 Name: BROWN'S CLEANERS
 Address: 211 BANK STREET, OTTAWA
 Facility Type: Laundries and Cleaners
 Comments 1:
 Comments 2:
 Generator Number:
 Storage Tanks:
 HL References 1: SC98
 HL References 2:
 HL References 3: 2001 Employment Survey

NAICS	SIC
812320	0
812320	972
812310	972
561740	972
812330	972

Company Name	Year of Operation
BROWN'S CLEANERS	c. 2001
Brown's Cleaners	c. 1998



CITY OF OTTAWA

HLUI ID: __679E3Q

AREA (Square Metres): 674.963

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:10:02

Study Year
1998

PIN
041150160

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 1966 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 041150160

Name: BUILDING & MAINTENANCE IND

Address: 207 BANK STREET,

Facility Type: Residential Building and Development

Comments 1: #405

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2005 Select Phone

NAICS SIC

236110 0

Company Name

BUILDING & MAINTENANCE IND

Year of Operation

c. 2005



CITY OF OTTAWA
 HLUI ID: __679E3Q
 AREA (Square Metres): 674.963

Report: RPTC_OT_DEV0122
 Run On: 22 Aug 2017 at: 08:10:02

Study Year
1998

PIN
041150160

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 3089 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :**
Related PINS: 041150160
Name: TO BE
Address: 207 BANK STREET,
Facility Type: Combined Publishing and Printing Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2005 Select Phone

NAICS **SIC**
 511110 0

Company Name	Year of Operation
TO BE	c. 2005
CAPITAL XTRA / PINK TRIANGLE PRESS	c. 2005
CAPITAL XTRA / PINK TRIANGLE PRESS	c. 2001



CITY OF OTTAWA

HLUI ID: __679E3Q

AREA (Square Metres): 674.963

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:10:02

Study Year
1998

PIN
041150160

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 875 Multiple PINS: N
PIN Certainty: 2 Previous Activity ID(s) : 2230

Related PINS: 041150160

Name: A.C. SCHLENDER
Address: 205 BANK STREET, OTTAWA

Facility Type: Photographers

Comments 1: 1900 - also residence

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950

HL References 2:

HL References 3:

NAICS	SIC
323120	282
541920	993
812921	282

Company Name

A. C. Schlender

Year of Operation

c. 1900



CITY OF OTTAWA

HLUI ID: __679E2B

AREA (Square Metres): 669.048

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:10:52

Study Year
1998

PIN
041150159

Multi-NAIC
N

Multiple Activities
N

Activity ID: 12453 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 3475
Related PINS: 041150159

Name: SHERIN WILLIAMS PAINT CO. OF CANADA LIMITED
Address: 197 BANK STREET, OTTAWA
Facility Type: Paint and Varnish Industry
Comments 1:
Comments 2:

Generator Number:

Storage Tanks:

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

HL References 2:

HL References 3:

NAICS	SIC
325510	375

Company Name

Sherin Williams Paint Co. of Canada Ltd.

Year of Operation

c. 1970



CITY OF OTTAWA

HLUI ID: __679EUV

AREA (Square Metres): 609.863

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:11:49

Study Year
1998

PIN
041150141

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 11438 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 5144
Related PINS: 041150140
Name: PLUS CLEANERS
Address: 174 GLOUCESTER STREET, OTTAWA
Facility Type: Laundries and Cleaners
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3:

NAICS	SIC
812310	972
812330	972
812320	972
561740	972

Company Name

Plus Cleaners

Year of Operation

c. 1998



CITY OF OTTAWA

HLUI ID: __679EJ5

AREA (Square Metres): 517.961

Report: RPTC_OT_DEV0122

Run On: 22 Aug 2017 at: 08:12:37

Study Year
1998

PIN
041150162

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 8571 Multiple PINS: N
PIN Certainty: 2 Previous Activity ID(s) : 1615

Related PINS: 041150162

Name: LOWE-MARTIN COMPANY LIMITED

Address: NEPEAN STREET, OTTAWA

Facility Type: Commercial Printing Industries

Comments 1: Manufacturers of loose leaf systems, office supplies, card systems, filing and library supplies. Armco Print Generator #ON1550000 (waste generator) E.A.S. Illustrators and Printers Ltd. Generator #ON1203100 (waste generator)

Comments 2: 171 to 175

Generator Number:

Storage Tanks:

HL References 1: M.1900,M.1910,M.1920,M.1921,M.1930,M.1940,M.1948,M.1950,M.1955, M.1958, M.1960, M.1961, M.1964,M.1970,M.1980; S.1958,S.1961,S.1964,S.1965;

HL References 2: FIP1901-38-233,Vol2; FIP1912-38-233,Vol1; FIP1922-38-233,vol1; FIP1948-122-233; FIP1956-122-233,vol1; PID1994

HL References 3:

NAICS	SIC
323116	281
323114	281
812921	282
323115	281
323119	281
323120	282

Company Name

Year of Operation

Lowe-Martin Company Ltd.	c. 1920-1965
Canadian Government Printing Bureau	c. 1970
E.A.S. Illustrators and Printers Ltd.	c. 1994
Armco Print	c. 1994

Ministry of the Environment
and Climate Change

Wells Help Desk
Environmental Monitoring and
Reporting Branch

125 Resources Road
Toronto ON M9P 3V6
(Toll Free) 1-888-396-9355
WellsHelpdesk@ontario.ca

Ministère de l'Environnement et de l'Action
en matière de changement climatique

Service d'information sur les puits
Direction de la surveillance environnementale

125 Resources Road
Toronto ON M9P 3V6
Téléphone : 1-888-396-9355
Télécopieur : 416-235-5960
WellsHelpdesk@ontario.ca



**** NEW ****

**** NEW ****

**You can now use our Interactive Map Well Records
<http://www.ontario.ca/environment-and-energy/map-well-record-data>
to search and view well records from reported wells in Ontario.**

**Computer Print-Out Data Well Search Request – Form B
Reference Number 1718-0289Bs
August 17, 2017**

Paterson Group
154 Colonnade Road S
Ottawa, Ontario K2E 7J5
Attn: Karyn Munch

Fax: : 613-226-6344
Email Address: kmunch@patersongroup.ca
File/Reference No. : PE3651

Search by UTM Coordinates
(0.3km radius) Easting 445472 Northing 5029550



County:

Township:

Conc.:

Lot:

No Well Record found matching the search criteria
provided



If you have any questions, please contact the Wells Help Desk at 1-888-396-9355 or wellshelpdesk@ontario.ca

*** SEARCH REQUEST FORMS AVAILABLE AT www.forms.ssb.gov.on.ca ***

Please note: The Ministry cannot and does not represent or guarantee that the Well Records information is current, accurate or complete. The Ministry assumes no responsibility for errors or omissions in the Well Records information and is not liable in any way for damages of any kind arising out of or related to the Well Records information or for delay or failure to provide the Well Records information. Any reliance upon the Well Records information provided is solely at the risk of the requester. Well Information provided is subject to the Freedom of Information and Protection of Privacy Act (FIPPA), Ontario.

Well Computer Print Out Data as of August 17 2017

TOWNSHIP CONCESSION (LOT)	UTM ¹	DATE ² CNTR ³	CASING DIA ⁴	WATER ^{5,6} DETAIL	STAT LVL/PUMP LVL ⁷ RATE ⁸ /TIME HR:MIN	WATER USE ⁹	SCREEN INFO ¹⁰	WELL # (AUDIT#) WELL TAG # STATE ¹² DEPTHS TO WHICH FORMATIONS EXTEND ^{5,11}
NEPEAN TOWNSHIP ()	18 445365 5029763 W	2014/10 7241	01			MT	26 15	7230965 (Z188406) A168775 BLCK GRVL SOFT 0002 BRWN SAND BLDR SOFT 0014 BLCK SHLE FCRD HARD 0041
NEPEAN TOWNSHIP ()	18 445694 5029684 W	2014/04 1844	02	0025		MO	10 15	7236609 (Z171364) A148005 ---- 0000 GREY LMSN 0001 GREY SAND FILL GRVL 0006 GREY CLAY SILT 0030 GREY CLAY SILT TILL 0053
NEPEAN TOWNSHIP ()	18 445686 5029686 W	2014/04 1844	02	0023		MO	15 10	7236607 (Z171315) A148005 ---- 0000 GREY LMSN FILL SAND 0001 BRWN SAND FILL CLAY 0004 GREY CLAY SILT 0009 GREY CLAY 0025 GREY SILT TILL SNDY 0045
NEPEAN TOWNSHIP ()	18 445336 5029785 W	2014/09 7241	01			MT	24 10	7231362 (Z187872) A168839 BLCK GRVL SOFT 0004 GREY CLAY SAND SOFT 0015 GREY SHLE HARD 0034
NEPEAN TOWNSHIP ()	18 445367 5029798 W	2014/09 7241	01			MT	19 15	7231361 (Z187871) A168744 BLCK GRVL SOFT 0001 BRWN SAND BLDR SOFT 0014 BLCK SHLE HARD 0034
OTTAWA CITY ()	18 445063 5029676 W	2009/11 1844						7137421 (M05531) A074637 A
OTTAWA CITY ()	18 445498 5029689 W	2009/12 1844	02			MO		7139448 (M05547) A083149 BRWN SAND FILL 0002 BRWN SAND GRVL FILL 0004 BRWN CLAY WBRG SLTY 0010 GREY CLAY WBRG 0014 GREY SILT CLYY 0018 GREY CLAY SNDY 0020 BRWN SHLE DRY 0037
OTTAWA CITY ()	18 445650 5029430 W	6894				MO		7211110 (Z096856) A152341 A
OTTAWA CITY ()	18 445519 5029299 W	2015/07 7241	01			MT	10 10	7246842 (Z208884) A165621 GREY 0001 GREY CLAY SILT 0010 TILL 0020
OTTAWA CITY ()	18 445485 5029667 W	2009/07 1844			022 / / :0	MO		7130914 (M04512) A074637 ---- 0000 GREY SAND GRVL FILL 0001 BRWN SAND FILL 0002 BRWN CLAY FILL SNDY 0005 GREY CLAY SLTY SAND 0016 BLCK SHLE 0020

Well Computer Print Out Data as of August 17 2017

TOWNSHIP CONCESSION (LOT)	UTM ¹	DATE ² CNTR ³	CASING DIA ⁴	WATER ^{5,6} DETAIL	STAT LVL/PUMP LVL ⁷ RATE ⁸ /TIME HR:MIN	WATER USE ⁹	SCREEN INFO ¹⁰	WELL # (AUDIT#) WELL TAG # STATE ¹² DEPTHS TO WHICH FORMATIONS EXTEND ^{5,11}
OTTAWA CITY ()	18 445417 5029884 W	2008/08 1844				MO		7121702 (M02881) A074581 ---- 0000 GREY SAND GRVL SLTY 0006 GREY CLAY SLTY 0009 GREY SAND CLAY SLTY 0019 GREY SAND CLAY SHLE 0024 BLCK SHLE ROCK LMSN 0101
OTTAWA CITY ()	18 445557 5029364 W	2005/04 1844	20				10 10	1535586 (Z30507) A020628 GREY GRVL 0003 BRWN SAND 0004 GREY SILT 0020
OTTAWA CITY ()	18 445519 5029299 W	2015/07 7241	01			MT	3 7	7246843 (Z208885) A163032 GREY HARD 0001 GREY CLAY SILT SOFT 0010
OTTAWA CITY ()	18 445602 5029369 W	2007/06 7241	02				16 11	7046637 (Z74024) A061568 BRWN LOAM SNDY GRVL 0003 BRWN SILT SAND CLAY 0005 BRWN SILT CLAY SOFT 0012 GREY CLAY SILT SOFT 0020 GREY CLAY WBRG SOFT 0027
OTTAWA CITY ()	18 445331 5029572 W	1948/02 3566	04 04	FR	008 / 012 010 / 0:30	DO		1503876 () SILT 0028 SHLE 0075

- Notes:
1. UTM in Zone, Easting, Northing and Datum is NAD83; L: UTM estimated from Centroid of Lot; W: UTM not from Lot Centroid
 2. Date Work Completed
 3. Well Contractor Licence Number
 4. Casing diameter in inches
 5. Unit of Depth in Feet
 6. See Table 4 for Meaning of Code
 7. STAT LVL: Static Water Level in Feet ; PUMP LVL: Water Level After Pumping in Feet
 8. Pump Test Rate in GPM, Pump Test Duration in Hour : Minutes
 9. See Table 3 for Meaning of Code
 10. Screen Depth and Length in feet
 11. See Table 1 and 2 for Meaning of Code
 12. A: Abandonment; P: Partial Data Entry Only

1. Core Material and Descriptive terms										
Code	Description	...	Code	Description	...	Code	Description	...	Code	Description
BLDR	BOULDERS		FCRD	FRACTURED		IRFM	IRON FORMATION		PORS	POROUS
									SOFT	SOFT
BSLT	BASALT		FGRD	FINE-GRAINED		LIMY	LIMY		PRDG	PREVIOUSLY DUG
									SPST	SOAPSTONE
CGRD	COARSE-GRAINED		FGVL	FINE GRAVEL		LMSN	LIMESTONE		PRDR	PREV. DRILLED
									STKY	STICKY
CGVL	COARSE GRAVEL		FILL	FILL		LOAM	TOPSOIL		QRTZ	QUARTZITE
									STNS	STONES
CHRT	CHERT		FLDS	FELDSPAR		LOOS	LOOSE		QSND	QUICKSAND
									STNY	STONEY
CLAY	CLAY		FLNT	FLINT		LTCL	LIGHT-COLOURED		QTZ	QUARTZ
									THIK	THICK
CLN	CLEAN		FOSS	FOSILIFEROUS		LYRD	LAYERED		ROCK	ROCK
									THIN	THIN
CLYY	CLAYEY		FSND	FINE SAND		MARL	MARL		SAND	SAND
									TILL	TILL
CMTD	CEMENTED		GNIS	GNEISS		MGRD	MEDIUM-GRAINED		SHLE	SHALE
									UNKN	UNKNOWN TYPE
CONG	CONGLOMERATE		GRNT	GRANITE		MGVL	MEDIUM GRAVEL		SHLY	SHALY
									VERY	VERY
CRYS	CRYSTALLINE		GRSN	GREENSTONE		MRBL	MARBLE		SHRP	SHARP
									WBRG	WATER-BEARING
CSND	COARSE SAND		GRVL	GRAVEL		MSND	MEDIUM SAND		SHST	SCHIST
									WDFR	WOOD FRAGMENTS
DKCL	DARK-COLOURED		GRWK	GREYWACKE		MUCK	MUCK		SILT	SILT
									WTHD	WEATHERED
DLMT	DOLOMITE		GVLY	GRAVELLY		OBDN	OVERBURDEN		SLTE	SLATE
DNSE	DENSE		GYPS	GYP SUM		PCKD	PACKED		SLTY	SILTY
DRTY	DIRTY		HARD	HARD		PEAT	PEAT		SNDS	SANDSTONE
DRY	DRY		HPAN	HARDPAN		PGVL	PEA GRAVEL		SNDY	SANDY

2. Core Color	
Code	Description
WHIT	WHITE
GREY	GREY
BLUE	BLUE
GREN	GREEN
YLLW	YELLOW
BRWN	BROWN
RED	RED
BLCK	BLACK
BLGY	BLUE-GREY

3. Water Use			
Code	Description	Code	Description
DO	Domestic	OT	Other
ST	Livestock	TH	Test Hole
IR	Irrigation	DE	Dewatering
IN	Industrial	MO	Monitoring
CO	Commercial	MT	Monitoring & Test Hole
MN	Municipal		
PS	Public		
AC	Cooling And A/C		
NU	Not Used		

4. Water Detail			
Code	Description	Code	Description
FR	Fresh	GS	Gas
SA	Salty	IR	Iron
SU	Sulphur		
MN	Mineral		
UK	Unknown		

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

POSITION

Intermediate Environmental Engineer

EDUCATION

Carleton University, B.Eng. 2002
Environmental Engineering

MEMBERSHIPS AND AWARDS

Professional Engineers of Ontario
Ottawa Geotechnical Society

EXPERIENCE

2011-present

Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Intermediate Engineer

2009-2010

Department of Indian and Northern Affairs
Contaminated Sites Division
Environment Officer (PC-02)

2003 to 2009

Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Intermediate Engineer

2002 to 2003

Dessau Soprin Inc.
Consulting Engineers
Environmental Division
Junior Engineer

SELECT LIST OF PROJECTS

Billings-Hurdman Interconnect Watermain - Ottawa
Telus Building Remediation - Ottawa
Block D Lands Remediation and Redevelopment – Kingston
Alcan Plant Redevelopment - Kingston
Gladstone Avenue Reconstruction - Ottawa
Lees Avenue Coal Tar Site - City of Ottawa
Nortel Networks Environmental Monitoring Program
3W Zone Feedermain – Ottawa
Bank Street Reconstruction – Ottawa
Lees Avenue Remediation Program – Ottawa
Colonnade Road North Development – Ottawa
Montreal Road Reconstruction – Ottawa
Designated Substance Surveys – Residential and Commercial Sites - Ottawa
Phase I & II Environmental Site Assessments – Residential, Commercial and Industrial Sites – Ottawa (CSA Z768-01 and O.Reg 269/11)
Brownfields Applications and Records of Site Condition – Residential and Commercial Redevelopment

**Environmental
Engineering**

**Geotechnical
Engineering**

**Materials Testing
Quality Control**

Building Sciences

Hydrogeology

Archeological 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

**Environmental
Engineering**

**Geotechnical
Engineering**

**Materials Testing
Quality Control**

Building Science

Hydrogeology

**Archaeological
Services**

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