

December 1, 2011
File: PE2357-REP.01

Claridge Homes
2001-210 Gladstone Avenue
Ottawa, Ontario
K2P 0Y6

Attention: **Mr. Neil Molhotra**

Subject: **Phase I - Environmental Site Assessment**
175 Richmond Road
Ottawa, Ontario

Dear Sir,

Please find enclosed, six (6) copies of Report PE2357-1 regarding the environmental site assessment conducted for the aforementioned site.

We trust that this is to your satisfaction.

Sincerely,

Paterson Group Inc.

Mark S. D'Arcy, P.Eng.



Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Phase I - Environmental Site Assessment

175 Richmond Road
Ottawa, Ontario

Prepared For

Claridge Homes

December 1, 2011

Report: PE2357-1

Paterson Group Inc.

Consulting Engineers
28 Concourse Gate - Unit 1
Ottawa (Nepean), Ontario
Canada K2E 7T7

Tel: (613) 226-7381

Fax: (613) 226-6344

www.patersongroup.ca

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Claridge Homes to conduct a Phase I - Environmental Site Assessment (ESA) of the property located at 175 Richmond Road, in the City of Ottawa, Ontario. The purpose of this Phase I – Environmental Site Assessment (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.

Based on the findings of the historical research and the site inspection, potential environmental concerns were identified with the former use of a large underground furnace oil storage tank along the east side of the building, the former use of the site by General Electric (1950-1977) for the manufacture of fridges and stoves, the former and current storage of Canadian Bank Note Company chemicals and equipment, the hydraulic piston elevator and the former property to the south (across Richmond Road) by Crain Printers (1940's to 1990's). A Phase II ESA was conducted in 2009 and a Supplemental Phase II ESA was conducted in October of 2011, in order to address most of the above mentioned concerns. The elevator and Canadian Bank Note storage areas were not addressed as part of the previous Phase II investigations.

Based on the findings of the previous subsurface investigations, the southern portion of the property was not considered to have been impacted by the Crain Printers facility formerly located south of the site, across Richmond Road. No signs of contamination were identified on the northern portion of the site, as a result of the former on-site manufacturing operations. Petroleum hydrocarbon (PHC) and benzene, toluene, ethylbenzene and xylene (BTEX) contaminated soil and groundwater was identified in the vicinity of the former UST.

Reccomendations

Contaminated soil and groundwater are present in the area of the former on-site underground fuel storage tank nest. It is recommended that a soil and groundwater remediation program be conducted in this area to remove and dispose of the soil and groundwater in excess of the MOE Table 3 standards for a residential land use. It is also recommended that an additional soil and groundwater testing program be conducted for the soil beneath the Canadian Bank Note Company storage area and the elevator pit. All waste chemicals should be removed from the property and properly disposed of, as soon as possible

Impacted soil must be disposed of at an approved waste disposal facility. A leachate analysis in accordance with Ontario Regulation 347/558, will be required prior to disposal. It is also recommended that Paterson personnel be present during the sampling program, and also during the removal of the impacted soil and groundwater to provide direction and obtain confirmatory samples upon the completion of the remediation program.

1.0 INTRODUCTION

At the request of Claridge Homes, Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (ESA) of the property located at 175 Richmond Road, in the City of Ottawa, Ontario. The purpose of this Phase I – ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I – ESA by Mr. Neil Malhotra of Claridge Homes, the current owner of the subject site located at 175 Richmond Road, Ottawa, Ontario, K1Z 6W3. Mr. Malhotra can be reached by telephone at (613) 233-6030. The Phase I – ESA was commissioned to support the filing of a Record of Site Condition (RSC) for a modification in land use from commercial to residential.

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 - Environmental Site Assessment report has been prepared in general accordance with the agreed scope-of-work and the general requirements of Ontario Regulation 511/09 made under the Environmental Protection Act and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as local, provincial and federal agencies, and was limited within the scope-of-work, time and budget of the project herein.

2.0 PROPERTY INFORMATION

Address:	175 Richmond Road, Ottawa, Ontario
Parcel Identification Number:	04021-0073
Legal Description:	Part Lot 1, Plan 376, as in N723397; Lots 2 to 5, Plan 376, City of Ottawa.
Location:	The subject property is located at the northwest corner of the intersection of Richmond Road and Kirkwood Avenue, in the City of Ottawa, Ontario. Refer to Figure 1 - Key Plan, following the body of this report, for the site location.
Latitude and Longitude:	45°23'45" N, 75°44'50" W

Site Description:

Configuration:	Irregular
Site Area:	6,475 m ²
Zoning:	IG 1 - General Industrial Zone
Current Use:	The subject property is currently occupied by a two (2) to three (3) storey commercial building with a partial basement level.
Services:	The subject property is situated in a municipally serviced neighbourhood.

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 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 511/09 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- Provide a preliminary 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 Study Area Determination

A radius of 250 m was determined to be appropriate as a Phase I study area for the Phase I Environmental Site Assessment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distances from the site.

First Developed Use Determination

According to the Chain of Title, the site was owned exclusively by individuals from 1915 to 1946 when a portion of the property was purchased by the Canadian Bank Note Company. The entire property was purchased by Canadian General Electric Company Limited (General Electric) in 1950 and sold to Max Cantor in 1977, although the property was still leased by General Electric. A foreclosure is registered in 1995, in favour of The Imperial Life Assurance Company of Canada. The property was subsequently purchased by 122856 Canada Limited in 1997 and leased to Zenix Engineering Limited in 2005. The property was purchased by Claridge Homes (Westboro) Inc., the current property owner, in October of 2011.

An aerial photograph from 1946 show the presence of what appears to be at least one (1) residential structure on the central portion of the subject site. It should be noted that the photograph is too poor in scale to show any significant details. Aerial photographs from 1953 through 2008, clearly show the subject structure. City directories, which were reviewed at the National Archives as part of this assessment, indicate that the subject property was first listed with the existing structure in 1952, at which time it was occupied by Canadian General Electric Company. According to the directories, the subject site remained occupied by Canadian General Electric until 1978. The property was subsequently listed as vacant in 1979, and has been listed as various commercial businesses (retail and offices) since 1980. For the purposes of this report, the subject property was first developed for residential purposes in the early 1900's until developed with the existing structure circa 1950.

Fire Insurance Plans

Fire Insurance Plans (FIPs), dated 1956, were reviewed at the National Archives as part of this assessment. Based on the FIPs, the subject property was occupied by Canadian General Electric Company at the time. The adjacent property to the east, across Kirkwood Avenue, was occupied by the Canadian Bank Note, while the adjacent property to the south, across Richmond Road, was occupied by Crain Printers.

Adjacent properties to the west were occupied by residential dwellings, and the adjacent property to the north, across Wilber Avenue, was vacant. In addition to the Canadian Bank Note and Crain Printers, the FIPs identified several more potentially contaminating activities in the vicinity of the subject property. The potentially contaminating activities are summarized in Table 1.

Table 1: 1956 FIPs - Potentially Contaminating Activity in Phase I Study Area			
Address	Activity	Approximate Distance/Orientation from Subject Site	Potential Environmental Concern for Subject Site (Y/N)
105 Richmond Road	Automotive Service Garage	215 m - E	N
130 Richmond Road	Crain Printers	20 m - S	N
145 Richmond Road	Canadian Bank Note	25 m - E	N
205 Richmond Road	Pepsi-Cola Co. Of Canada Ltd.	90 m - W	N
225 Richmond Road	Gasoline Service Station	170 m - W	N
199 McRae Avenue	Thomas G. Fuller Ltd., Contractors Yard	100 m - W	N
346 A McRae Avenue	Automotive Service Garage	175 m - W	N
320 McRae Avenue	Willy's Body Shop	180 m - NW	N
307 Clifton Road	Transformer Sub-Station	120 m - SW	N
Scott Street	Canadian Pacific Railway and associated warehouses	160 m - N	N
Latchwood Road	Independent Coal & Lumber Company	210 m - N	N

Based on its location of less than 50 m upgradient of the subject site, the Crain Printers property at 130 Richmond Road would typically be considered to have had the potential to impact the subject site. However, based on previous engineering reports, the Crain Printers facility is not considered to have impacted the subject site.

None of the other potentially contaminating activities identified on the 1956 FIPs are considered to have had the potential to impact the subject site given their distances and/or orientations (down- or cross-gradient) with respect to the subject property.

City of Ottawa Street Directories

City directories from 1930 to 2010 were reviewed at the National Archives, in approximate 10 year intervals, as part of the Phase I ESA. The city directories identified the following listings for the subject property.

Table 2: City Directories - Listings for Subject Site			
Site Occupant	From	To	Potential Environmental Concern (Y/N)
Marlin Travel, Ottawa Vocal and Dance Performance Academy, Gotta Paint, Genivar, Nan's Fashion and Beauty Supplies, Elation Centre	>2000	2010	N
Guillevin International Pro-restaurant equipment supply	1990	2010	N
Crackers Restaurant Two, Marine Mail Order Supply, Eastern Ontario Swimming Association, Guillevin International Inc. Electric Wholesale	1990	<2000	N
Copper Kettle Restaurant	1980	<1990	N
Canadian General Electric Company	1952	1978	Y

Neighbouring properties were listed as a combination of residential, commercial and institutional. Several potentially contaminating activities were identified and are summarized in Table 3 below.

Table 3: City Directories - Potentially Contaminating Activities in Phase I Study Area				
Address	Listed Activity	Years Listed	Distance / Orientation from Site	Potential Environmental Concern (Y/N)
345 Tweedsmuir Avenue	Lew's Auto Upholstery Frappier's Garage	1969 1959	210 m - W	N
320 McRae Avenue	Auto Rebex Carson Auto Body	2000, 2010 1990	185 m - NW	N
330 McRae Avenue	Gifford Auto	2010	180 m - NW	N
356 McRae Avenue	Lloyd's Service Centre	1979	170 m - W	N
359 McRae Avenue	Gifford Auto	2000	85 m - W	N
Clifton Road	Coal and Lumber Yard	1969, 1959, 1949	210 m - N	N
1950 Scott Street	Independent Coal, Oil and Lumber Service Station	1959, 1969 1959	150 m - NW	N
1960 Scott Street	Capital Landscaping Co. Gervais Motors	2010 1990	135 m - NW	N
1976 Scott Street	Shouldice Construction Warehouse Auto Upholstery J's Gas Bar Westboro Motors	1959 1959, 1969 1976 2010	185 m - NW	N
90 Richmond Road	Appliance Recycling Depot Esquire Cleaners Dominion Helicopters JW Bell Paper Co. Lowney & O'Connor roofers	2000, 1996, 1990, 1986, 1976 1970 1966 1956 1946	210 - SE	N
93 Richmond Road	Goodwill Auto Landsdowne VW Bernard Motors	2000, 1996, 1990, 1986 1976 1966	255 m - E	N
107 Richmond Road	Gibson Service Station	1960	220 m - E	N

Table 3 Continued: City Directories - Potentially Contaminating Activities in Phase I Study Area				
Address	Listed Activity	Years Listed	Distance / Orientation from Site (approx)	Potential Environmental Concern (Y/N)
109 Richmond Road	Canadian Tire gas bar Westboro Motor Sales Munro Garage Munro Car Dealer	1986, 1976 1966 1956 1946	220 m - E	N
119 Richmond Road	Canadian Tire	2010, 1996, 1990, 1986, 1976, 1966	150 m - E	N
125 Richmond Road	Biggs Car Lot	1956	150 m - E	N
145 Richmond Road	Canadian Bank Note	2010, 2000, 1996, 1990, 1986, 1976, 1966	20 m - E	N
190 Richmond Road	Crain-Drummond Transport	2000	25 m - S,SW	Y
201 Richmond Road	Sheera Car Care	2000	87 m - W	N
225 Richmond Road	Otto's Service Centre Westboro Auto Imports Shell Service Station	2010, 2000, 1990 1980 1970, 1960, 1949	165 m - W	N
235 Richmond Road	Otto's Car Sales and Service	1980	210 m - W	N
236 Richmond Road	McEwen Petroleum/ Nick's Service Centre	2010, 2000, 1990, 1980, 1970, 1960	220 m - SW	N
245 Richmond Road	Otto's Subaru	2000, 1990, 1980, 1970, 1960	245 m - W	N
255 Richmond Road	Lusitania Auto Body Holoway Motors Auto Garage	2010, 2000, 1990, 1980, 1970 1960, 1949	280 m - W	N
256 Richmond Road	Sunoco Service Station	2010, 2000, 1990, 1980, 1970, 1960	275 m - SW	N

Based on its location of less than 50 m upgradient of the subject site, the Crain Drummond property at 190 Richmond Road would typically be considered to have had the potential to impact the subject site. This property is considered to have also been addressed as 130 Richmond Road, the Crain Printers property, which is not listed in the city directories. As mentioned previously, this property is not considered to have impacted the subject site, based on previous engineering reports.

None of the other potentially contaminating activities identified in the city directories are considered to have had the potential to impact the subject site given their distances and/or orientations (down- or cross-gradient) with respect to the subject property.

Chain of Title

Paterson verified the current land title with Read Abstracts Limited. According to the Chain of Title, the site was owned exclusively by individuals from 1915 to 1946. It appears as though a portion of the property was purchased by the Canadian Bank Note Company in 1946 and subsequently sold to Canadian General Electric Company Limited (General Electric) in 1950. General Electric also purchased the remaining portion of the property, from a private individual, in 1950. In 1977 the deed became registered to Max Cantor, however a lease also dated 1977, was registered from Max Cantor to General Electric. Leases are also registered from Max Cantor to Canadian Appliance Manufacturing Company Ltd. in 1977, to Paul A. Thibodeau (The Soup Kettle Restaurant Limited) in 1979, and to Charles Finkelstein in 1981. A foreclosure is registered in 1995, in favour of The Imperial Life Assurance Company of Canada. The property was purchased by 122856 Canada Limited in 1997 and leased to Zenix Engineering Limited in 2005. The property was purchased by Claridge Homes (Westboro) Inc., the current property owner, in October of 2011. A copy of the Chain of Title is provided in Appendix 1.

Environmental Reports

The following reports were reviewed prior to conducting the Phase I ESA:

- “Phase I-II - Environmental Site Assessment, 175 Richmond Road, Ottawa, Ontario”, prepared by Paterson Group, dated November, 2009; and
- “Supplemental Phase II Environmental Site Assessment, Existing Commercial Property, 175 Richmond Road-Ottawa, Ontario”, prepared by Paterson Group, dated October 19, 2011.

Based on the findings of the original Phase I-ESA, potential environmental concerns identified include the former use of a furnace oil underground storage tank (UST) along the east side of the subject building, the former use of the site by General Electric for the manufacture of refrigerators and stoves, and the former use of the adjacent property to the south (across Richmond Road) by Crain Printers from the 1940's to the 1980's. A Phase II-ESA was recommended and conducted to identify potential soil and groundwater impacts from the above-noted areas of the concern.

A borehole equipped with a groundwater monitoring well was placed on the southern portion of the subject site to address the former printing facility across Richmond Road. There was no evidence of contamination observed in the soil or groundwater samples recovered from the borehole and organic vapour readings were considered to be representative of background conditions. No detectable concentrations of volatile organic compounds (VOCs) were detected in the groundwater sample submitted for analysis. Based on these findings, the Crain Printers facility was not considered to have had an impact on the subject site.

Three (3) boreholes were advanced in the area of the former tank nest. Hydrocarbon impact (odour, staining and elevated vapours) was noted in some of the samples from the boreholes placed inside and north of the former tank nest. Soil samples were submitted for benzene, toluene, ethylbenzene and xylenes (BTEX) and/or petroleum hydrocarbons (PHCs - F₁-F₄) analysis. PHCs (F₂ and/or F₃) concentrations in excess of the MOE Table 3 standards were detected in samples recovered in the footprint of the former tank nest and north of the former UST. Based on this information, the former furnace oil UST has impacted the subsurface of the subject property.

Two (2) boreholes were placed on the northern portion of the site in order to assess the former on-site industrial activities. No visual or olfactory signs of contamination were noted in the soil samples recovered from these boreholes. No VOC parameters were detected in the soil sample submitted for analytical testing.

It was recommended that the area of the former tank nest be remediated to comply with MOE standards. A more detailed delineation program was recommended for both the interior and exterior of the subject property.

Very limited information on the former site operations during General Electric ownership was available during the assessment. It was recommended that an additional attempt be made at locating original building plans in order to gather more information on the former manufacturing operations in order to determine whether additional outstanding areas of concern exist. It was also recommended that the maintenance and decommissioning contractor for the piston elevator be contacted in order to ensure that the elevator was in good condition when decommissioned with no significant leaks (current or historical) from the unit.

Finally, it was recommended that reference be made to a previous asbestos survey conducted by T. Harris (2007), to obtain further details on potential asbestos containing materials within the building, and that lead testing be conducted in the building prior to the disturbance of older painted surfaces.

During the supplemental Phase II-ESA, conducted in May and June of 2011, seven (7) additional boreholes were placed on the subject property. BTEX and PHC concentrations in excess of the MOE Table 3 standards were identified in the soil samples recovered from boreholes in the vicinity of the former UST. No detectable BTEX or PHC concentrations were identified in the soil samples collected from the remaining boreholes.

PHC concentrations in excess of the MOE Table 3 standards were identified in the groundwater sample collected from BH4. PHC parameters were not detected in the groundwater samples collected from BH6 and BH7. VOC parameters were not detected in any of the groundwater samples.

It was recommended that a soil and groundwater remediation program be conducted in the area of the former on-site underground storage tank nest, in order to remove and dispose of the soil and groundwater in excess of the MOE Table 3 standards. It was suggested that the remediation program be carried out at the time of site redevelopment, in order to reduce costs.

Plan of Survey

A current plan of survey, dated March 17, 2011 and prepared by Annis, O'Sullivan, Vollebekk Ltd., was provided to Paterson for review. A copy of the plan of survey is included in Appendix 1.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on November 4, 2011. The subject site was not listed in the NPRI database. A record was identified for the Canadian Bank Note property located east of the property, across Kirkwood Avenue, at 145 Richmond Road. The database indicates that in 2009 11 tonnes of volatile organic compounds were released to the air. These air emissions are not considered to be a concern to the subsurface soil and groundwater conditions at the subject site. The NPRI database also indicates a release of 4.5 kg at the Canadian Bank Note property as well as the off-site disposal of 12 kg of Hexavalent Chromium (and its compounds) from this property. Based on the nature of metals and the orientation of the CBNC cross-gradient from the subject site, the release at the CBNC property is not considered to pose a significant concern to the subject property. No other properties within the 250 m Phase I study area were listed in the NPRI database.

PCB Inventory

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

Ontario Ministry of the Environment (MOE) Instruments

A request for information was submitted to the MOE Freedom of Information office for information with respect to Certificates of Approval, Permits to Take Water, Certificates of Property Use or any other similar MOE issued instruments for the site. At the time of issuing this report a response had not yet been received from the MOE. A copy of the response will be forwarded to the client when it is received, along with an addendum letter to this report. A copy of the request is provided in Appendix 2.

MOE Coal Gasification Plant Inventory

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

MOE Incident Reports

A request was submitted to the MOE 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. At the time of issuing this report a response had not yet been received from the MOE. A copy of the response will be forwarded to the client when it is received, along with an addendum letter to this report. A copy of the request is provided in Appendix 2.

It should be noted that the same request was made for the subject property in 2009. The results of the search identified an occurrence report from 1997 and an MOE Hazardous Waste Information Network (HWIN) record. The occurrence report concerned a reported release of CFC's to the atmosphere by Pro Restaurant Equipment. No violation was confirmed. A copy of this information, along with the original MOE request form is also provided in Appendix 2.

MOE Waste Management Records

A request was submitted to the MOE Freedom of Information office for information regarding waste management records, which are not anticipated to exist within the files maintained by the MOE. Applicable information of current and historical waste storage locations, waste generators and waste receivers pursuant to Regulation 347 of the Revised Regulations of Ontario, 1990 (O.Reg.347) was considered in this review. At the time of issuing this report, a response had not yet been received from the MOE. A copy of the response will be forwarded to the client when it is received, along with an addendum letter to this report. A copy of the request form is included in Appendix 2.

As mentioned previously, a similar request was made for the subject property in 2009, at the time of the initial Phase I-II ESA. The HWIN record indicated that a liquid waste classified as 221-L was generated on site and disposed off-site. No other details were provided. A copy of this information and the original request form are provided in Appendix 2.

MOE Submissions

A request was submitted to the MOE Freedom of Information office for information regarding reports related to environmental conditions which are expected to have been submitted to the MOE. At the time of issuing this report, a response had not yet been received from the MOE. A copy of the response will be forwarded to the client when it is received, along the an addendum letter to this report. A copy of the request form is included in Appendix 2.

Ontario Ministry of the Environment (MOE) Notices and Instruments

A search of the MOE Brownfields Environmental Site Registry was conducted as part of this assessment, for the subject site and properties located within the Phase I study area. Four (4) records of site condition (RSCs) within the Phase I study area, were listed in the site registry. The properties are as follows: 1900 Scott Street (the residential development located approximately 20 m north of the subject site, across Wilber Avenue), 111 Richmond Road (located approximately 155 m east of the site, immediately east of the Canadian Bank Note Company property), 101 Richmond Road (approximately 240 m east of the site) and 93 Richmond Road (approximately 250 m east of the site). Based on information contained in the registry and in our files, these properties are not considered to pose a concern to the subject site.

MOE Waste Disposal Site Inventory

The Ontario Ministry of Environment document entitled "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 this document, there are no active or closed waste disposal sites or above mentioned industrial sites within the Phase I study area.

Areas of Natural Scientific Interest

According to the Ontario Ministry of Natural Resources' (MNR) GIS mapping website, there are no areas of natural scientific interest within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on November 3, 2011, to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties with potential environmental concerns. There are no records listed in the TSSA registry for the subject site. There is one (1) record of an active cylinder exchange facility at the property addressed as 190 Richmond Road, located approximately 20 m south of the subject site. The nature of this facility is not considered to pose a concern to the subject property. There were no other records identified for the properties located within the Phase I ESA study area.

City of Ottawa Former Landfill Document

Based on this document, there is a former landfill site located west of McRae Avenue, between Scott Street and Richmond Road, between 160 m and 200 m west of the subject site. Available information indicates that the landfill was likely active prior to 1940 and was used for the disposal of domestic waste. There has been no known monitoring conducted on the site. Based on its distance from the subject property and its location cross-gradient to the subject site the former landfill is not considered to pose a concern to the subject property. No active waste disposal sites are located within the Phase I study area.

City of Ottawa Former Industrial Site Document

The properties at 145 Richmond Road (Canadian Bank Note Company) and 190 Richmond Road (former Crain Printers) were identified in this document. No other industrial sites were listed within the Phase I study area.

City of Ottawa Historical Land Use Inventory Search

A request was made to the City of Ottawa to conduct a search of existing environmental records in their Historical Land Use Inventory (HLUI) database, for the subject site and surrounding properties. A response was received from the municipality on December 2, 2011. The Infrastructure Services and Community Sustainability Department has no records for the subject property. The HLUI showed seven (7) records for the subject site and seven (7) records for properties within 50 m of the subject site. The activities identified at the subject site, which is also addressed as 350 and 360 Kirkwood Avenue, include the following: Albert and Sons Engravers (2000-2003), Pro Restaurant Equipment (2001), Brebner Manufacturer and Repairs (men and boy's clothing industries - 2001), Canadian General Electric (1956), Kirkwood Paper Sign Man (2001-2005), Diamond Mechanical (2001), Guillevin International (2001,2005). The activities identified for the neighbouring properties include the following: RL Crain (190 Richmond Road - 1947-1994), Westboro Garage (166 Richmond Road 1930-1940), Photo Features (160 Richmond Road - 2001), Westboro Monument and Wire Works (156 Richmond Road - 1940), Canada Aerial Photo Corporation (160 Richmond Road - 1998) and the Canadian Bank Note Company (195 Richmond Road - 1948). The information provided in the City's records does not appear to be entirely accurate or complete. No pertinent information not already addressed in other sections of this report was identified. A copy of the City's response is located in Appendix 2.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed. The review period covers the period of time from the first development of the site to present site conditions. Based on the review, the following observations have been made:

- | | |
|------|---|
| 1945 | The subject site and adjacent properties were occupied by residential dwellings or were vacant. |
| 1946 | No significant changes were made to the use of the subject site or adjacent properties to the north, east and west. The Crain Printers facility was constructed south of the site, across Richmond Road. |
| 1953 | The existing structure was constructed on the subject site. The original portion of the Canadian Bank Note facility was constructed on the adjacent property to the east, across Kirkwood Avenue. No significant changes were made to the use of the adjacent properties to the north, south and west. |
| 1968 | No apparent changes were made to the subject site or adjacent properties with the exception of the Canadian Bank Note facility which was expanded. |
| 1976 | No apparent changes were made to the subject site or adjacent properties. |
| 1986 | No apparent changes were made to the subject site or adjacent properties. |
| 1994 | No apparent changes were made to the subject site or adjacent properties. |
| 2002 | (City of Ottawa website) No apparent changes were made to the subject site or adjacent properties to the north, east and west. The adjacent property to the south, formerly occupied by Crain Printers, was vacant. |
| 2005 | (City of Ottawa website) No apparent changes were made to the subject site or adjacent properties to the east and west. The adjacent property to the south was redeveloped with the existing commercial structure and the adjacent property to the north was developed with numerous residential dwellings. |

2008 (City of Ottawa website) No apparent changes were made to the subject site or adjacent properties.

Laser copies of some of the aerial photographs listed above are included in Appendix 1 of this report.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada - The Atlas of Canada website. The topographic maps indicate that the regional topography in the general area of the subject site slopes downward to the north. No environmental concerns were identified on the topographic mapping. An illustration of the referenced topographic map is present on Figure 2 - Topographic Map following the body of 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, "where the land is rarely more than 150 m above sea level, except for the Monteregion Hills, which consist of intrusive igneous rocks."

Geological Maps

The map "Bedrock Geology of Ontario, Map 2544, Ontario Geological Survey, 1991" was consulted as part of this assessment. Based on this mapping, the surficial overlying material consists of plain Glacial Till at depths ranging from 3 to 5 m over most of the site and from 2 to 3 m near the northwestern corner of the subject site. The mapping also indicates that the bedrock underlying the subject property is of the Gull River Formation, comprised of interbedded limestone and dolomite.

Water Well Records

A requisition was sent to the MOE to provide water well records for all drilled wells within 250 m of the subject site. A response was received from the MOE on December 1, 2011. The records provided by the MOE indicate potable wells located on properties along the west side of Island Park Drive (1948), at the southwest corner of Richmond Road and Kirkwood Avenue (1958) and at the southeast corner of Richmond Road and Tweedsmuir Avenue (1958). Records of monitoring wells are present for the properties at 109 Richmond Road (former Canadian Tire property), 369 Island Park Drive at Richmond Road, Tweedsmuir Avenue north of Richmond Road and 255 Richmond Road. Based on the distances of these properties (over 50 m) and their positions cross-gradient to the subject site and information located in our files, these properties are not considered to pose a concern to the subject site. A well record for an abandoned potable well for 145 Richmond Road (the Canadian Bank Note Company property) was also included in the MOE's response. Copies of the well records are provided in Appendix 2.

Water Bodies and Areas of Natural Significance

No water bodies are present on the subject property or within the Phase I study area. The Ontario Ministry of Natural Resources GIS mapping was reviewed for Areas of Natural and Scientific Interest (ANSIs). According to the mapping, there are no areas of natural significance within the Phase I study area.

Fill Materials

Fill materials were not observed on site at the time of the site inspection. Based on the previous engineering reports, fill material is present on site, beneath the asphaltic concrete and over native Glacial Till. Fill was encountered at the former tank nest location, to the end of the borehole (practical refusal to augering at a depth of 4.2 m below ground surface), during the previous drill program. The fill material generally consisted of silty sand with gravel or crushed stone. No deleterious fill materials were noted during the field program.

No obvious signs of fill material were noted on the properties within the Phase I ESA study area, at the time of the site assessment. No environmental concerns are anticipated with respect to fill materials on the site or neighbouring properties.

5.0 INTERVIEWS

Property Owner

A representative from Claridge Homes was not interviewed as part of the assessment. Claridge Homes recently purchased the subject property and does not have significant historical knowledge of the site.

District Realty Representative

Mr. Grant Gentle, with District Realty, has been the site superintendent for approximately 15 years, and was interviewed during both the previous Phase I-ESA carried out for the subject property in 2009 and the current Phase I ESA. At the time of the original Phase I, Mr. Gentle indicated that an underground storage tank (UST) was formerly located on the east side of the subject building and that the tank had been removed (~2007). Mr. Gentle indicated that there were numerous holes at the bottom of the tank and a strong odour coming from the excavation at the time of the tank removal.

According to Mr. Gentle, he was told that General Electric formerly used the site to build fridges and stoves. He mentioned that, from conversations with long-time employees of the adjacent Canadian Bank Note facility, the work was done on the second and third floors of the building. When asked about building plans, Mr. Gentle indicated that he recalled looking at a set of original building plans for the subject property. He believed that the plans were given to an engineering firm during renovations to the building, and the plans could not be located.

Mr. Gentle indicated that, to his knowledge, the subject site and adjacent properties were never occupied by service stations, garages or dry cleaning facilities. He was also unaware of any spills or environmental concerns for the subject site (other than the former UST). To his knowledge, there have been no significant changes with regard to the environmental condition of the subject site and adjacent properties, since the previous Phase I ESA conducted in 2009.

Mr. John Foley, with the Canadian Bank Note Company Ltd. (CBNC) was also interviewed as part of this assessment. CBNC stores a vast quantity of various chemicals in the former basement-level parking garage located at the north end of the subject structure. Most of the chemicals are stored in 45 gallon (205) L sealed drums, located on platforms. According to Mr. Foley, various inks, ink pigments and varnishes as well as rollers and mechanical parts are stored at this location. Items stored on the ground floor level above include mostly paper products as well as sealed drums 205 L drums containing aqueous glue and clay products. Mr. Foley was unaware of any significant releases or spills of any CBNC products stored within the subject structure.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site investigation was conducted between 1:30 and 4:00 PM on November 10, 2011. Ms. Karyn Munch, an Environmental Engineer with the Environmental Department of Paterson Group, conducted the site investigation. The weather conditions were cloudy with a temperature of 5°C. In addition to the site, the uses of neighbouring properties within the Phase I ESA study area were also assessed at the time of the site investigation.

The subject building is currently occupied by the following tenants: Marlin Travel, Guillevin International Company (electrical supply wholesaler), Ottawa Vocal & Dance Performance Academy, Gotta Paint, Genivar, Nana's Fashion and Beauty Supplies, Elation Centre (a yoga studio), Canadian Bank Note Company storage and Church of the Pentecost. Photographs 1-4 depict most of the exterior of the site building.

6.2 Specific Observations at the Phase I Property

Buildings and Structures

The subject property is occupied by a 1 to 2 storey commercial building with a basement level. The exterior of the building is finished with a combination of concrete block, brick, stucco and aluminum cladding. The roof is flat and finished with a combination of asphaltic membrane and tar and gravel. Based on historical information, the structure was built in the 1950's. The building is currently heated with natural gas fired equipment (boilers, space heaters and roof top HVAC units).

Below Ground Structures

A piston elevator is present in the subject building. The elevator was reportedly decommissioned several years ago. The elevator room was accessible at the time of the inspection. Some staining was observed on the poured concrete floor around the elevator pump and around three (3) small containers of hydraulic fluid stored on the floor. The elevator pit was not accessible at the time of the site inspection, however it was possible to view a limited portion of the pit. What appeared to be water and rust stains were present on the concrete floor of the pit and are shown in Photograph 5. No other below ground structures were observed on the site at the time of the site assessment, nor are any expected to exist.

Storage Tanks

Vent and fill pipes, presumed to be associated with a former basement aboveground storage tank (AST), were observed on the east wall of the building. The vent and fill pipes were also observed on the interior of the subject structure, within the boiler room located in the basement. The pipes were cut off and no AST was present.

An asphalt patch was also noted on the exterior of the property, near the aforementioned vent and fill pipes, the reported location of the former underground storage tank (UST) previously removed from the subject property. A set of distribution lines were observed entering the boiler room at this location on the interior of the subject structure. There were no other vent and fill pipes or signs of existing or former USTs observed on the interior or exterior of the subject site at the time of the site assessment.

Potable Water Source

The subject property is serviced with municipal water. There were no potable water wells observed on or around the subject property at the time of the site visit.

Underground Utilities

Underground utility service locates were conducted prior to both the previous Phase I-II ESA and Supplemental Phase II ESA. A buried Hydro conduit is present east of the building and runs parallel to Kirkwood Avenue on the northern portion of the property.

The sanitary sewer line extends north from the north wall of the building and connects to a manhole located on near the northwestern corner of the property. The sewer line then travels west along Wilbur Avenue. The water service extends north from Richmond Road and enters the central portion of the east wall of the subject building. Enbridge Gas and Bell were marked as clear on the service locates, however two (2) natural gas hookups are present along the east wall of the subject building. It is considered likely that these lines connect to a main distribution line along either Kirkwood Avenue or Richmond Road.

Building Entry/Exit Points

Twelve (12) man doors were observed on the exterior of the building. One (1) garage bay door is present along the south wall near the western corner of the building. One (1) loading area/bay door is present along the east wall near the central portion of the site. Four (4) loading areas/bay doors are present at the rear of the building. The location of the aforementioned entry/exit points are labelled on Drawing PE2357-2.

Heating/Cooling Systems

The building is currently heated with natural gas fired equipment (boilers, space heater and rooftop HVAC units). As mentioned previously, a former underground storage tank was located along the eastern wall of the subject building. A former aboveground storage tank was also located in the basement boiler room. The former presence of the UST and AST indicates that the previous heating source for the building was furnace oil.

Sumps, Pits and Drains

The liquid discharge from the subject property includes the washwater and sewage from the building and the water from the floor drains and sump pit. The sump pit was located in the boiler room situated along the eastern wall of the subject structure. The sump pit, approximately 1 m in depth, is suspected to be original with the construction of the building in the 1950's. Water was present in the pit at the time of the inspection. The water appeared cloudy at the time of the site assessment, however no hydrocarbon sheen or unusual odour was noted.

Mr. Gentle indicated that a sump pump is located in the elevator pit, which was not accessible at the time of the site inspection. He indicated that the pit is approximately 2 m deep and has been dry in the past. A photo of a portion of the pit is shown in Photograph 5.

Several floor drains were observed at the time of the site inspection. A floor drain was observed in the mechanical room containing the air handling equipment. Water was ponded around the drain at the time of the assessment. The water was clear and no signs of contamination were observed. A floor drain was observed in the basement hallway (within the northern portion of the subject building). It was not possible to open the drain cover at the time of the inspection. A floor drain was also observed in the ground floor level CBNC storage area. The drain appeared to be dry upon inspection. A floor grate, extending the length of the basement-level CBNC storage area was noted at the time of the inspection. It was not possible to inspect the length of the floor grate as the majority of it was covered with stored items. However, the drain led to a catch basin at the base of the entrance ramp, which was inspected. The basin was approximately 1 m deep and the water inside was observed to be clean with no hydrocarbon sheen or odour and is shown in Photograph 6.

Building plans showing the location of the floor drains were not available. However, the location of the elevator pit and approximate locations of the sump pit and floor grate and catch basin located in the CBNC storage area are shown on Drawing PE2357-2.

All floor drains and sump pits discharge to the municipal sewer system.

Unidentified Substances

A 20-L pail containing an unidentified substance was located in the basement mechanical room where the air handling equipment was located. The pail was sealed and marked, however, the substance had been spilled over the side and it was not possible to determine its contents. Staining was observed on the poured concrete floor around the pail. No cracks were observed in the concrete and the staining was not located in the vicinity of a drain or any other potential discharge location.

Staining Near a Potential Discharge Location

Staining was noted on the floor of the basement-level CBNC storage area. The staining was red in colour and considered to have resulted from minor spillages of ink pigments stored in small containers located on a shelf in the central portion storage area. There were also minor oil stains on the concrete floor in the vicinity of the stored mechanical parts. The staining was not in the immediate vicinity of the floor drain, however as noted previously, the drain could not be fully inspected due to stored items covering the grate. As mentioned above in the *Sumps, Pits and Drains* section, the drain led to a basin at the base of the ramp leading to the storage area. The basin was open and inspected. The water in the basin was clear and no obvious visual or olfactory indications of impact were noted. Minor stains were noted elsewhere in the basement and ground floor levels of the subject building, however the stains were not located in the vicinity of potential discharge locations.

The Canadian Bank Note Company was contacted with a request for an inventory of chemicals stored on site, including Material Safety and Data Sheets (MSDS), as well as information pertaining to any previous spills or releases on the subject site. A response had not been received at the time of issuance of this report. Upon receipt, all information will be provided to the client in an addendum letter.

Floor Condition

The flooring throughout the building was observed to be a combination of poured concrete, vinyl floor tiles, linoleum, terrazzo, carpet, laminate and ceramic tile. No cracks or signs of corrosion were observed on the flooring in the building at the time of the assessment. As discussed above, staining was noted on the poured concrete floor of the Canadian Bank Note Company basement storage area. The concrete in the vicinity of the staining was in good condition at the time of the site assessment. Other areas of minor staining were observed in the basement mechanical rooms, including the air handling equipment room and the elevator. Minor staining was also observed in Gotta Paint. The floor surface in the areas of minor staining was in good condition.

Ground Surface

The subject building occupies most of the subject site, with the exception of asphalt parking areas located north, east and south of the building. The site and general topography in the area slope down in a northerly direction. Site drainage consists of sheet drainage to catch basins located on the subject property and adjacent roadways. No ponding of water or signs of surficial contamination were observed at the time of the investigation.

Railway Lines

No railway lines were observed on the subject site. A Canadian Pacific Railway line was previously present approximately 160 m north of the subject site. Based on the distance of the former railway from the subject property and the inferred direction of groundwater flow northward towards the Ottawa River, the former rail line is not considered to pose a concern to the subject property.

Potentially Contaminating Activities

There are no manufacturing or processing activities conducted on the subject property, however ink, ink pigments and varnishes are stored in the basement-level Canadian Bank Note Company storage area. Inks and varnishes are stored in sealed 205 L drums located on platforms. Small quantities of ink pigments are stored in plastic containers located on a shelving unit. No other potentially contaminating activities are currently located on the subject property.

Building Materials

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

- The floors are finished with a combination of poured concrete, vinyl floor tiles, linoleum, terrazzo, carpet, laminate and ceramic tiles;
- The walls are finished with a combination of concrete, concrete wire mesh and gypsum board;
- The ceilings are finished with gypsum board, suspended tiles, plaster (stippled finish) or concrete. Newly installed spray-on insulation was observed on the ceiling in the upper floors; and
- Lighting used throughout the building is fluorescent and incandescent.

Potentially Hazardous Building Products

■ **Asbestos-Containing Materials (ACMs)**

Based on the date of construction of the building (1950's), some building materials are considered to have the potential to contain asbestos. An asbestos survey was reportedly conducted by T. Harris for the subject building in 2007. Reference to this report should be made for further information on ACMs. The suspected ACMs were generally in good condition at the time of the site visit and do not represent an immediate concern.

■ **Lead-Based Paint**

Based on the date of construction of the building, lead-based paints may be present on original painted surfaces throughout the subject structure. Painted surfaces were generally in good condition at the time of the site assessment.

■ **PCBs**

No concerns with respect to PCBs were noted at the time of the site inspection. The hydro vault was inaccessible at the time of the site visit. The site superintendent was not aware of any issues with respect to the transformer.

■ **Urea Formaldehyde Foam Insulation (UFFI)**

No signs of UFFI were observed at the time of the site assessment, however the wall cavities were not inspected to confirm insulation type.

6.3 Enhanced Investigation Property

On-Site Processing/Manufacturing Operations

The tenants currently occupying the subject site include: Marlin Travel, Guillevin International Company (wholesaler of electrical equipment, wiring and supplies), Rob's Music, Gotta Paint (paint-it-yourself ceramic studio), Genivar (an engineering firm), Nana's Fashion and Beauty Supplies, Elation Centre (yoga studio) and Church of the Pentecost. The Canadian Bank Note Company uses the northern portion of the building for storage purposes. There are no current on-site processing or manufacturing operations.

Hazardous Material Storage

As mentioned previously, large quantities of ink and varnishes are stored in the basement-level Canadian Bank Note Company storage area. Inks and varnishes are stored in sealed 45 gallon drums (205 L) located on platforms. Small quantities of ink pigments are stored in plastic containers located on a shelving unit. There was no indication of a significant chemical release at this location, however there was staining considered to be from small releases of ink pigments, observed on the poured concrete floor. The floor was in good condition at the time of the assessment. There was a floor drain running the length of the eastern wall of the storage area. The floor drain could not be thoroughly inspected due to storage items. However, the collector basin was inspected. The water was clean and no sheen or odours were noted.

Small quantities of hydraulic fluid were observed to be stored in small plastic containers located in the elevator room. Small quantities of paint as well as cleaning and maintenance chemicals were present throughout the remainder of the building. As mentioned previously, minor staining (dipping glaze) was noted in Gotta Paint and minor staining of an unidentified substance was observed in the mechanical room containing the air handling equipment.

Raw Materials Handling and Storage

No raw materials are handled or stored on the subject property.

Drums, Totes and Bins

Multiple drums were stored in the Canadian Bank Note property at the time of the site assessment. A request has been made to a representative (Mr. John McKechnie) from the Canadian Bank Note property for an inventory of the various chemicals on site and any records of previous spills. According to Mr. John Foley (with the CBNC) who was present at the time of the site inspection, chemicals stored on site include various inks, pigments, varnishes, aqueous bonding adhesives, clay compound and rollers. These chemicals are stored in 45 gallon (205 L) drums. As noted previously, some staining was noted on the floor of the storage area, however there was no indication of a significant release. It should be noted that photographs of the interior of the Canadian Bank Note storage area were not permitted at the time of the site assessment.

Oil/Water Separators

As mentioned previously, no in-ground structures including oil-water separators, were observed at the time of the site inspection. Mr. Grant Gentle also indicated that to his knowledge there are no existing or former oil/water separators located in the subject building.

Vehicle Equipment and Maintenance Areas

There were no vehicle equipment and maintenance areas present at the site.

On-Site Spills

Based on historical research, current searches and inquiries made as part of this assessment and available information to date as well as observations made during the site visit, there have been no significant on-site spills or releases. A request has been made to the Canadian Bank Note Company for information pertaining to any spills that may have occurred in the CBNC storage area. A response had not been received at the time of issuance of this report.

As discussed in previous sections, minor staining was noted in several areas throughout the building, however the stain were not located near potential discharge locations and are not considered to pose a significant concern to the subject property.

Liquid Discharge Points

As discussed previously, in the section entitled *Sumps, Pits and Drains*, the liquid discharge from the subject property includes the washwater and sewage from the building and the water from the floor drains and sump pit. The sump pit was located in the boiler room situated along the eastern wall of the subject structure. The sump pit, approximately 1 m in depth, is suspected to be original with the construction of the building in the 1950's. Water was present in the pit at the time of the inspection. The water appeared cloudy at the time of the site assessment, however no hydrocarbon sheen or unusual odour was noted.

Mr. Gentle indicated that a sump pump is located in the elevator pit, which was not accessible at the time of the site inspection. He indicated that the pit is approximately 2 m deep and has been dry in the past. A photo of a portion of the pit is shown in Photograph 5.

Several floor drains were observed at the time of the site inspection. A floor drain was observed in the mechanical room containing the air handling equipment. Water was ponded around the drain at the time of the assessment. The water was clear and no signs of contamination were observed. A floor drain was observed in the basement hallway (within the northern portion of the subject building). It was not possible to open the drain cover at the time of the inspection. A floor drain was also observed in the ground floor level CBNC storage area. The drain appeared to be dry upon inspection. A floor grate, extending the length of the basement-level CBNC storage area was noted at the time of the inspection. It was not possible to inspect the length of the floor grate as the majority of it was covered with stored items. However, the drain led to a catch basin at the base of the entrance ramp, which was inspected. The basin was approximately 1 m deep and the water inside was observed to be clean with no hydrocarbon sheen or odour and is shown in Photograph 6.

Building plans showing the location of the floor drains were not available. However, the location of the elevator pit and approximate locations of the sump pit and floor grate and catch basin located in the CBNC storage area are shown on Drawing PE2357-2 .

All floor drains and sump pits discharge to the municipal sewer system.

Hydraulic Equipment

As previously discussed, a piston elevator is present in the subject building. The elevator was reportedly decommissioned three (3) years ago. The elevator room was accessible at the time of the inspection. Some staining was observed on the poured concrete floor around the elevator pump and around three (3) small containers of hydraulic fluid stored on the floor. The elevator pit was not fully accessible at the time of the site inspection, however it was possible to view a limited portion of the pit. What appeared to be water and rust stains were present on the concrete floor of the pit and are shown in Photograph 5.

No other hydraulic equipment, such as hydraulic lifts, in-ground hoists or loading-dock lifts were observed at the time of the site assessment. Two (2) loading docks with spring-loaded equipment are present at the subject site. The remaining loading areas have been constructed with ramps. The loading docks/areas present on site are not considered to pose a concern to the subject property.

6.4 Neighbouring Properties

An inspection of the neighbouring properties were conducted from publicly accessible roadways at the time of the site assessment. Several potentially contaminating activities were identified within the Phase I ESA study area, and are presented in Table 4 below.

Table 4: Neighbouring Properties - Potentially Contaminating Activities in Phase I Study Area			
Address	Activity	Approximate Distance/Orientation from Subject Site	Potential Environmental Concern for Subject Site (Y/N)
305 Clifton Road	Hydro Sub-Station	120 m -NW	N
81 Richmond Road	Legacy Auto Centre	315 m - E	
145 Richmond Road	Canadian Bank Note	20 m - E	N
225 Richmond Road	Otto's Subaru	165 m - W	N
256 Richmond Road	Retail fuel outlet	275 m - SW	N
320 McRae Avenue	Autorebex service garage	185 m - NW	N
330 McRae Avenue	Gifford Automotive Centre Otto's Collision Centre	180 m - NW 175 m - W	N N

The current uses of the immediately adjacent properties and the other neighbouring properties in the Phase I study area are not considered to pose an environmental concern to the subject site, based on their distances and/or locations down- or cross-gradient with respect to the subject property. Current land use in the Phase I study area is illustrated on Drawing: PE2357-2 - Surrounding Land Use 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 ownership and other observations dating back to the first known date of ownership of the site.

Table 5: Land Use History				
Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photographs, Fire Insurance Plans, Etc.
Prior to 1915	Fred A. Heney	Likely vacant or residential	Likely vacant or residential	N/A
1915 to 1921	Robert M. Arbuthuot	Likely vacant or residential	Likely vacant or residential	N/A
1921 to 1922	Joseph G. McGuire	Likely vacant or residential	Likely vacant or residential	N/A
1924 to 1950	Winnifred Plaunt	Residential	Residential	Residential structure can be seen in 1945 aerial photo
1950 to 1977	Canadian General Electric Co. Ltd.	Canadian General Electric Co. Ltd.	Residential and later Commercial (Canadian General Electric Company)	Existing structure can be seen in 1953 aerial and 1956 FIP
1977 to 1995	Max Cantor	Commercial	Various commercial retail and restaurants, as well as Guillevin International electrical supply wholesaler	City Directories
1995 to 1997	The Imperial Life Assurance Company of Canada	Commercial	Various commercial retail and restaurants, as well as Guillevin International electrical supply wholesaler	City Directories

Table 5 Continued: Land Use History				
Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photographs, Fire Insurance Plans, Etc.
1997 to 2005	122856 Canada Limited	Commercial	Various commercial retail and restaurants, as well as Guillevin International electrical supply wholesaler	City Directories
Oct, 2011 to present	Claridge Homes (Westboro) Inc.	Commercial	Rob's Music, Nana's Beauty Products and Supplies, Marlin Travel, Elation Centre, Gotta Paint, Guillevin International, Canadian Bank Note storage, Church of the Pentecost, Genivar	Site Visit

Potentially contaminating activities were identified on the subject site with the former use of the site for manufacturing purposes (Canadian General Electric Company Limited) as well as the former use of an underground fuel storage tank (UST) on the subject property. Limited information with regards to the Canadian General Electric Company Limited operations was available at the time of the assessment. It was reported by Mr. Grant Gentle that the operations consisted of the manufacturing of fridges and stoves on the second and third floors of the subject structure. Mr. Gentle also indicated that at the time of the UST removal, the UST was in poor condition and a fuel odour was coming from the excavation.

7.2 Areas of Potential Environmental Concern and Potential Contaminating Activities

Areas of potential environmental concerns identified with the Phase I property, at the time of the site assessment, are provided in Table 6 below.

Table 6: Areas of Potential Environmental Concern					
Area of Potential Environmental Concern (APEC)	Location of PEC on Phase One Property	Potential Contaminating Activities (PCA)	Location of PCA (on-site/off-site)	Contaminants of Potential concern (CPC)	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
Former on-site underground fuel storage tank (UST)	Exterior of Phase 1 Property, along east wall of subject structure	Leakage from former UST	on-site	Petroleum Hydrocarbons (PHCs - F ₁ -F ₄) and Benzene, Ethylbenzene, Toluene and Xylenes (BTEX)	Soil and Groundwater
Former on-site operations associated with the Canadian General Electric Company	Interior/exterior of subject structure	Use, storage and disposal of potential chemicals associated with manufacturing process or equipment	on-site	Volatile Organic Compounds (VOCs), PHCs and metals	Soil and Groundwater
Storage of various Canadian Bank Note products	Interior of northern portion of subject structure	Storage of chemicals including ink, ink pigments, adhesives and varnishes	on-site	VOCs and metals	Soil and Groundwater
Hydraulic elevator	Interior of subject property	In-ground hydraulic structure	on-site	PHCs	Soil and Groundwater
Former Crain Printers facility and Transport operation	Southern portion of Phase I property	Use, storage and disposal of chemicals associated with site operations	off-site	PHCs, VOCs	Soil and Groundwater

A Phase II ESA was conducted in 2009 and a more recent Supplemental Phase II ESA was conducted in October of 2011. Based on the field observations and analytical test results, both the former Crain Printers facility located south of the site and any potential General Electric activities located on the exterior of the site are not considered to have impacted the subject property. The initial Phase II ESA identified soil and groundwater contamination in the vicinity of the former UST. The Canadian Bank Note storage area was not identified as a potential area of concern during the previous Phase I ESA, as no staining was identified and no spills were reported. It was therefore not addressed as part of the Phase II ESA. At the time of the previous investigation, it was recommended that the contractor that decommissioned the elevator be contacted to determine the condition of the equipment at that time. Both Mr. Gentle and the representative from District Realty present at the time of the site inspection, were unaware of any attempts to address this recommendation.

The former Crain Printers facility was addressed during the previous subsurface investigations and are not considered to have impacted the subject property. A borehole was also placed to address the Canadian Bank Note property although based on its location across Kirkwood, cross-gradient to the site, it was not considered to have the potential to significantly impact the property. Based on the results of the subsurface investigations, these two properties are not considered to have impacted the subject site.

7.3 Conceptual Site Model

Existing Buildings and Structures

The subject site is occupied by a one (1) to two (2) storey commercial building with a partial basement level. The location of the subject structure is shown on Drawing PE2357-3 - Conceptual Site Model.

The immediately adjacent properties to the west (of the northern portion of the property) and south (across Wilber Avenue) are occupied by residential dwellings. The property adjacent to the west of the southern portion of the site is occupied by a commercial retail property. The property to the east (across Kirkwood Avenue) is occupied by the Canadian Bank Note Company Ltd. and the property to the south (across Richmond Road) is occupied by The Great Canadian Superstore. The uses of the properties in the Phase I study area are indicated on the Conceptual Site Model.

Water Bodies and Areas of Natural Significance

There are no water bodies on the subject site or within the Phase I study area. No areas of natural significance were observed on the site or within the Phase I study area, nor are any expected to be present based on the information provided in the Ministry of Natural Resources' electronic GIS mapping system.

Drinking Water Wells

The properties in the Phase I Study area are currently serviced by municipal water and sewer services. According to the MOE Well Records several properties within the Phase I study area were serviced with potable wells in the 1940's and 1950's. A well record exists for the decommissioning of a potable well at the property at 145 Richmond Road (Canadian Bank Note Company).

Neighbouring Land Use

Neighbouring land use in the Phase I study area was predominantly residential and commercial with several institutional properties. Several potentially contaminating activities were observed in the study area and are listed in Table 4 (Section 6.4). No significant environmental concerns were identified in the Phase I study area.

Areas of Potential Contaminating Activities and Potential Environmental Concerns

Areas of potential contaminating activities and potential environmental concerns identified on the site at the time of the site assessment include signs (distribution line and asphalt cut) indicating the former use of an underground storage tank (UST), as well as the storage of Canadian Bank Note chemicals and the hydraulic piston elevator located within the subject structure.

Based on previous subsurface investigations it is known that soil and groundwater contamination in excess of the current MOE standards, is present on site in the vicinity of the former underground storage tank.

According to Table 2 of Ontario Regulation 179/11, the storage of ink and pigments is considered to be a potentially contaminating activity. Some staining was noted on the concrete floor, however the floor was in good condition and no indications of a significant release in the vicinity of potential discharge locations (the floor drain along the eastern wall) were observed. To the knowledge of Mr. John Foley, the Canadian Bank Note representative on site at the time of the site assessment, there have never been any significant quantities of chemicals spilled on site.

A hydraulic elevator is present on site. The elevator room was accessible at the time of the site assessment. It was possible to view a portion of the interior of the pit from the elevator room. Apparent water and rust stains were noted on the floor of the pit as shown in Photograph 5. According to Mr. Grant Gentle, the pit has in the past been dry and to his knowledge there are no potential concerns associated with the elevator.

Small quantities of various chemicals, including dipping glaze and ceramic paint (Gotta Paint), hydraulic oil (elevator room) and cleaning and maintenance chemicals as well latex paint and adhesives were observed in the building. All chemicals were properly stored in sealed containers. Minor staining was observed on the poured concrete floor in the elevator room and in Gotta Paint. The staining was contained to a limited area away from potential discharge locations. An unknown substance was observed in a basement mechanical (air handling equipment) room. The substance was contained in a 20 L pail. Minor staining was located on the concrete floor around the pail. The floor was in good condition and no potential discharge locations were located in the immediate vicinity.

As discussed previously, several potential contaminating activities were observed in the Phase I study area at the time of the site assessment. None of the potentially contaminating activities identified are considered to pose a concern to the subject property based on their distance and or orientation (down- or cross-gradient) with respect to the subject site.

8.0 CONCLUSIONS

Assessment

The results of the historical research and site assessment identified the following potential contaminating activities and potential environmental concerns on the Phase I property: the former use of an underground fuel oil storage tank, the former use of the site by the Canadian General Electric Company for the manufacturing of fridges and stoves, the current storage of Canadian Bank Note Company inks, pigments and varnishes and the existing hydraulic piston elevator. The former Crain Printers facility (south of the site across Richmond Road) was considered to have the potential to impact the subject property.

Previous subsurface environmental investigations were conducted for the Phase I property, to address the above mentioned concerns (with the exception of the elevator and CBNC chemical storage). Soil and groundwater contaminated in excess of the current 2011 MOE Table 3 standards for a residential land use is present on site, in the vicinity of the former underground storage tank (UST). No visual or olfactory signs of contamination were identified in the soil collected from boreholes placed on the northern portion of the site to address potential issues with the former use of the site by the Canadian General Electric Company. No VOC's were identified in the groundwater sample collected from the borehole placed on the southern portion of the site to address the former Crain Printers facility.

Based on the results of this assessment, it is our opinion that a soil and groundwater remediation program is required for the subject property.

Recommendations

Contaminated soil and groundwater have been identified in the area of the former on-site underground fuel storage tank nest. It is recommended that a soil and groundwater remediation program be conducted in this area to remove and dispose of the soil and groundwater in excess of the MOE Table 3 standards for a residential land use. It is also recommended that an additional soil and groundwater sampling program be conducted for the soil beneath the Canadian Bank Note Company storage area and the elevator pit. All waste chemicals should be removed from the property and properly disposed of as soon as possible.

Impacted soil must be disposed of at an approved waste disposal facility. A leachate analysis in accordance with Ontario Regulation 347/558, will be required prior to disposal. It is also recommended that Paterson personnel be present at the time of the additional sampling program, and also during the removal of the impacted soil and groundwater to provide direction and obtain confirmatory samples upon the completion of the remediation program.

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with the agreed scope-of-work, in compliance with O. Reg. 511/09 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 Claridge Homes. Permission and notification from Claridge Homes and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Karyn Munch, P.Eng.



Mark S. D'Arcy, P.Eng.

Report Distribution:

Claridge Homes (6 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 Waset Storage Site Inventory.

Provincial Records

MOE Freedom of Information and Privacy Office.

MOE Municipal Coal Gasification Plant Site Inventory, 1991.

MOE document entitled "Waste Disposal Site Inventory in Ontario".

MOE Brownfields Environmental Site Registry.

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

MNR Areas of Natural Significance.

MOE Water Well Inventory.

Municipal Records

City of Ottawa Historical Land Use Inventory.

City of Ottawa Former Landfill Document.

City of Ottawa Former Industrial Sites Document.

City of Ottawa electronic map.

Local Information Sources

Chain of Title obtained through Read Abstracts Limited, November 24, 2011.

Current Plan of Survey, prepared by Annis, O'Sullivan, Vollebakk Ltd.

Previous Engineering Reports.

Personal Interviews.

Public Information SourcesB

Google Earth

Google Maps/Street View

FIGURES

FIGURE 1 - KEY PLAN

FIGURE 2 - TOPOGRAPHIC MAP

DRAWING PE2357-2 - SURROUNDING LAND USE PLAN

DRAWING PE2357-3 - CONCEPTUAL SITE MODEL

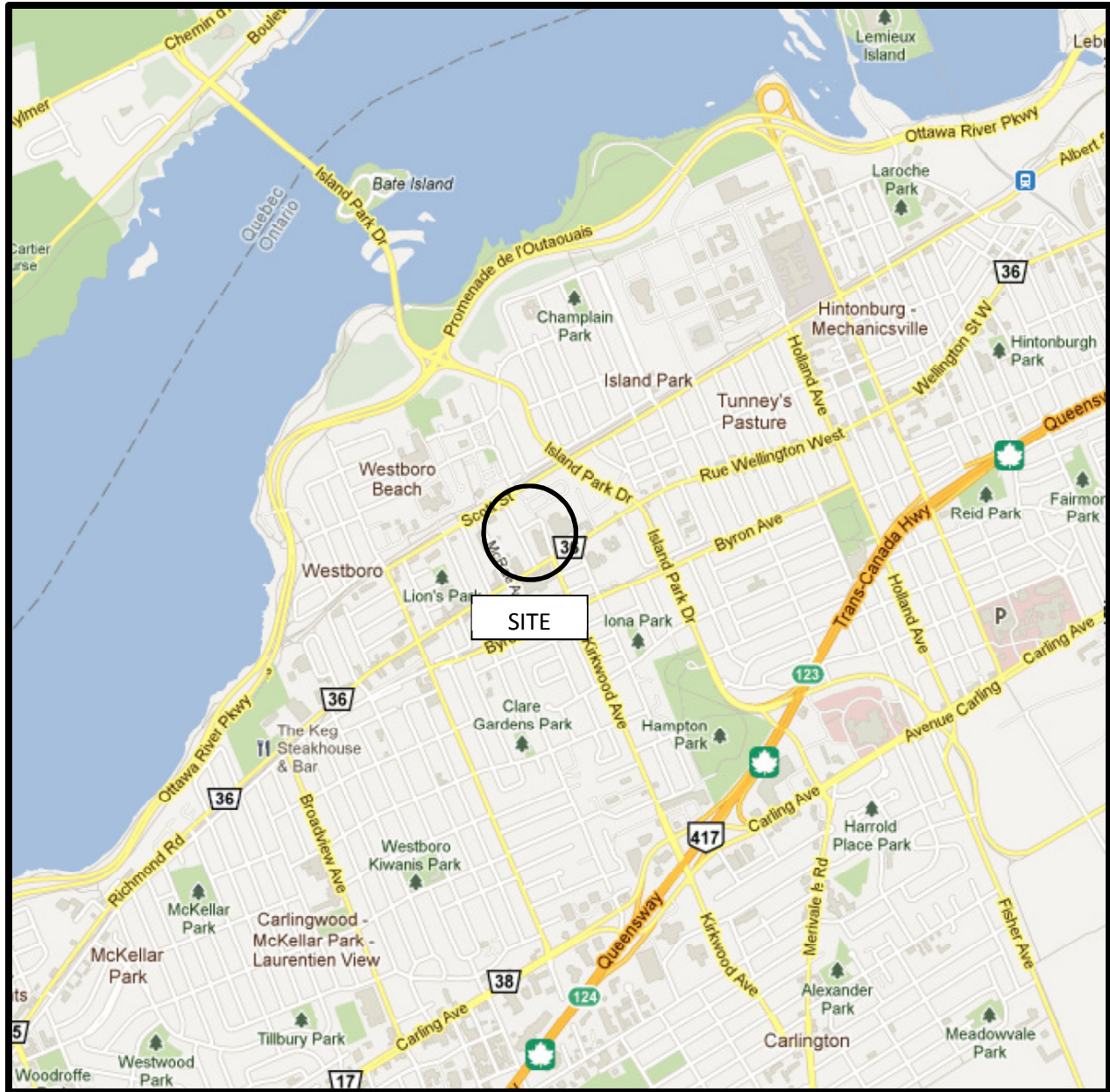


FIGURE 1
KEY PLAN

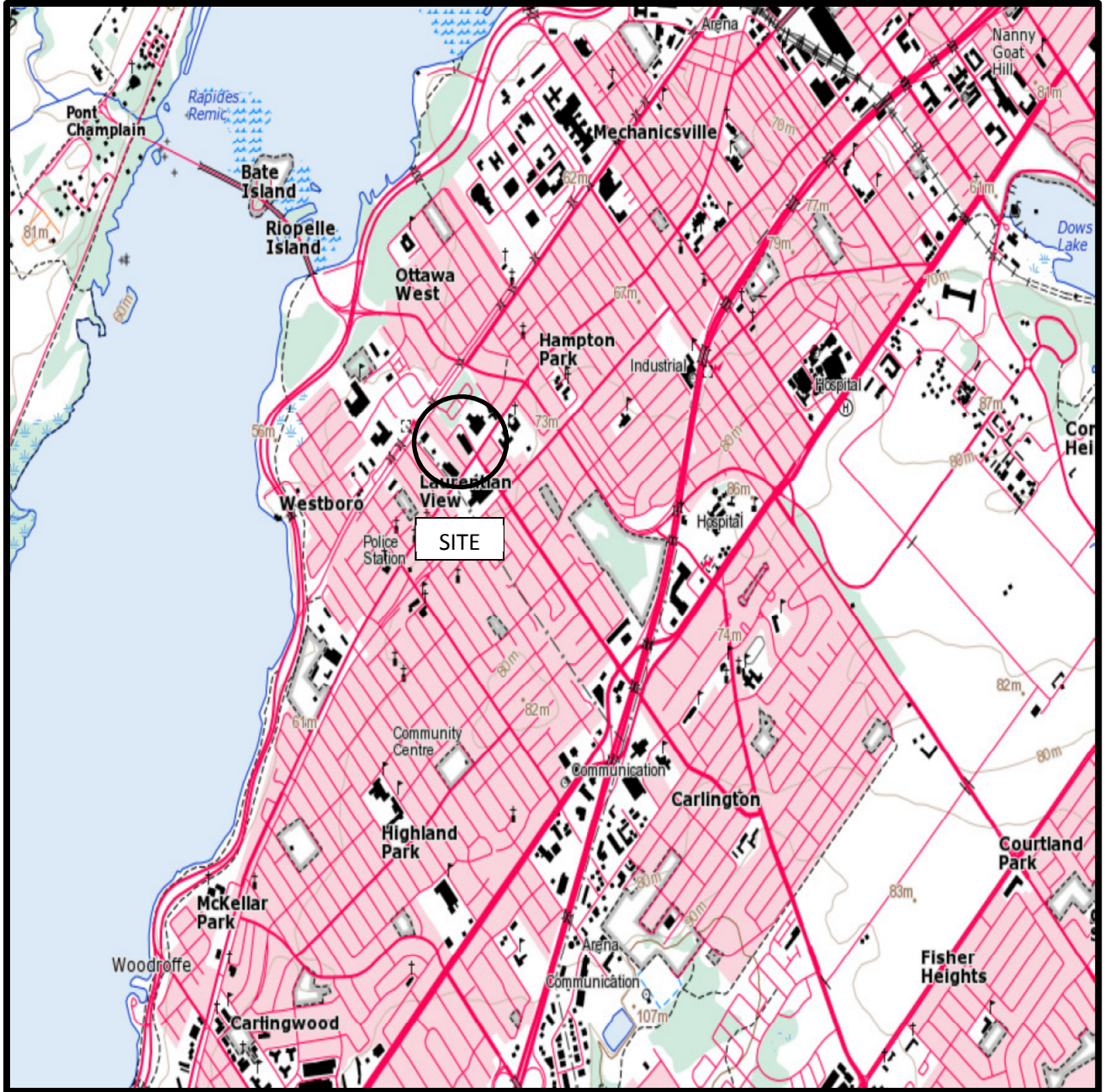
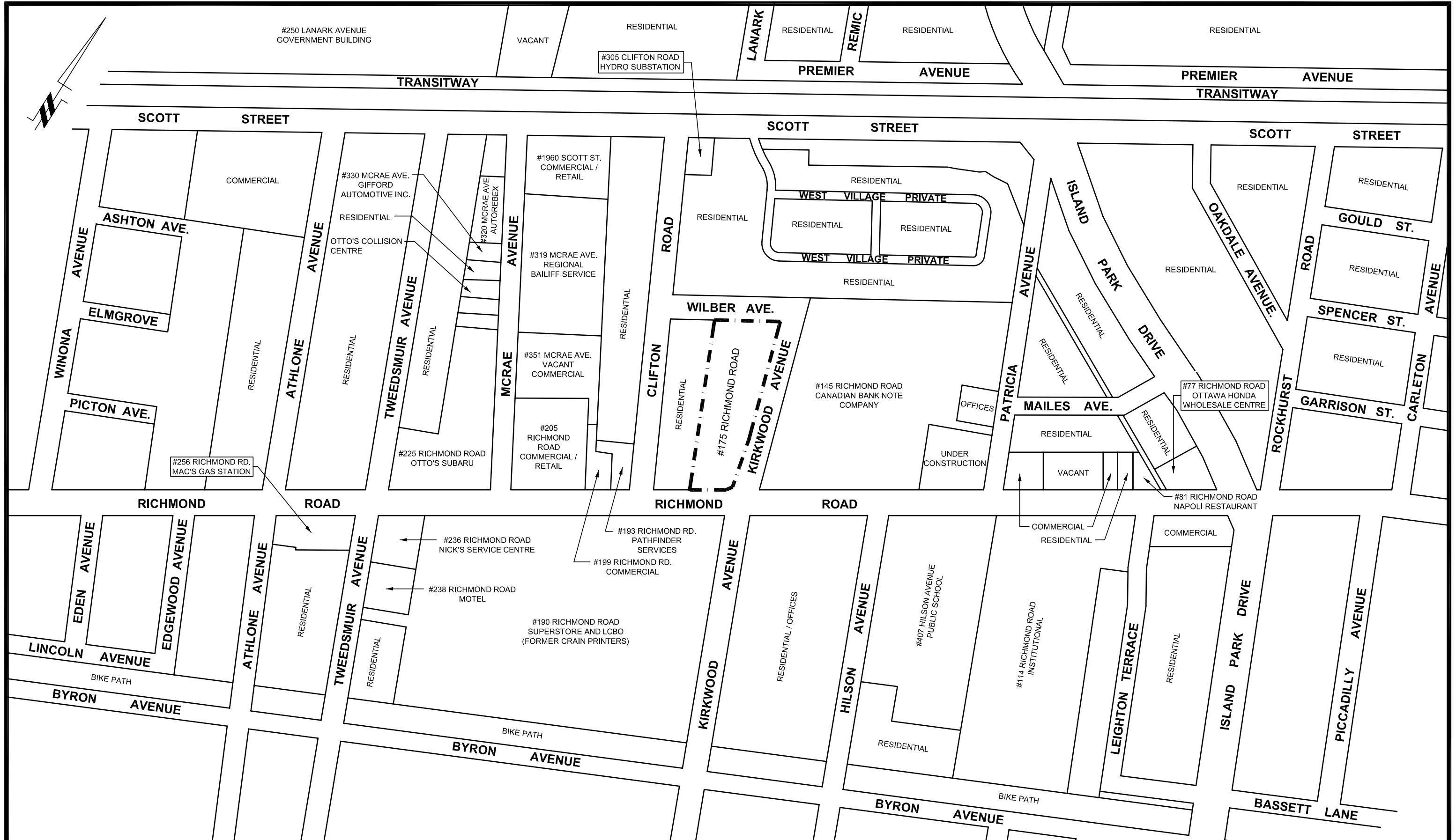


FIGURE 2
TOPOGRAPHIC MAP



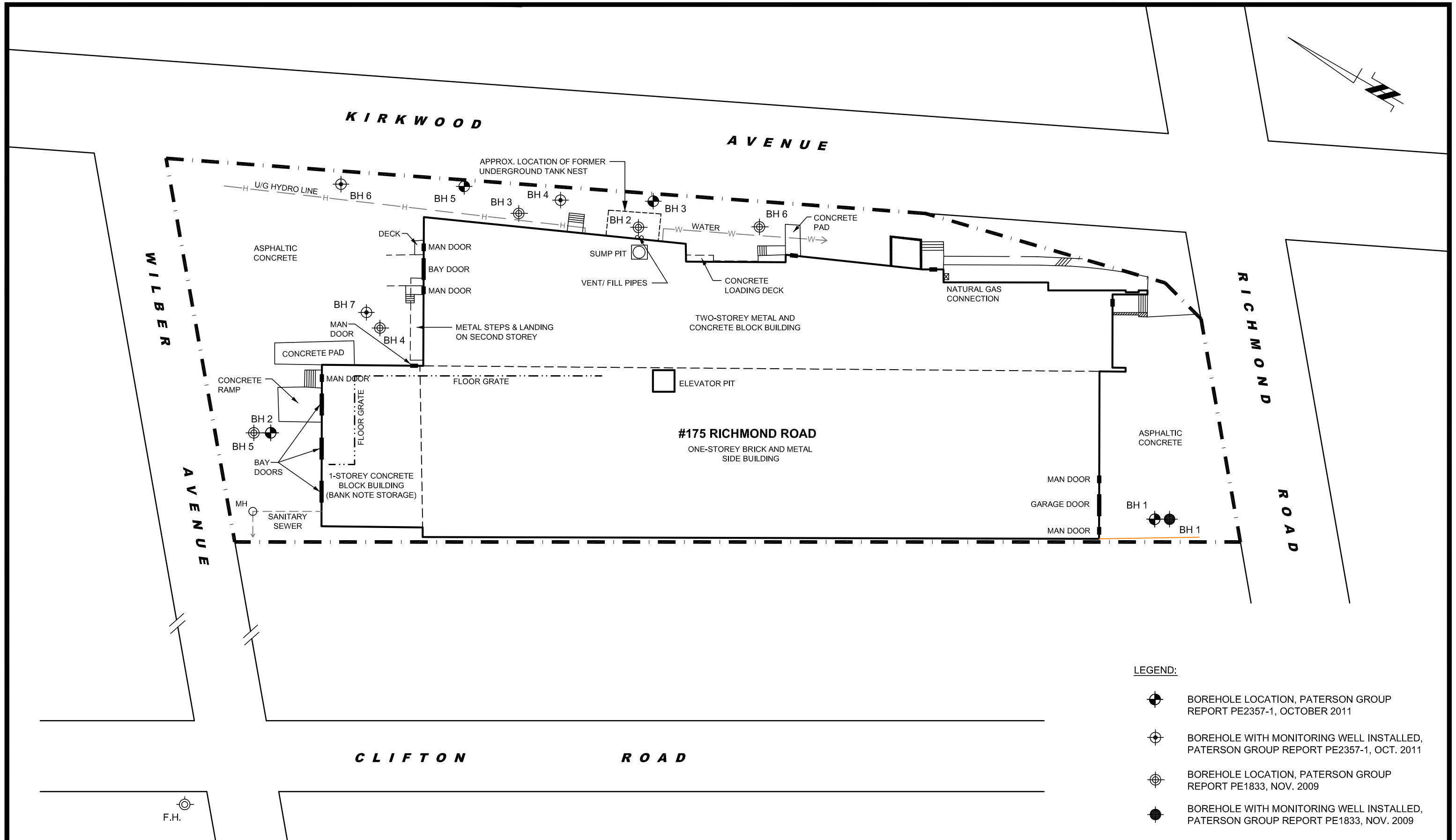
patersongroup
 consulting engineers
 28 Concourse Gate, Unit 1, Ottawa, Ontario K2E 7T7





Scale: N.T.S.
 Des.: KM
 Dwn: MPG
 Chkd: MSD

CLARIDGE HOMES
 PHASE I - ENVIRONMENTAL SITE ASSESSMENT
 175 RICHMOND ROAD
 OTTAWA, ONTARIO

SURROUNDING LAND USE

Dwg. No. **PE2357-2**
 Report No.: PE2357-2
 Date: 12/2011



- LEGEND:**
-  BOREHOLE LOCATION, PATERSON GROUP REPORT PE2357-1, OCTOBER 2011
 -  BOREHOLE WITH MONITORING WELL INSTALLED, PATERSON GROUP REPORT PE2357-1, OCT. 2011
 -  BOREHOLE LOCATION, PATERSON GROUP REPORT PE1833, NOV. 2009
 -  BOREHOLE WITH MONITORING WELL INSTALLED, PATERSON GROUP REPORT PE1833, NOV. 2009

patersongroup
 consulting engineers
 28 Concourse Gate, Unit 1, Ottawa, Ontario K2E 7T7

Scale: 1:500
 Des.: KM
 Dwn: MPG
 Chkd: MSD

CLARIDGE HOMES
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
175 RICHMOND ROAD
 OTTAWA, ONTARIO

CONCEPTUAL SITE MODEL

Dwg. No. **PE2357-3**
 Report No.: PE2357-2
 Date: 12/2011

APPENDIX 1

CHAIN OF TITLE

PLAN OF SURVEY

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

ENVIRONMENTAL SEARCH
Att: Karyn Munch
Ref: 175 Richmond Road, Ottawa
PIN: 04021-0073
Part lot 1, Plan 376, as in N723397; Lots
2 to 5, Plan 376
City of Ottawa
November 21, 2011

Deed 29619 registered Aug 11, 1915
From Fred A. Heney to Robert M. Arbuthuot

Deed 34969 registered Sept 21, 1921
From Robert M. Arbuthuot to Joseph G. McGuire

Deed 35576 registered May 15, 1922
From Joseph G. McGuire to Amie J. McGuire

Deed 37315 registered April 4, 1924
From Amie J. McGuire to Winifred M. Plaunt

Deed 156111 (aka 56111) registered Nov 2, 1946
From Estate of Fred A. Heney and Ida M. Heney to Canadian Bank Note Company Limited

Deed 4548 registered Dec 20, 1950
From Canadian Bank Note Company Limited to Canadian General Electric Co. Ltd.

Deed 4549 registered Dec 20, 1950
From Winifred M. Prtichard (formerly Plaunt) to Canadian General Electric Co. Ltd.

Deed 716815 registered Sept 16, 1977
From Canadian General Electric Company Limited to Max Cantor to uses

Lease 716817 registered Sept 16, 1977
From Max Cantor to Canadian General Electric Company Limited

Lease 716818 registered Sept 16, 1977
From Max Cantor to Canadian Appliance Manufacturing Company Limited

Lease NS41866 registered June 10, 1979
From Max Cantor to Paul A. Thibodeau, in trust

Assignment of lease NS41867 registered June 10, 1979
From Paul A. Thibodeau, in trust to The Soup Kettle Restaurant Ltd.

Lease NS128538 registered Aug 27, 1981
From Max Cantor to Charles Finkelstein

Deed N645858 registered Dec 21, 1992
From Max Cantor to Elsa Cantor

Deed N672300 registered Sept 21, 1993
From Elsa Cantor to Max Cantor

Foreclosure N723397 registered July 10, 1995
In favour of The Imperial Life Assurance Company of Canada

Deed 1059186 registered July 16, 1997
From The Imperial Life Assurance Company of Canada to 122856 Canada Limited

Lease OC454374 registered April 22, 2005
From 122856 Canada Limited to Zenix Engineering Ltd.

Deed OC1291968 registered Oct 6, 2011
From 122856 Canada Limited to Claridge Homes (Westboro) Inc.

TOPOGRAPHICAL PLAN OF

PART OF LOT 1 AND ALL OF LOTS 2, 3, 4 AND 5 REGISTERED PLAN 376 CITY OF OTTAWA

Surveyed by Annis, O'Sullivan, Vollebek Ltd. Field Work Completed

Scale 1 : 250



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

Date Edward M. Lancaster, O.L.S.

Notes & Legend

Denotes	
⊙	Traffic Signal Post
⊙ B	Bollard
⊙ CB	Catch Basin
T/G	Top of Gate
⊙ MH	Maintenance Hole (Unidentified)
⊙ MH-B	Maintenance Hole (Bell Telephone)
⊙ TB-T	Traffic Terminal Box
⊙	Borehole
⊙ WV	Water Valve
⊙ AN	Anchor
CLF	Chain Link Fence
⊙ PD-W	Wood Pole
BF	Board Fence
<	Diameter
+45.00	Location of Elevations
+65.00	Location of Elevations (Top of Curb)
C/L	Centreline
---	Property Line
⊙ W	Well Cap / Monitoring
⊙ FH	Fire Hydrant
⊙	Deciduous Tree
---	Overhead Wires
⊙ GM	Gas Meter

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

Bearings are grid bearings, derived from GPS observations and are not to be used for any other purpose without the consent of the Surveyor.

SITE AREA = 6386 m

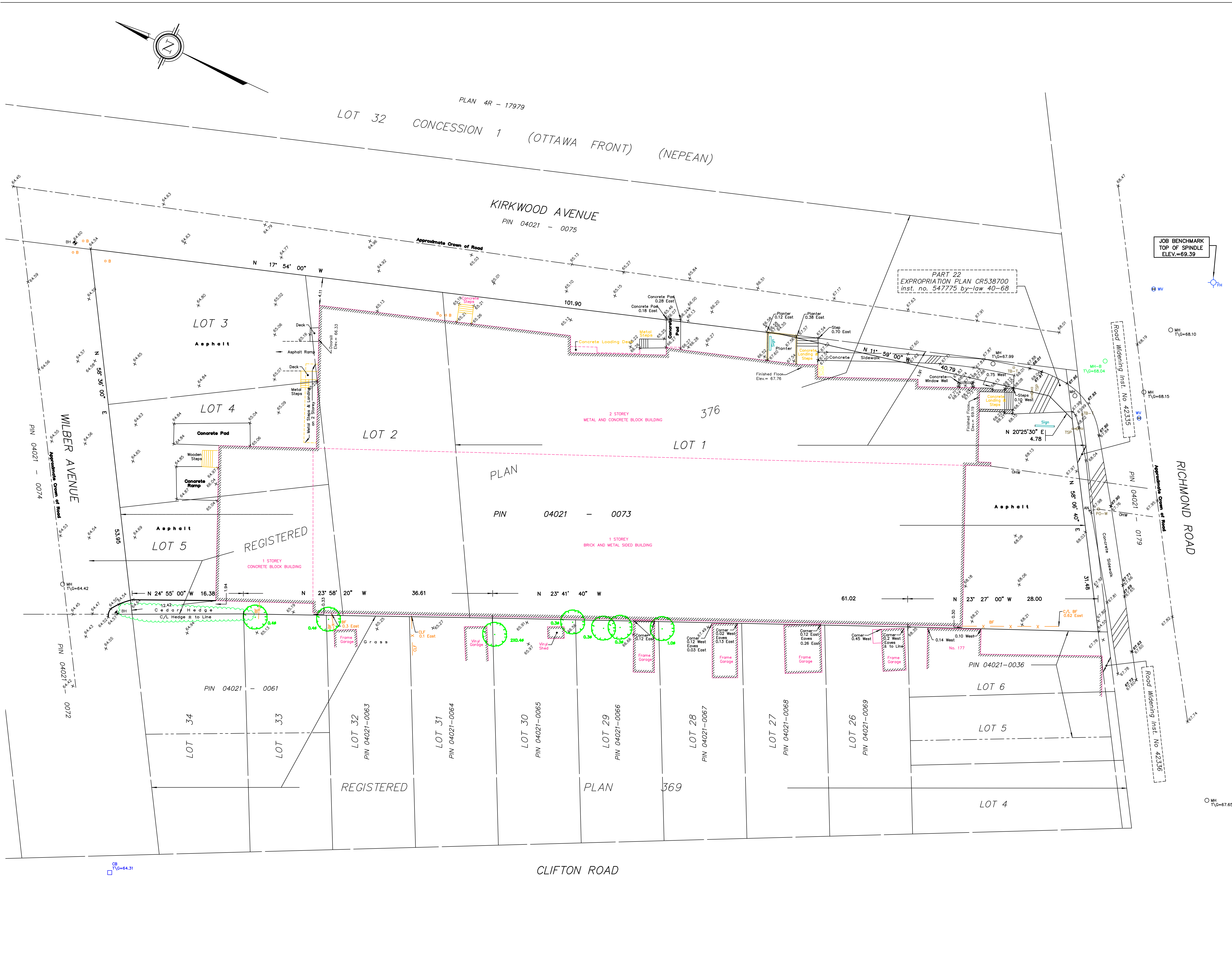
BOUNDARY INFORMATION DERIVED FROM FIELD SURVEY, REGISTRY OFFICE RESEARCH AND OFFICE RECORDS.

ELEVATION NOTES

- Elevations shown are referred to geodetic datum.
- It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that its relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

- This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
- Only visible surface utilities were located.
- A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.





AERIAL PHOTOGRAPH
1946



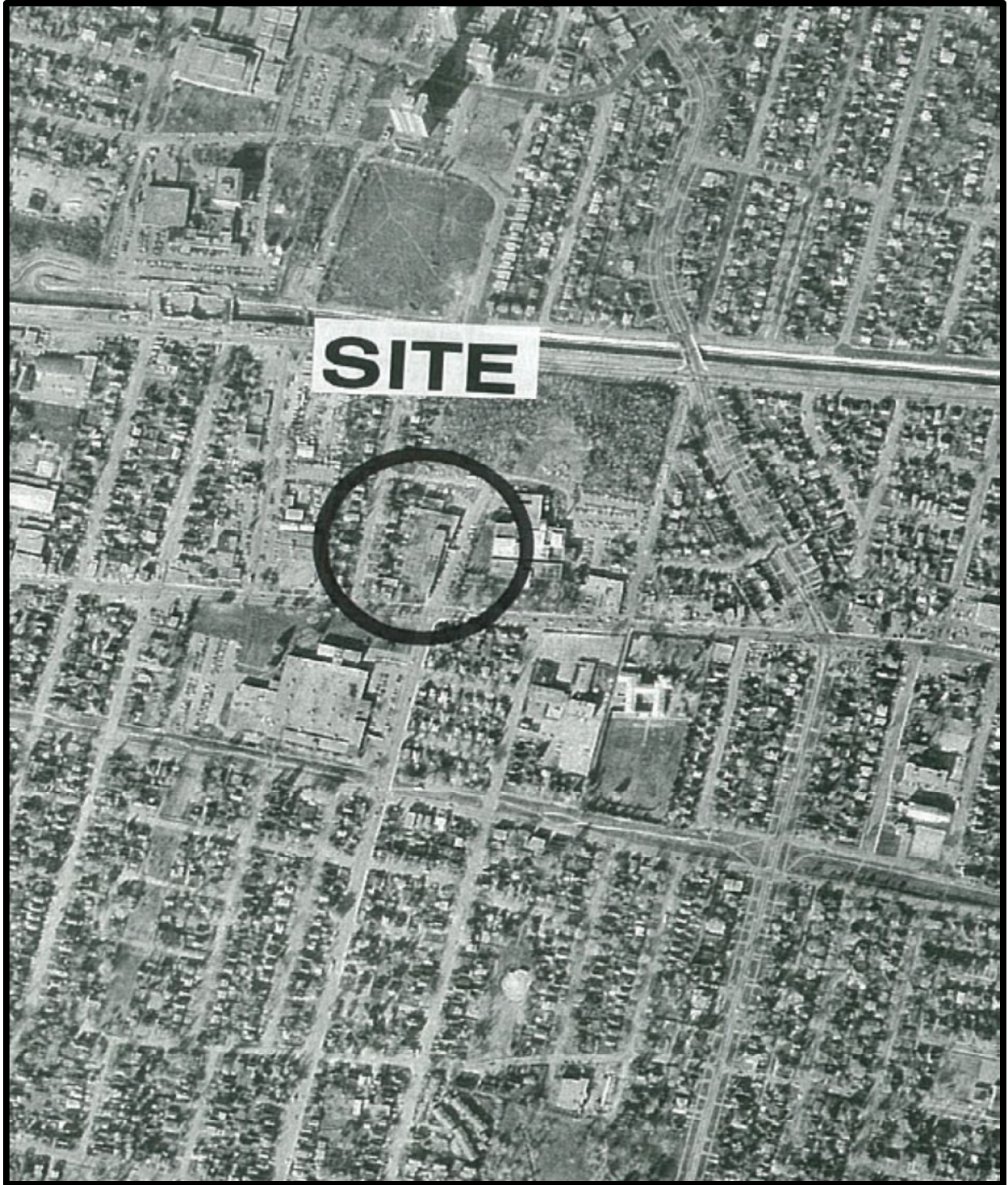
AERIAL PHOTOGRAPH
1953



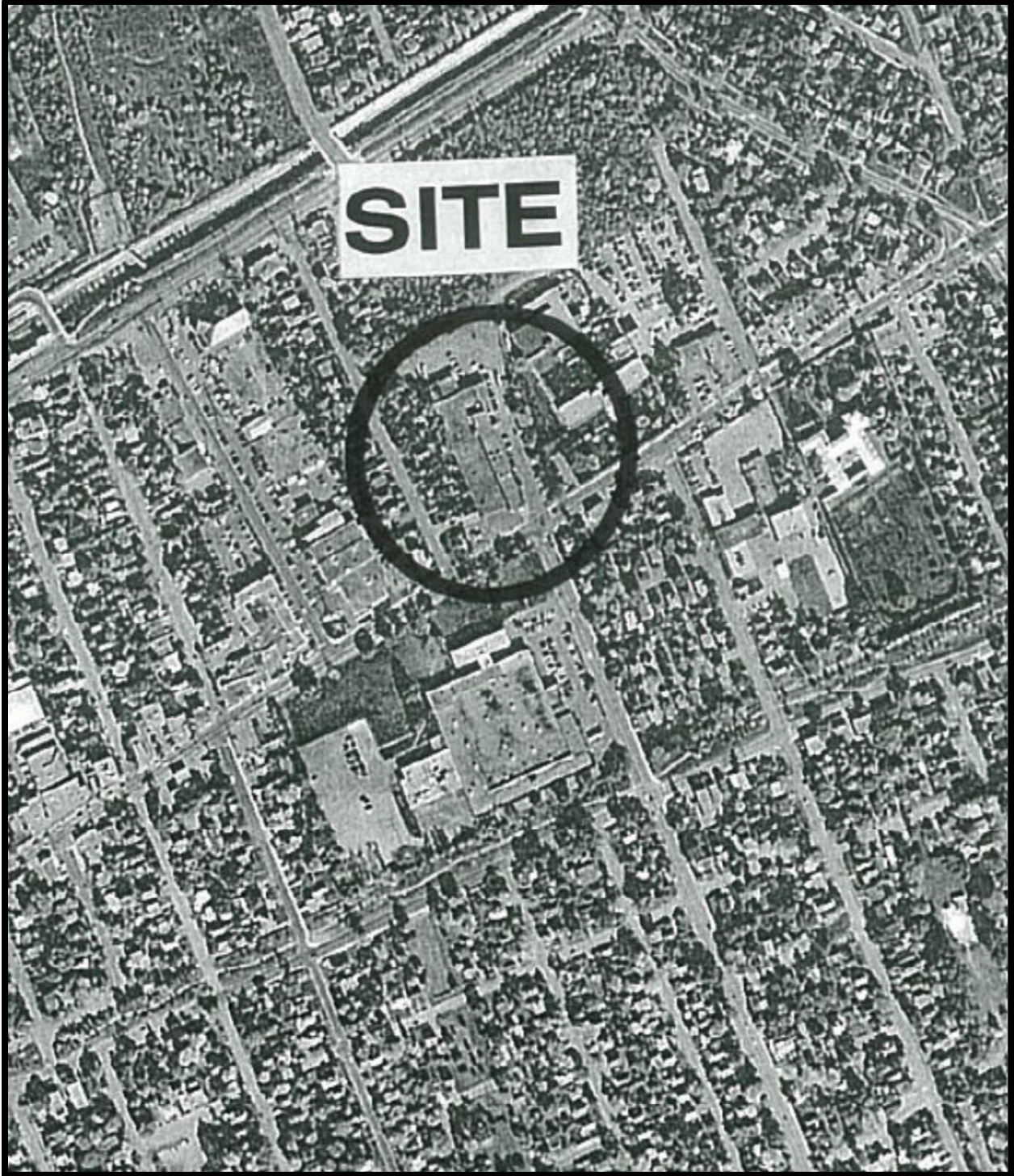
AERIAL PHOTOGRAPH
1968



AERIAL PHOTOGRAPH
1986



AERIAL PHOTOGRAPH
1984



AERIAL PHOTOGRAPH
1994

Site Photographs

PE2357

175 Richmond Road, Ottawa, Ontario

December 1, 2011



Photograph 1: South wall of western portion of the building, facing north.



Photograph 2: South wall of eastern portion of the building, facing north.

Site Photographs

PE2357

175 Richmond Road, Ottawa, Ontario

December 1, 2011



Photograph 3: East wall of southern portion of the building, facing northwest.



Photograph 4: South wall of the northern portion of the building, facing south.

Site Photographs

PE2357

175 Richmond Road, Ottawa, Ontario

December 1, 2011



Photograph 5: Floor of elevator pit.



Photograph 6: Sump pit in boiler room.

APPENDIX 2

MOE FREEDOM OF INFORMATION REQUEST

TSSA CORRESPONDENCE

CITY OF OTTAWA HISTORICAL LAND USE INVENTORY REQUEST

MOE WELL RECORDS

Ministry of
the Environment

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

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



November 15, 2011

Karyn Munch
Paterson Group Inc.
1 - 28 Concourse Gate
Ottawa, ON K2E 7T7

Dear Karyn Munch:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2011-05182, Your Reference PE2357

The Ministry is in receipt of your request made pursuant to the *Freedom of Information and Protection of Privacy Act* and has received your payment in the amount of \$5.00 (non-refundable application fee), along with your \$30.00 deposit.

The search is being conducted on the following: 175 Richmond Road, Kirkwood West, Ottawa. If there is any discrepancy please contact us immediately.

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

If you have any questions regarding this matter, please contact Liz Mico at (416) 212-0559.

Yours truly,



Heidi Ritscher
FOI Manager

Ministry of
the Environment

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

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



November 6, 2009

Cynthia Tremblay
Paterson Group Inc.
1 - 28 Concourse Gate
Ottawa, ON K2E 7T7

Dear Cynthia Tremblay:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2009-04085, Your Reference PE1833

The Ministry is in receipt of your request made pursuant to the *Freedom of Information and Protection of Privacy Act* and has received your payment in the amount of \$5.00 (non-refundable application fee), along with your \$30.00 deposit.

The search is being conducted on the following: 175 Richmond Road, Ottawa. If there is any discrepancy please contact us immediately.

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

If you have any questions regarding this matter, please contact Liz Mico at (416) 212-0559.

Yours truly,

Donna Currie
FOI Coordinator
Freedom of Information and Protection of Privacy Office

PE 1833

Ministry of
the Environment

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

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



December 17, 2009

Cynthia Tremblay
Paterson Group Inc.
1 - 28 Concourse Gate
Ottawa, ON K2E 7T7

Dear Cynthia Tremblay:

**RE: Freedom of Information and Protection of Privacy Act Request
Our File #: A-2009-04085, Your Reference #: PE1833**

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 175 Richmond Road, Ottawa.

After a thorough search of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, records were located in response to your request. It is my decision to provide partial access to the attached information as the identity of complainants has been removed to protect privacy (Section 21(1)(f) of the Act).

In accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, detailed below are our charges:

• Search Time 1 hour @ \$30/hour	\$30.00
• Copying 4 pages @ \$0.20/page	\$0.80
• Delivery	3.00
• Total	\$ 33.80
• Deposit Received	- 30.00
• BALANCE WAIVED (NOT REQUIRED)	\$ 3.80

If you object to any decision I have made, you may request a review 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 Erin Coulter at (416) 327-1985.

Yours truly,

For Erin Coulter

Donna Currie
FOI Coordinator
Freedom of Information and Protection of Privacy Office

Attachments



OCURRENCE REPORT

Location of Occurrence: OTTAWA CITY 175 RICHMOND ROAD Reg: 4 Dist: OT Municipality: 20101		Source: PRO RESTAURANT EQUIPMENT RE-SELLER OF RESTAURANT EQUIPMENT Sector: SI Source: OT SIC: 9999 UTM: N: <input type="checkbox"/> E: <input type="checkbox"/> Zone: <input type="checkbox"/>	
Entered: 1997/06/24 15:09	ORIS No. 9740001109	Abstracts: 0	Diaries: 1
Received By: TOR RUSTAD		Batch: 2523	I. E. B. No.
Occurrence Type: C	Subtype: 99	Occurrence Date:	
Work Plan:	11	Occurrence Time:	
Report to MOE : 1997/06/24 13:15 MOE at Scene: 97/08/15 10:55		Assigned To:	TOR RUSTAD
Alternate No. x			
Address:		ERP Contacted: Callout: <input type="checkbox"/> NSP: <input type="checkbox"/> ERP Name:	
Postal Code:			
Syn: PRO RESTAURANT EQUIPMENT- RELEASE OF CFC'S TO ATMOSPHERE			
Brief Summary: CALLER REPORTS THAT STAFF AT THE STORE VENTED CFC'S TO ATMOSPHERE. MAJED, THE OWNER, WAS REPORTED TO HAVE CUT A LINE CONTAINED IN A FRIDGE, ALLOWING CFC'S TO VENT TO ATMOSPHERE. 08/15, 10:55 AT SITE: SPOKE TO MAJED, PROPRIETOR. MAJED DENIED ANY VENTING OF CFC'S TO ATMOSPHERE. MAJED'S BUSINESS RE-SELLS RESTAURANT REFRIGERATION EQUIPMENT TO FOOD SUPPLIERS/RESTAURANT. MAJED STATED THAT: - ALL OF THE REFRIGERATION UNITS PRESENT IN HIS SHOP ARE DRAINED OF CFC'S. - I ASKED WHERE THE TAGS WERE TO DEMONSTRATE DRAINAGE OF CFC'S - MAJED RESPONDED THAT THE REFRIGERATION EQUIPMENT IS RE-SOLD WITH THE CFC'S INSIDE. MAJED THEN RE-SELLS THE EQUIPMENT CONTAINING CFC'S.			
If there are related reports, record initial/master ORIS No. here >>			
Followup Action: Abatement IEB Other BF Date: NO VIOLATION CONFIRMED. DIFFERENCE IN STATEMENT OF FACT BETWEEN TWO INDIVIDUALS. IEB FOR YOUR INFORMATION			
File Closed: X Abatement: X IEB Other Suspected Violation:			
Report Prepared By: TOR RUSTAD	Date: 97/08/15	IEB Investigator:	IEB BF Date
Approving Officer GEORGE CLARKE	Date: 97/08/18	Reviewing Officer: TERRY O'NEILL	Date
Specify number(s) for routing Original [] [] [] [] [] []		Continued [] Yes	
Specify number(s) for copy distribution [] [] [] [] [] []			
1. Investigator/E.O.	2. D. O. /File	3. SAC (initial spills)	
4. Reg. Dir. / Mgr.	5. IEB Reg. Spv	6. IEB H.O./file	7. Other _____
SAC Action Class: 1: 2:			

s.21

Material 1:	Code :
Amount :	UN No.:
Material 2:	Code :
Amount :	UN No.:
Material 3:	Code :
Amount :	UN No.:



OCCURENCE REPORT

Location of Occurrence: OTTAWA CITY 175 RICHMOND ROAD Reg: 4 Dist: OT Municipality: 20101		Source: PRO RESTAURANT EQUIPMENT RE-SELLER OF RESTAURANT EQUIPMENT Sector: SI Source: OT SIC: 9999 UTM: N: <input type="checkbox"/> E: <input type="checkbox"/> Zone: <input type="checkbox"/>	
Entered: 1997/06/24 15:09	ORIS No. 9740001109	Abstracts: 0	Diaries: 1
Received By: TOR RUSTAD		Batch: 2523	I. E. B. No.
Occurrence Type: C	Subtype: 99	Occurrence Date:	
Work Plan:	11	Occurrence Time:	
		Report to MOE : 1997/06/24 13:15 MOE at Scene: 97/08/15 10:55	
Alternate No. x		Assigned To:	TOR RUSTAD
Address:		ERP Contacted: Callout: <input type="checkbox"/> NSP: <input type="checkbox"/> ERP Name:	
Postal Code:			
Syn: PRO RESTAURANT EQUIPMENT- RELEASE OF CFC'S TO ATMOSPHERE			
<p>Brief Summary: CALLER REPORTS THAT STAFF AT THE STORE VENTED CFC'S TO ATMOSPHERE. MAJED, THE OWNER, WAS REPORTED TO HAVE CUT A LINE CONTAINED IN A FRIDGE, ALLOWING CFC'S TO VENT TO ATMOSPHERE. 08/15, 10:55 AT SITE: SPOKE TO MAJED, PROPRIETOR. MAJED DENIED ANY VENTING OF CFC'S TO ATMOSPHERE. MAJED'S BUSINESS RE-SELLS RESTAURANT REFRIGERATION EQUIPMENT TO FOOD SUPPLIERS/RESTAURANT. MAJED STATED THAT: - ALL OF THE REFRIGERATION UNITS PRESENT IN HIS SHOP ARE DRAINED OF CFC'S. - I ASKED WHERE THE TAGS WERE TO DEMONSTRATE DRAINAGE OF CFC'S - MAJED RESPONDED THAT THE REFRIGERATION EQUIPMENT IS RE-SOLD WITH THE CFC'S INSIDE. MAJED THEN RE-SELLS THE EQUIPMENT CONTAINING CFC'S.</p>			
If there are related reports, record initial/master ORIS No. here >>			
Followup Action: Abatement IEB Other			
BF Date: NO VIOLATION CONFIRMED. DIFFERENCE IN STATEMENT OF FACT BETWEEN TWO INDIVIDUALS. IEB FOR YOUR INFORMATION			
File Closed: X Abatement: X IEB Other			
Suspected Violation:			
Report Prepared By: TOR RUSTAD	Date: 97/08/15	IEB Investigator:	IEB BF Date
Approving Officer GEORGE CLARKE	Date: 97/08/18	Reviewing Officer: TERRY O'NEILL	Date
Specify number(s) for routing Original [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] Continued [<input type="checkbox"/>] Yes			
Specify number(s) for copy distribution [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>] [<input type="checkbox"/>]			
1. Investigator/E.O. 2. D. O. /File 3. SAC (initial spills)			
4. Reg. Dir. / _____ Mgr. 5. IEB Reg. Spv 6. IEB H.O./file 7. Other _____			
SAC Action Class: 1: 2:			

s.21

Material 1:	Code :
Amount :	UN No.:
Material 2:	Code :
Amount :	UN No.:
Material 3:	Code :
Amount :	UN No.:

Search



Generator Details

Registration/Notification Number

ON3461140

Legal Company Name

Primary Name: MIKE STEINBURG Division Name: NA

Company Operating Name

Primary Name: DISTRICT REALTY Division Name: NA

Mailing Address

Division Building: NA Post Box Number: NA
 Address Line 1: 50 BAYSWATER Address Line 2: NA
 Town/City: OTTAWA Postal Code / Zip Code: K1Y 2E9
 County: (if inside Ontario) OTTAWA CARLTON (RM) Province/State (If inside Canada/US) ONTARIO
 County: (if outside Ontario) NA Province / State (If outside Canada / US) NA
 Country: Canada

Site Location

This should be the street address of the site that is being registered. You are required to register each site that generates hazardous waste separately.

Division Building: NA Post Box Number: NA
 Address Line 1: 175 RICHMOND RD
 Address Line 2: NA
 Town/City: OTTAWA Postal Code / Zip Code: K1Z 6W3
 County: (if inside Ontario) OTTAWA CARLTON (RM) Province / State (If inside Canada / US) ONTARIO
 County: (if outside Ontario) NA Province / State (If outside Canada / US) NA
 Country: Canada

hwin

Administration

Search

Go

Company Name: **MIKE STEINBURG**
Company Number: **ON3461140 (Generator)**

Active Waste Classes

Active Waste Class Listing

[Add New Waste Class](#) | [Inactive waste classes](#)

Active On-site Waste Classes

Waste Class	View Details	Hazardous Waste Number (per waste stream)	Reg. 347 Schedules	Disposal Method	Part 2B required	Part 2B complete	Physical State	Off-Site	Status
221 - L	View Details	N/A					Liquid	Off-Site	Active

[Back](#)

Karyn Munch

From: spng@tssa.org on behalf of publicinformationsservices@tssa.org
Sent: November-03-11 4:29 PM
To: Karyn Munch
Subject: Re: Records Search - PE2357 (Part 2) [REF:10629829893]

Hi Karyn,

In order to avoid any delays, in the future please direct all your information requests to 'publicinformationsservices@tssa.org'.

Thank you for your inquiry.

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

190 Richmond Rd, Ottawa has record of an active cylinder exchange facility.

For a more detailed report including underground fuel storage tank details and copies of all inspection reports, please submit your request in writing to Public Information Services via e-mail (publicinformationsservices@tssa.org) 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!

Sarah Png
Public Information Services

"Putting Public Safety First"

Technical Standards and Safety Authority
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4

Toll-Free: 1-877-682-8772
Email: publicinformationsservices@tssa.org
Web Site: www.tssa.org

TSSA Customer Service <pectscs@atoracle.com>

To publicinformationsservices@tssa.org

cc

11/03/2011 03:40 PM

Subject Re: Records Search - PE2357 (Part 2) [REF:10629829893]

Please respond to customerservices@tssa.org

Please read below email and kindly assist, thank you!

Reply email to: KMunch@patersongroup.ca

----- Original Message -----

Good morning,

Could you please search for records for the following addresses in the City of Ottawa.

193, 190, 181, 177, 175, 164, 160, 150, 148, 145 Richmond Road

Also, please note that the addresses in my last email were in the City of Ottawa as well!

Best Regards,

Karyn Munch, P.Eng.

patersongroup

28 Concourse Gate, Unit 1

Ottawa, Ontario K2E 7T7

Tel: (613)226-7381

Fax: (613)226-6344

This electronic message and any attached documents are intended only for the named addressee(s).

This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential, or otherwise exempt from disclosure under the Access to Information Act. It is not to be copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately. Thank you.

Karyn Munch

From: spng@tssa.org on behalf of publicinformationsservices@tssa.org
Sent: November-03-11 4:26 PM
To: Karyn Munch
Subject: Re: Records Search - PE2357 (Part 1) [REF:10629733358]

Hi Karyn,

In order to avoid any delays, in the future please direct all your information requests to 'publicinformationsservices@tssa.org'.

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 and have a great day!

Sarah Png
Public Information Services

"Putting Public Safety First"

Technical Standards and Safety Authority
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4

Toll-Free: 1-877-682-8772
Email: publicinformationsservices@tssa.org
Web Site: www.tssa.org

TSSA Customer Service <pectscs@atoracle.com>

To publicinformationsservices@tssa.org

cc

11/03/2011 03:39 PM

Subject Re: Records Search - PE2357 (Part 1) [REF:10629733358]

Please respond to customerservices@tssa.org

Please read below email and kindly assist, thank you!

Reply email to: KMunch@patersongroup.ca

----- Original Message -----

Good morning,

Could you please search your records for any storage tanks or incidents at the following addresses:

188, 185 Wilbur Street

343, 351, 353, 355, 361, 363, 365, 369 Clifton Road

Best Regards,

Karyn Munch, P.Eng.

patersongroup

28 Concourse Gate, Unit 1

Ottawa, Ontario K2E 7T7

Tel: (613)226-7381

Fax: (613)226-6344

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Thank you.



File Number: C10-01-11-0232

November 29, 2011

Karyn Munch
Paterson Group Inc.
28 Concourse Gate, Unit 1
Nepean, ON K2E 7T7

Dear Ms. Munch,

**Re: Information Request
175 Richmond Road, Ottawa, Ontario ("Subject Property")**

Internal Department Circulation

The Infrastructure Services and Community Sustainability Department has the following information in response to your request for information regarding the Subject Property:

- 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 Property.

A search of the HLUI database revealed the following information:

- There are 7 activities associated with the Subject Property: Activity Number 1014, 11119, 2053, 2482, 342, 4303 & 6559.

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

- There are 7 activities associated with properties located within 50m of the Subject Property: Activity Number 10796, 14750, 10370, 13814, 2464, 5173 & 2480.

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Infrastructure Services and Community
Sustainability Department
Planning and Growth Management Branch

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 14743
Fax: (613) 560-6006
www.ottawa.ca

Ville d'Ottawa
Services d'infrastructure et Viabilité des
collectivités
Direction de l'approbation des demandes
d'aménagement et d'infrastructure

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 14743
Télééc: (613) 560-6006
www.ottawa.ca

Please note that Activity Numbers 14750 & 13814 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 Property or on certain properties within 50m of the Subject Property. 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 Property as well as the location of all the activities noted above, including the HLUI database’s location of the Activity Numbers with a PIN Certainty of “2”.

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 Property. You may wish to contact the Ontario Ministry of Environment for additional information.

If you have any further questions or comments, please contact Jessica Krushnisky at 613-580-2424 ext. 14743 or HLUI@ottawa.ca

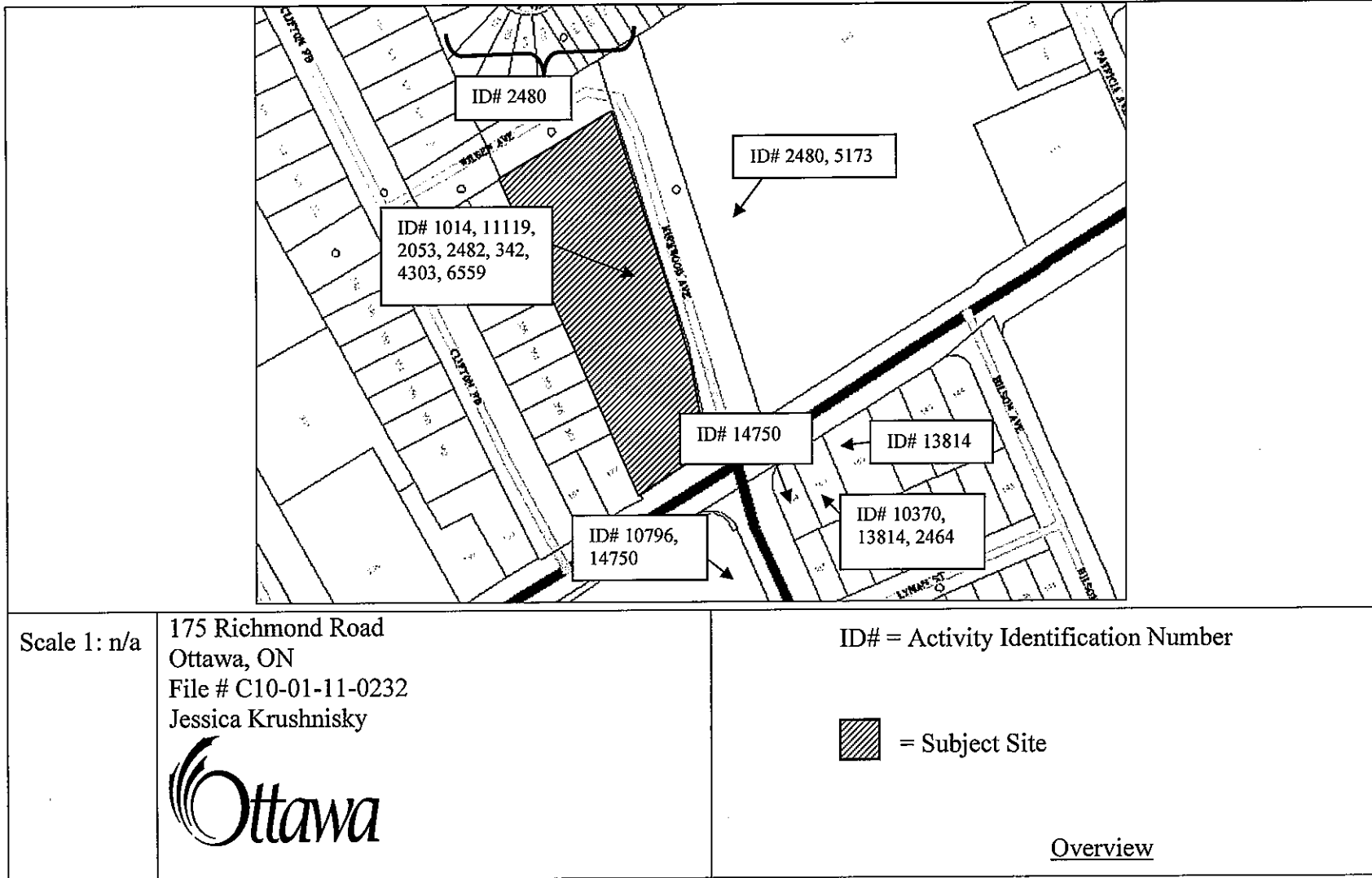
Sincerely,



Michael J. Boughton, MCIP, RPP
Acting Program Manager
Development Review (Suburban Services) - West
Infrastructure Services and Community Sustainability
MB/JK

Attach: 16

cc: File no. C10-01-11-0232





CITY OF OTTAWA

HLUI ID: __679GOJ

AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:33:19

Study Year
1998

PIN
040210073

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 1014 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 040210073

Name: ALBERT & SON ENGRAVERS

Address: 350 KIRKWOOD AVENUE, OTTAWA

Facility Type: Platemaking, Typesetting and Bindery Industry

Comments 1: Unit A

Comments 2:

Generator Number: ON2135901

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2000 PID

NAICS	SIC
323120	0
812921	0
332810	0

Company Name	Year of Operation
ALBERT & SON ENGRAVERS	c. 2000
ALBERT & SON ENGRAVERS	c. 2001
ALBERT & SON ENGRAVERS	c. 2003



CITY OF OTTAWA
 HLUI ID: __679GOJ
 AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122
 Run On: 29 Nov 2011 at: 09:33:19

Study Year
 1998

PIN
 040210073

Multi-NAIC
 Y

Multiple Activities
 Y

Activity ID: 11119 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :**
Related PINS: 040210073
Name: PRO RESTAURANT EQUIPMENT
Address: 175 RICHMOND ROAD, OTTAWA
Facility Type: Machinery and Equipment Rental and Leasing Service
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2001 Employment Survey

NAICS	SIC
532490	0

Company Name	Year of Operation
PRO RESTAURANT EQUIPMENT	c. 2001



CITY OF OTTAWA
HLUI ID: __679GOJ
AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122
Run On: 29 Nov 2011 at: 09:33:19

Study Year
1998

PIN
040210073

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2053 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 040210073

Name: BREBNER MANUFACTURING & REPAIRS INC.

Address: 360 KIRKWOOD AVENUE, OTTAWA

Facility Type: Men's and Boys' Clothing Industries

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2001 Employment Survey

NAICS	SIC
315210	0

Company Name

BREBNER MANUFACTURING & REPAIRS INC.

Year of Operation

c. 2001



CITY OF OTTAWA
 HLUI ID: __679GOJ
 AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122
 Run On: 29 Nov 2011 at: 09:33:19

Study Year
1998

PIN
040210073

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2482

Multiple PINS: N

PIN Certainty: 1

Previous Activity ID(s) : 5193

Related PINS: 040210073

Name: CANADIAN GENERAL ELECTRIC CO. LIMITED

Address: 175 RICHMOND ROAD, OTTAWA

Facility Type: Electric Power Systems Industry

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: FIP1901,vol2; FIP1912,vol2; FIP1922,vol2; FIP1948-309-1304A; FIP1956-309-4-1304A,vol3; M.1948, M.1955

HL References 2:

HL References 3:

NAICS	SIC
221112	491
221113	491
221121	491
221111	491
221119	491
221122	491

Company Name

Canadian General Electric Co. Ltd.

Year of Operation

c. 1956



CITY OF OTTAWA

HLUI ID: __679GOJ

AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:33:19

Study Year
1998

PIN
040210073

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 342 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 040210073

Name: PAPER SIGN MAN
Address: 350 KIRKWOOD AVENUE,
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
ART DISPLAY & SIGNS	c. 2001
EMERY SIGNS	c. 2001
PAPER SIGN MAN	c. 2005



CITY OF OTTAWA

HLUI ID: __679GOJ

AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:33:19

Study Year
1998

PIN
040210073

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 4303 Multiple PINS: N
 PIN Certainty: 1 Previous Activity ID(s) :
 Related PINS: 040210073
 Name: DIAMOND MECHANICAL
 Address: 350 KIRKWOOD AVENUE, OTTAWA
 Facility Type: Plumbing, Heating and Air Conditioning, Mechanical Work
 Comments 1:
 Comments 2:
 Generator Number:
 Storage Tanks:
 HL References 1:
 HL References 2:
 HL References 3: 2001 Employment Survey

NAICS	SIC
238220	0

Company Name	Year of Operation
DIAMOND MECHANICAL	c. 2001



CITY OF OTTAWA

HLUI ID: __679GOJ

AREA (Square Metres): 6370.600

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:33:19

Study Year
1998

PIN
040210073

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 6559

Multiple PINS: N

PIN Certainty: 1

Previous Activity ID(s) :

Related PINS: 040210073

Name: GUILLEVIN INTERNATIONAL

Address: 175 RICHMOND ROAD,

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: 2005 Select Phone

NAICS	SIC
416110	0

Company Name

Year of Operation

GUILLEVIN INTERNATIONAL

c. 2001

GUILLEVIN INTERNATIONAL

c. 2005



CITY OF OTTAWA

HLUI ID: __670IQH

AREA (Square Metres): 30368.888

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:31:45

Study Year
1998

PIN
040210168

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 10796 Multiple PINS: N
 PIN Certainty: 1 Previous Activity ID(s) : 1251
 Related PINS: 040210168

Name: R. L. CRAIN LIMITED
 Address: 190 RICHMOND ROAD, OTTAWA

Facility Type: Other Machinery and Equipment Industries

Comments 1: Pre 1950 this property was located in Nepean. It is now a part of Ottawa. Company occupies 10 acres of property.

Comments 2: They manufactured products such as business forms R. L. Crain Ltd. Generator #ON0146302 (waste generator) Crain-Drummond Inc. Generator #ON0249903 (waste generator)

Generator Number:

Storage Tanks: Two (2) 1000 gallon UST (fuel oil) and one (1) 500 gallon UST (gasoline).

HL References 1: M.1948, M.1955, M.1958, M.1960, M.1961, M.1964, M1965, M.1970, M.1971, M1980; S.1958, S.1961, S.1964, S.1965; FIP1901-?-397; FIP1912-?-397; FIP1922-397; FIP1948-309-697,vol3; FIP1956-309-4-697,vol3; Roy-1952; PID1994

HL References 2:

HL References 3:

NAICS	SIC
322111	271
322112	271
322122	271
323115	281
323116	281
333110	319
333210	319
333299	319
333611	319
336120	319
812921	282
323114	281
323119	281
333130	319
333291	319
336211	319
322121	271
322130	271
323120	282
333120	319
333220	319
335990	319
336510	319
332991	319
333910	319



CITY OF OTTAWA
HLUI ID: __670IQH
AREA (Square Metres): 30368.888

Report: RPTC_OT_DEV0122
Run On: 29 Nov 2011 at: 09:39:21

Study Year
1998

PIN
040210168

Multi-NAIC
Y

Multiple Activities
Y

Company Name

Year of Operation

R. L. Crain Ltd.

c. 1947-1994

Crain-Drummond Inc.

c. 1994



CITY OF OTTAWA

HLUI ID: __679GX5

AREA (Square Metres): 365.722

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:30:57

Study Year
1998

PIN
040210196

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 14750 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 5602

Related PINS: 040210168

Name: WESTBORO GARAGE
Address: 166 RICHMOND ROAD, OTTAWA
Facility Type: Motor Vehicle Repair Shops

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
811119	635
811112	635
811121	635

Company Name

Westboro Garage

Year of Operation

c. 1930-1940



CITY OF OTTAWA

HLUI ID: __679E11

AREA (Square Metres): 509.966

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:29:58

Study Year
1998

PIN
040210198

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 10370 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 040210198

Name: PHOTO FEATURES
Address: 160 RICHMOND ROAD, OTTAWA
Facility Type: Photographers

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2001 Employment Survey

NAICS	SIC
541920	0

Company Name

PHOTO FEATURES

Year of Operation

c. 2001



CITY OF OTTAWA

HLUI ID: __679E11

AREA (Square Metres): 509.966

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:29:58

Study Year
1998

PIN
040210198

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 13814 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 5738

Related PINS: 040210197

Name: WESTBORO MONUMENT & WIRE WORKS

Address: 156 RICHMOND ROAD, OTTAWA

Facility Type: Wire and Wire Products Industries

Comments 1: - listed @ 122 in 1930

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
331222	305
334512	305
327420	359
333990	305
332619	305

Company Name

Westboro Monument & Wire Works

Year of Operation

c. 1940



CITY OF OTTAWA

HLUI ID: __679E11

AREA (Square Metres): 509.966

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:29:58

Study Year
1998

PIN
040210198

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2464

Multiple PINS: N

PIN Certainty: 1

Previous Activity ID(s) : 5081

Related PINS: 040210198

Name: CANADIAN AERIAL PHOTO CORPORATION OTTAWA

Address: 160 RICHMOND ROAD, OTTAWA

Facility Type: Air Transport Industries

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: SC98

HL References 2:

HL References 3:

NAICS	SIC
481110	451
481215	451
487990	451
621912	451
481214	451
611510	451

Company Name

Canadian Aerial Photo Corporation Ottawa

Year of Operation

c. 1998



CITY OF OTTAWA

HLUI ID: __679BHL

AREA (Square Metres): 24140.850

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:28:55

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	040210076	Y	N
2005	040210247	Y	Y

Activity ID: 5173 Multiple PINS: N

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 040210247

Name: ED BRUNET & ASSOCIATES INC.

Address: 145 RICHMOND ROAD, OTTAWA

Facility Type: Residential Building and Development

Comments 1:

Comments 2:

Generator Number: ON9380521

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2003 PID

NAICS	SIC
236110	0

Company Name

ED BRUNET & ASSOCIATES INC.

Year of Operation

c. 2003



CITY OF OTTAWA

HLUI ID: __670IRA

AREA (Square Metres): 31146.804

Report: RPTC_OT_DEV0122

Run On: 29 Nov 2011 at: 09:28:04

Study Year
1998

PIN
040210076

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 2480 Multiple PINS: N
PIN Certainty: 1 Previous Activity ID(s) : 1914

Related PINS: 040210247

Name: CANADIAN BANK NOTE CO LIMITED

Address: 145 RICHMOND ROAD, OTTAWA

Facility Type: Commercial Printing Industries

Comments 1:

Comments 2:

Generator Number: ON0045200

Storage Tanks:

HL References 1: FIP1912,vol2; FIP1922,vol2; FIP1948-310-1541; FIP1956-310-2-1541; M.1900, M.1910, M.1920, M.1930, M.1940, M.1949, M.1950, M.1957, M.1958, M.1960, M.1961, M.1964, M.1970, M.1980; PID1994; SC98

HL References 2:

HL References 3: 2000 PID

NAICS	SIC
323113	0
323114	281
323115	281
323116	281
323120	282
323114	0
323115	0
323119	281
812921	282

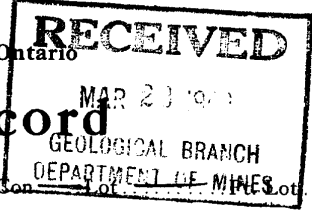
Company Name	Year of Operation
Canadian Bank Note Co. Ltd.	c. 1948-1998
CANADIAN BANK NOTE CO LIMITED	c. 2000
CANADIAN BANK NOTE CO LIMITED	c. 2001
CANADIAN BANK NOTE CO LIMITED	c. 2003
CANADIAN BANK NOTE CO LIMITED	c. 2005

UTM 118 02 441455 - Wm. Macphail
 9R 050 273610 N
 Elev. 9R 0200
 Basin 259



ASE 306 15 No 3972
 102

The Well Drillers Act
 Department of Mines, Province of Ontario



Water Well Record

County or District Carleton Tp. NEPEAN



Acres
 including pump) 180.00

Pipe and Casing Record

Pumping Test

Casing diameter(s)	<u>5</u>	Date	<u>February 26</u>
Length(s) of casing(s)	<u>10 ft</u>	Developed Capacity	
Length of screen		Duration of Test	<u>1 hr</u>
Type of screen		Pumping Rate	<u>200 g.p.m.</u>
Type of pump		Drawdown	<u>3 ft</u>
Capacity of pump		Static level of completed well	<u>8 ft</u>
Depth of pump setting	<u>20 ft</u>	Is well a gravel-wall type?	<u>No</u>

Water Record

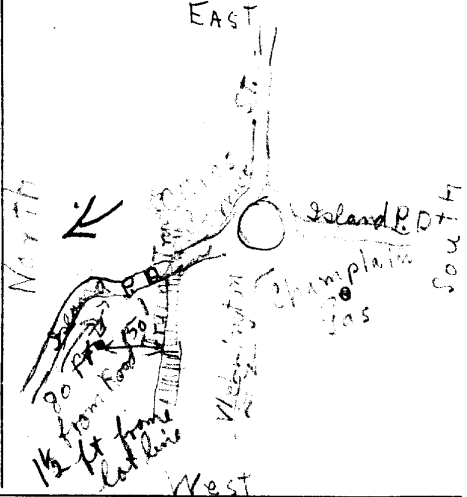
Kind (fresh or mineral)	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
<u>Fresh</u>			
Quality (hard, soft, contains iron, sulphur etc.)			
<u>Soft</u>			
Appearance (clear, cloudy, coloured)	<u>119 ft</u>	<u>Soft</u>	<u>110 feet</u>
For what purpose(s) is the water to be used?			
<u>For house and lawn garden etc.</u>			
How far is well from possible source of contamination?			
<u>25 feet</u>			
What is source of contamination?			
<u>septic tank</u>			
Enclose a copy of any mineral analysis that has been made of water			

Well Log

Drift and Bedrock Record	From	To
	0 ft.ft.
<u>Sand</u>		<u>1</u>
<u>Blue Clay</u>	<u>2</u>	<u>5</u>
<u>White limestone</u>	<u>6</u>	<u>50</u>
<u>Black slate</u>	<u>50</u>	<u>60</u>
<u>Blue shale</u>	<u>60</u>	<u>125</u>

Location of Well

In diagram below show distances of well from road and lot line



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

Drilling Firm

Address

Recorded by

Date

UTM 182 441650E

9R 5027210N

Elev. 9R 0210

Basin 25

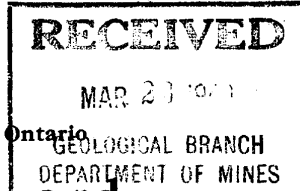
Lot 32



The Well Drillers Act

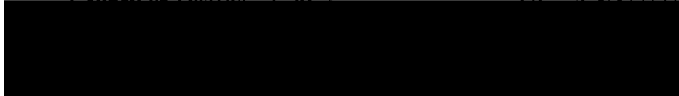
Department of Mines, Province of Ontario

15 No 3973



Water Well Record

Country or District *Carleton* OTTAWA To *Manotau* Con. Lot Pt. Lot



land *Prick done* Acres *1/2*
including pump) *\$300-*

Pipe and Casing Record

Pumping Test

Casing diameter(s) ... <i>5"</i>	Date
Length(s) of casing(s) ... <i>10 feet</i>	Developed Capacity
Length of screen	Duration of Test ... <i>1 hr</i>
Type of screen	Pumping Rate ... <i>300 gals a hour</i>
Type of pump	Drawdown ... <i>2</i>
Capacity of pump	Static level of completed well ... <i>10 feet from top</i>
Depth of pump setting	Is well a gravel-wall type?

Water Record

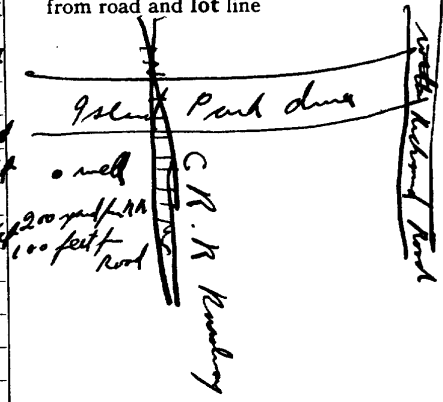
Kind (fresh or mineral)	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
<i>Fresh</i>	<i>10 feet</i>	<i>fresh</i>	<i>10"</i>
Quality (hard, soft, contains iron, sulphur etc.) ... <i>soft</i>			
Appearance (clear, cloudy, coloured) ... <i>clear</i>	<i>120 feet</i>		
For what purpose(s) is the water to be used? ... <i>Domestic</i>			
How far is well from possible source of contamination?			
What is source of contamination?			
Enclose a copy of any mineral analysis that has been made of water			

Well Log

Drift and Bedrock Record	From 0 ft.	To ... ft.
<i>top soil</i>		
<i>gravel and hard clay</i>	<i>1-</i>	<i>9 feet</i>
<i>Domestic sandstone or a real hard rock</i>	<i>9 -</i>	<i>70 feet</i>
<i>shale</i>	<i>70 -</i>	<i>120 feet</i>

Location of Well

In diagram below show distances of well from road and lot line



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

Drilling Firm ... *McAlly Bros*

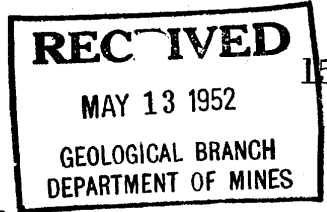
Address ... *W. Walton R.R. #1*

Recorded by ... *W. Walton & McAlly Bros* Address ... *W. Walton R.R. #1*

Date

Licence Number

UTM 18 2 4 1 1 1 5 1 4 5 1 8
9 R 5 10 12 16 17 10 0 N
 Elev. 9 1/2 0 2 3 10
 Basin 25 1 1



15 No 8412

The Well Drillers Act
 Department of Mines, Province of Ontario

Water Well Record

County or Territorial District... Carleton ... Township, Village, Town or City... Ottawa
 Con. ... Lot ... Street and Number (if in Village, Town or City) ...
 Owner... R. L. Crain Ltd ... Address... Richmond Rd.
 Date Completed... 5 (day) Sept (month) 1951 (year) Cost of Well (excluding pump).....

Pipe and Casing Record	Pumping Test
Casing diameter(s)..... <u>8"</u>	Date..... <u>Sept 5 1951</u>
Length(s) of casing(s)..... <u>36'</u>	Static level..... <u>17'</u>
Type of screen.....	Pumping level.....
Length of screen.....	Pumping rate..... <u>6.0 gpm per foot</u>
Distance from top of screen to ground level.....	Duration of test..... <u>12 hrs</u>
Is well a gravel-wall type?.....	Distance from cylinder or bowls to ground level.....

Water Record

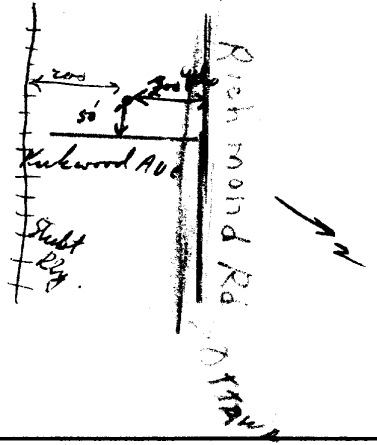
Kind (fresh or mineral).....	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
<u>fresh</u>	<u>80'</u>	<u>fresh</u>	<u>40'</u>
<u>soft</u>	<u>160'</u>	<u>fresh</u>	<u>20'</u>
<u>clear</u>	<u>200'</u>	<u>fresh</u>	<u>160'</u>
<u>domestic</u>	<u>245'</u>	<u>fresh</u>	<u>28'</u>
For what purpose(s) is the water to be used?.....			
How far is well from possible source of contamination?.....			
What is the source of contamination?.....			
Enclose a copy of any mineral analysis that has been made of water.....			

Well Log

Overburden and Bedrock Record	From	To
<u>sandy clay & boulders</u>	<u>0 ft.</u>	<u>3.6 ft.</u>
<u>blue black limestone</u>	<u>36'</u>	<u>150'</u>
<u>black limestone</u>	<u>150'</u>	<u>225'</u>
<u>hard grey limestone</u>	<u>225'</u>	<u>250'</u>

Location of Well

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



Situation: Is well on upland, in valley, or on hillside?..... upland
 Drilling Firm..... F. A. McLean & Son
 Address..... 185 James St. Ottawa
 Name of Driller... Halter Lavanagh ... Address... 483 Preston St.
 Date... Apr 30 1952 ... Licence Number... 130
Halter Lavanagh
 Signature of Licensee

Kirkwood Ave.

U.T.M. | 18 | 2 | 441131010 | E
 | 5 | R | 5101216171215 | N
 Elev. | 4 | R | 0121215 |
 Basin | 215 | | | |



15 No 8932

GROUND WATER BRANCH
 AUG - 5 1958
 ONTARIO WATER
 RESOURCES COMMISSION

The Water-well Drillers Act, 1954
 Department of Mines

Water-Well Record

County or Territorial District... CARLETON Township, Village, Town or City OTTAWA
 in Village, Town or City).....
 Address

(day) (month) (year)

Pipe and Casing Record

Pumping Test

Casing diameter(s) <u>2 1/2" 5"</u>	Static level <u>35</u>
Length(s)	Pumping rate <u>1000 GPH</u>
Type of screen <u>NONE</u>	Pumping level <u>60</u>
Length of screen	Duration of test <u>1 HR</u>

Well Log

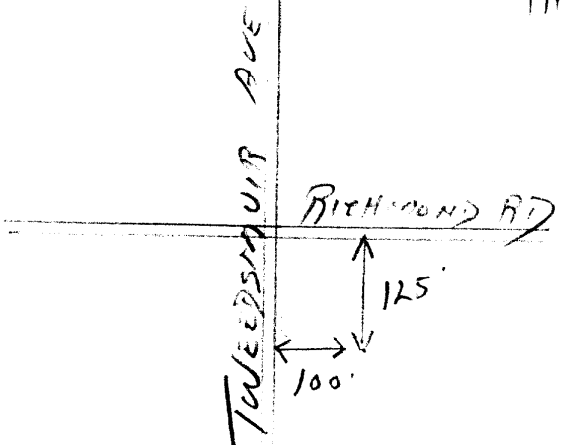
Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth (s) at which water (s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
<u>BOULDER CLAY</u>	<u>0</u>	<u>20</u>			
<u>GREY LIMESTONE</u>	<u>20</u>	<u>115</u>	<u>110</u>	<u>80</u>	<u>FRESH</u>

For what purpose(s) is the water to be used?
MOTEL
 Is water clear or cloudy?..... CLEAR
 Is well on upland, in valley, or on hillside?.....
 Drilling firm M. McEAGHER
 Address OTTAWA
 Name of Driller SAIME
 Address
 Licence Number.....

Location of Well

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



I certify that the foregoing statements of fact are true.
 Date July 26 1958 M. McEagher
 Signature of Licensee

TWEEDSMUIR AVE

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

11

1532963

Municipality **ISS02** Con.

475 Richmond Rd

County or District Ottawa - Carleton	Township/Borough/City/Town/Village City of Ottawa	Con block tract survey, etc. Lot
Address Ottawa Ont		Date completed 21 06 07 day month year

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)					
General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
	Sand & gravel			0	4
grey	limestone			4	51

31 _____

32 _____

41 WATER RECORD				51 CASING & OPEN HOLE RECORD				61 PLUGGING & SEALING RECORD		
Water found at - feet	Kind of water	Kind of water	Kind of water	Inside diam inches	Material	Wall thickness inches	Depth - feet	Sizes of opening (Slot No.)	Diameter inches	Length feet
10-13	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	14	10-11	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	12	From To	Material and type	Depth at top of screen	30
15-18	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	19	6 1/4	188	0	0 6			
20-23	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	24	17-18	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	19	0 4			
25-28	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	29	8 3/4		0	4			
30-33	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	34	6	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	26	4 51			

71	Pumping test method <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Bailor	10	Pumping rate 1/3 GPM	11-14	Duration of pumping Hours Mins 1 Hours 13 Mins	17-18
PUMPING TEST	Static level	Water level end of pumping	Water levels during			
	19-21	22-24	15 minutes	30 minutes	45 minutes	60 minutes
	13 feet		45 feet	39 feet	33 feet	31 feet
	25-28	29-31	32-34	35-37		
If flowing give rate	Pump intake set at	Water at end of test	Recommended pump rate			
38-41	42-45	46-49	1/3 GPM			
Recommended pump type	Recommended pump setting	Recommended pump rate	If flowing give rate			
<input type="checkbox"/> Shallow <input type="checkbox"/> Deep		1/3 GPM	<input type="checkbox"/> Clear <input checked="" type="checkbox"/> Cloudy			

LOCATION OF WELL

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

237915

FINAL STATUS OF WELL		
<input checked="" type="checkbox"/> Water supply	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Unfinished
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well
<input checked="" type="checkbox"/> Test hole	<input type="checkbox"/> Abandoned (Other)	
<input type="checkbox"/> Recharge well	<input type="checkbox"/> Dewatering	
WATER USE		
<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Not use
<input type="checkbox"/> Stock	<input type="checkbox"/> Municipal	<input type="checkbox"/> Other
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Public supply	
<input type="checkbox"/> Industrial	<input type="checkbox"/> Cooling & air conditioning	
METHOD OF CONSTRUCTION		
<input type="checkbox"/> Cable tool	<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Driving
<input type="checkbox"/> Rotary (conventional)	<input type="checkbox"/> Boring	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Jetting	

Name of Well Contractor Air-Rock Drilling Co Ltd	Well Contractor's Licence No. 1119
Address RR #2 Sussex Ont	
Name of Well Technician Shannon Purcell	Well Technician's Licence No. TD122
Signature of Technician/Contractor <i>[Signature]</i>	Submission date 100707 day mo year

MINISTRY USE ONLY	Data source 1119	Date received JUL 29 2007
	Date of inspection	Inspector
	Remarks CSS.ES2	



Ministry of the Environment

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

A056104

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Property Owner's Information

First Name: CITY OF OTTAWA, Last Name: DEPARTMENT OF PUBLIC WORKS, Mailing Address: 100 CONSTELLATION CRES. 6th FLOOR, Municipality: OTTAWA
 Province: ON, Postal Code: K2G6J8, E-mail Address: carol.houmes@ottawa.ca, Telephone No.: 6135807424

Cluster Well Information

Address of Well Location: SEE ATTACHED PLAN, Lot: , Concession: , Township: , County/District/Municipality: OTTAWA
 City/Town/Village: OTTAWA, Province: Ontario, Postal Code: , GPS Unit Make: GARMIN, Model: 765, Unit Mode of Operation: Differentiated, specify: 3A

Consent

Property Owner's Consent to use cluster form
 Signature: Carol Holmes, P. Eng, Date: 2007/11/07

Consent to release additional information to the Director upon request
 Signature of Technician/Contractor: , Date: (yyyy/mm/dd)

Well # on Sketch	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
	Zone	Easting						Northing	From					
BH2	18T	44148756	27448	5.2	20.0	BOREHOLE	PLASTIC	0-2.2	2.2	5.2	BENTONITE HOLEPLUG	4.0		
3H5	18T	44171250	27576	5.0	20.0	"	"	0-2.0	2.0	5.0	"	4.2		
3H6	18T	44221350	27874	5.1	20.0	"	"	0-2.1	2.1	5.1	"	4.1		
3H10	18T	44245250	28009	5.2	20.0	"	"	0-2.2	2.2	5.2	"	4.3		
H4	18T	44156950	27494	3.1	20.0	"	"	0-1.7	1.7	3.1	"			

Well Contractor and Well Technician Information

Business Name of Well Contractor: DST CONSULTING, Business Address: 605 HEWITSON ST, Municipality: THUNDER BAY, Province: ONTARIO
 Postal Code: A7B5V58076232929, Business Telephone No.: , Well Contractor's Licence No.: 6838, Business E-mail Address: dstgroup.com
 Name of Well Technician: ALAN FINKE, Well Technician's Licence No.: 2544, Date Submitted: OCT 2007, Signature of Technician: [Signature]

Date 1st Well in Cluster Constructed: 2007/10/12, Date Last Well in Cluster Constructed: 2007/10/16

Ministry Use Only

Date Received: 11/07/2007, Date Inspected: , Audit No.: 00100, Remarks: MOB136

1991 (11/2006)

Master Well Owner's and Land Owner's Information

First Name: **CITY OF OTTAWA** Last Name: **PUBLIC WORKS & SERVICES**
 Mailing Address (Street Number/Name, RR): **100 CONSTELLATION CRESENT** Municipality: **OTTAWA** Province: **ON** Postal Code: **K2G6S8** Telephone No. (inc. area code): **6135802424**

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR): **SEE ATTACHED PLAN** Township: _____ Lot: _____ Concession: _____
 County/District/Municipality: _____ City/Town/Village: **OTTAWA** Province: **Ontario** Postal Code: _____

UTM Coordinates: NAD 83 | Zone: **18T** | Easting: **442331** | Northing: **502794** | GPS Unit Make: **GARMIN** | Model: **765** | Mode of Operation: Undifferentiated Differentiated, specify **3A** Averaged

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres)	
				From	To
GRY	ASPHALT			0	0.2
GRY	CONCRETE			0.2	0.5
BRN	SAND	GRAVEL COBBLES		0.5	3.8
GRY	LIMESTONE			3.8	5.3

Hole Details

Depth (Metres)	Diameter (Centimetres)	
	From	To
0	5.3	20.0

BH 8

Water Use: Public Industrial Not used Other, specify _____
 Domestic Commercial Dewatering
 Livestock Municipal Monitoring
 Irrigation Test Hole Cooling & Air Conditioning

Method of Construction: Cable Tool Air Percussion Digging
 Rotary (Conventional) Diamond Boring
 Rotary (Reverse) Jetting Other, specify _____
 Rotary (Air) Driving

Status of Well: Test Hole Abandoned, Insufficient Supply
 Replacement Well Abandoned, Poor Water Quality
 Dewatering Well Other, specify _____
 Alteration (Construction) Abandoned, other, specify _____

No Casing and Screen Used: Yes No _____ Metres
 Static Water Level Test: _____ Metres

Screen: Galvanized Steel Fibreglass Concrete Plastic
 Outside Diameter (Centimetres): **3.6** Slot No.: **.010**

Construction Details

Inside Diameter (Centimetres)	Material (steel, plastic, fibreglass, concrete, galvanized)	Wall Thickness	Depth (Metres)	
			From	To
3.2	PLASTIC	RISEN	0.2	2.3
		SUNEN	0.2	5.3

Water Details

Water found at Depth: **3.5** Metres Gas Fresh Salty Sulphur Minerals
 Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals
 Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From	To	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
0.2	1.8	BENTONITE MOLEPLUG	N/A

Disinfected: Yes No. If no, provide reason: _____ Date Master Well Completed (yyyy/mm/dd): **2007/10/15**

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster):
 Total Wells in Cluster: **5** Please indicate Number of Cluster Well Information Log Sheets Submitted: **1**
 Total Wells on this Property: **1**

Location of Well Cluster: Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.
 Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request
 Signature of Technician/Contractor: _____ Date (yyyy/mm/dd): _____

Well Contractor and Well Technician Information

Business Name of Well Contractor: **DST CONSULTING** Well Contractor's Licence No.: **618318**
 Business Address (Street No./Name, number, RR): **605 HEWITSON ST THUNDER BAY** Municipality: _____
 Province: **ONTARIO** Postal Code: **A7A5V5** Business E-mail Address: **dstgroup.com**
 Business Telephone No. (inc. area code): **1076232929** Name of Well Technician (Last Name, First Name): **FINKE C. ALAN**
 Well Technician's Licence No.: **2544** Signature of Technician: _____ Date Submitted (yyyy/mm/dd): **OCT 2007**

Master Well Owner's/Land Owner's consent to use Cluster Form
 Signature: **Carol Holmes, P.Eng** Date (yyyy/mm/dd): **2007/11/07**

Ministry Use Only
 Audit No.: **00136** Well Contractor No.: _____
 Date Received (yyyy/mm/dd): **NOV 27 2007** Date of Inspection (yyyy/mm/dd): _____
 Remarks: **C 00100**

A032177

Master Well Owner's and Land Owner's Information

First Name: Canadian Fire Real Estate Ltd
 Last Name: [Redacted]
 Mailing Address (Street Number/Name, RR): 2100 Yonge Street 1st Floor
 Municipality: Toronto
 Province: Ontario
 Postal Code: M4P 2K8
 Telephone No. (inc. area code):

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR): 109 Richmond Road
 Township: Ottawa
 Lot: [Redacted]
 Concession: [Redacted]
 County/District/Municipality: Ottawa Carleton
 City/Town/Village: Ottawa
 Province: Ontario
 Postal Code: [Redacted]
 UTM Coordinates: Zone Easting Northing
 NAD 83 18941792 5027285
 GPS Unit Make Model
 Mode of Operation: Undifferentiated Averaged
 Differentiated, specify

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From	Depth (Metres) To
black	Asphalt		pavement	0	0.15
gray	Sandy gravel, occ. cobbles, glacial till			0.15	4.0

MW 112
 typical of all boreholes
 GPS readings for each well are shown on a separate sheet

Hole Details

Depth (Metres) From	Depth (Metres) To	Diameter (Centimetres)
0	4.0	20.3

Water Use

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

Method of Construction

Cable Tool Air Percussion Digging
 Rotary (Conventional) Diamond Boring
 Rotary (Reverse) Jetting Other, specify
 Rotary (Air) Driving hollow stem auger

Status of Well

Test Hole Abandoned, Insufficient Supply
 Replacement Well Abandoned, Poor Water Quality
 Dewatering Well Other, specify
 Alteration (Construction) Abandoned, other, specify

No Casing and Screen Used Yes No
 Static Water Level Test
 Open Hole [] Metres

Screen

Galvanized Steel Fibreglass Concrete Plastic
 Outside Diameter (Centimetres) Slot No.

Water Details

Water found at Depth [] Metres Gas Fresh Salty Sulphur Minerals
 Kind of Water
 Water found at Depth [] Metres Gas Fresh Salty Sulphur Minerals
 Kind of Water
 Water found at Depth [] Metres Gas Fresh Salty Sulphur Minerals
 Kind of Water

Disinfected Yes No If no, provide reason: Date Master Well Completed (yyyy/mm/dd)
 2008/09/17

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Total Wells in Cluster: 12
 Please indicate Number of Cluster Well Information Log Sheets Submitted: 1
 Total Wells on this Property: 12

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.
 Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Signature of Technician/Contractor: [Signature] Date (yyyy/mm/dd): 2008/06/09

Master Well Owner's/Land Owner's consent to use Cluster Form

Signature: [Redacted] Date (yyyy/mm/dd): [Redacted]

Construction Details

Inside Diameter (Centimetres)	Material (steel, plastic, fibreglass, concrete, galvanized)	Wall Thickness	Depth (Metres) From	Depth (Metres) To
5.2	plastic riser	0.4	0	2.3
5.2	plastic screen	0.4	2.3	4.0

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From	Depth Set at (Metres) To	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
0	0.3	Concrete	
0.3	2.0	hole plug	2 1/2 bags
2.0	4.0	Filter sand	2 1/2 bags

Well Contractor and Well Technician Information

Business Name of Well Contractor: OGS Inc
 Well Contractor's Licence No.: 6964
 Business Address (Street No./Name, number, RR): 1558 Appleton Side Road
 Municipality: Almonte
 Province: Ontario
 Postal Code: K0A1A0
 Business E-mail Address: ogsinc@bell.net.ca
 Bus. Telephone No. (inc. area code): 613 256 7666
 Name of Well Technician (Last Name, First Name): Ohlmann Wilf
 Well Technician's Licence No.: 2594
 Signature of Technician: [Signature]
 Date Submitted (yyyy/mm/dd): 2008/06/09

Ministry Use Only

Audit No.: M 00593
 Well Contractor No.: [Redacted]
 Date Received (yyyy/mm/dd): JUN 12 2008
 Date of Inspection (yyyy/mm/dd): [Redacted]
 Remarks: (A) Maps

Instructions for Completing Form

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

				Ministry Use Only			
MUN		CON		LOT			
Well Owner's Information and Location of Well Information							
First Name <i>Imperial Oil Canada</i>		Last Name <i>Don Mihhs</i>		Mailing Address (Street Number/Name, RR, Lot, Concession) <i>50 Wynford Drive - At Herne Blount</i>			
County/District/Municipality <i>Don Mills</i>		Township/City/Town/Village <i>100 ONTO</i>		Province <i>Ontario</i>		Postal Code <i>M3C 1K5</i>	
Address of Well Location (County/District/Municipality)				Township <i>Ottawa-Corchester</i>		Lot <i>416-441-2864</i>	
RR#/Street Number/Name <i>369 Island Park Drive at Richmond Rd</i>				City/Town/Village <i>OTTAWA</i>		Site/Compartment/Block/Tract etc.	
GPS Reading NAD <i>83</i>		Zone <i>18</i>		Easting <i>741900</i>		Northing <i>5022900</i>	
Unit Make/Model		Mode of Operation:		<input type="checkbox"/> Undifferentiated		<input type="checkbox"/> Averaged	
				<input type="checkbox"/> Differentiated, specify			

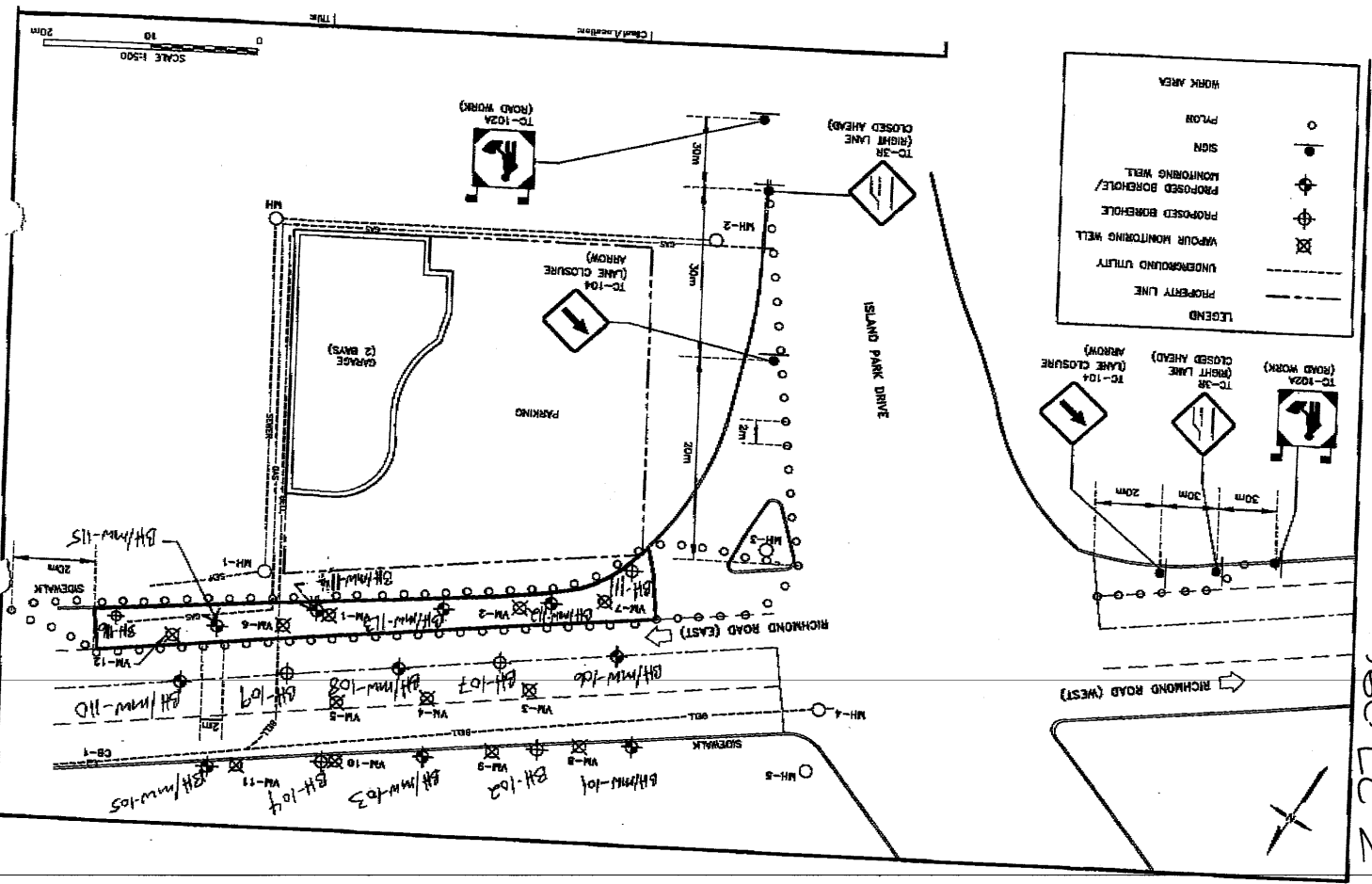
Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
<i>Grey</i>	<i>Silty sand</i>	<i>Some clay</i>	<i>wet soft typical BH</i>	<i>0</i>	<i>4M</i>
<i>10 Monitoring well as to Chester Well tag installed MW#110</i>					

Hole Diameter			Construction Record				Test of Well Yield					
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
<i>0</i>	<i>4M</i>	<i>20</i>	<i>5 cm</i>	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	<i>schedule 40</i>	<i>0</i>	<i>2.5M</i>	Pump intake set at - (metres) <i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
Water Record			Casing				Test of Well Yield					
Water found at Metres	Kind of Water		Screen				Pumping rate - (litres/min)					
<i>0</i>	<input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals		Outside diam <i>6.5 cm</i>				Duration of pumping <i>2</i> hrs + <i>2</i> min					
After test of well yield, water was			Slot No. <i>#10</i>				Final water level end of pumping <i>3</i> metres					
<input type="checkbox"/> Clear and sediment free			No Casing or Screen				Recommended pump type <i>4</i>					
<input type="checkbox"/> Other, specify			Open hole				Recommended pump depth <i>5</i> metres					
Chlorinated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							Recommended pump rate (litres/min) <i>15</i>					

Plugging and Sealing Record				Location of Well			
Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.			
<i>0</i>	<i>1M</i>	<i>Bentonite (Typical)</i>	<i>2 Bags</i>	<i>See attached site plan</i>			
Method of Construction				Water Use			
<input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (air) <input type="checkbox"/> Diamond <input type="checkbox"/> Digging				<input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Public Supply <input type="checkbox"/> Other <i>Supply</i>			
<input type="checkbox"/> Rotary (conventional) <input type="checkbox"/> Air percussion <input type="checkbox"/> Jetting <input type="checkbox"/> Other <i>Hydr.</i>				<input type="checkbox"/> Stock <input type="checkbox"/> Commercial <input type="checkbox"/> Not used			
<input type="checkbox"/> Rotary (reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Driving				<input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input type="checkbox"/> Cooling & air conditioning			
Final Status of Well				Ministry Use Only			
<input type="checkbox"/> Water Supply <input type="checkbox"/> Recharge well <input type="checkbox"/> Unfinished <input type="checkbox"/> Abandoned, (Other)				Data Source Contractor <i>1844</i>			
<input type="checkbox"/> Observation well <input type="checkbox"/> Abandoned, insufficient supply <input type="checkbox"/> Dewatering				Date Received <i>MAR 22 2005</i>			
<input type="checkbox"/> Test Hole <input type="checkbox"/> Abandoned, poor quality <input type="checkbox"/> Replacement well				Date of Inspection			

Well Contractor/Technician Information		Ministry Use Only	
Name of Well Contractor <i>George Downing Estate Drilling Ltd</i>	Well Contractor's Licence No. <i>1844</i>	Date Submitted	Well Record Number
Business Address (street name, number, city, etc.) <i>410 Main St. Ottawa Ne Range</i>	<i>50V-1B0</i>	<i>05/03/07</i>	
Name of Well Technician (last name, first name) <i>Downing Bruce</i>	Well Technician's Licence No. <i>72173</i>		
Signature of Technician/Contractor <i>x Bruce Downing</i>	Date Submitted		



227096

1844

MAR 2 2005

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- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- All metre measurements shall be reported to 1/10th of a metre.
- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information					Ministry Use Only			
First Name	Last Name	Mailing Address (Street Number/Name, RR, Lot, Concession)			MUN	CON	LOT	
Canadian Bank Note Company LTD		145 RICHMOND ROAD						
County/District/Municipality	Township/City/Town/Village	Province	Postal Code	Telephone Number (include area code)				
OTTAWA	OTTAWA	Ontario	K1E 1A1	613-702-3421				
Address of Well Location (County/District/Municipality)					Lot	Concession		
145 RICHMOND ROAD					OTTAWA			
RR#/Street Number/Name					City/Town/Village		Site/Compartment/Block/Tract etc.	
					OTTAWA			
GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation: <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify		
	83	18	941527	5027133	MAC	CCL 4.70		

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth	
				From	Metres To

Hole Diameter			Construction Record				Test of Well Yield							
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized										
Water Record Water found at ___ Metres / Kind of Water <input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other: _____ <input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other: _____ <input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other: _____ After test of well yield, water was: <input type="checkbox"/> Clear and sediment free <input type="checkbox"/> Other, specify _____ Chlorinated <input type="checkbox"/> Yes <input type="checkbox"/> No			Casing <input type="checkbox"/> No Casing or Screen <input type="checkbox"/> Open hole				Screen Slot No. _____ Outside diam <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Pumping test method: Pump intake set at - (metres) 1, Pumping rate - (litres/min) 2, Duration of pumping ___ hrs + ___ min, Final water level end of pumping ___ metres, Recommended pump type <input type="checkbox"/> Shallow <input type="checkbox"/> Deep, Recommended pump depth ___ metres, Recommended pump rate (litres/min) 10, 15, 20, 25, 30, 40, 50, 60. If flowing give rate - (litres/min) 20, 25, 30, 40, 50, 60. If pumping discontinued, give reason.			

Plugging and Sealing Record			Location of Well	
Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
2.5	1.5	Ontario Slurry		
1.5	0	Grout		
0	1.5	Casing Cut Off - 9 Replaced	Volume Placed (cubic metres) 2, 3 Bags	
Method of Construction <input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (air) <input type="checkbox"/> Diamond <input type="checkbox"/> Digging <input type="checkbox"/> Rotary (conventional) <input type="checkbox"/> Air percussion <input type="checkbox"/> Jetting <input type="checkbox"/> Other <input type="checkbox"/> Rotary (reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Driving			Audit No. z 28743 Date Well Completed YYYY MM DD Was the well owner's information package delivered? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Delivered YYYY MM DD	
Water Use <input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Public Supply <input type="checkbox"/> Other <input type="checkbox"/> Stock <input type="checkbox"/> Commercial <input type="checkbox"/> Not used <input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input type="checkbox"/> Cooling & air conditioning			Data Source Contractor 6574 Date Received NOV 24 2005 Date of Inspection YYYY MM DD Remarks DWC VIA PHONE 2005/11/15 Well Record Number	
Final Status of Well <input type="checkbox"/> Water Supply <input type="checkbox"/> Recharge well <input type="checkbox"/> Unfinished <input type="checkbox"/> Abandoned, (Other) <input type="checkbox"/> Observation well <input type="checkbox"/> Abandoned, insufficient supply <input type="checkbox"/> Dewatering <input type="checkbox"/> Test Hole <input type="checkbox"/> Abandoned, poor quality <input type="checkbox"/> Replacement well			Ministry Use Only Name of Contractor Plumbing Village Well Contractor's Licence No. 6574 Business Address (street name, number, city, etc.) Box 3091 - Camp Oshawa K1H 1L0 Name of Well Technician (last name, first name) S. J. ... Well Technician's Licence No. 370 Signature of Technician [Signature] Date Submitted 3005/11/15	

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- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information

MUN		CON		LOT	
First Name Domicile Developments Inc.	Last Name	Mailing Address (Street Number/Name, RR, Lot, Concession) 371A Richmond Road			
County/District/Municipality	Township/City/Town/Village Ottawa	Province Ontario	Postal Code K2A 0E7	Telephone Number (include area code) 613-288-0388	
Address of Well Location (County/District/Municipality) Ottawa		Township	Lot 57 58+59	Concession Reg. Plan 263	
RR#/Street Number/Name 309 Athlone Avenue	City/Town/Village Ottawa		Site/Compartment/Block/Tract etc.		
GPS Reading NAD 83	Zone 18	Easting 447130	Northing 5027223	Unit Make/Model Garmin GPS map 76	Mode of Operation: <input type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth Metres	
				From	To
	Asphalt concrete		Typical Monitoring well installation	0	1.10
DK Brown	Silty sand	Gravel		0.10	1.27
Brown	Sandy silt		(5 wells as a cluster)	1.27	1.52
Grey	Limestone	Shale layers		1.52	4.70

Hole Diameter			Construction Record				Test of Well Yield					
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
0	4.70	20	50 mm	<input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Schedull 40	0.9	1.25	Pump intake set at - (metres)	1		1	
Water Record			Casing				Test of Well Yield					
Water found at Metres	Kind of Water		Screen				Test of Well Yield					
<input type="checkbox"/> m <input type="checkbox"/> Gas <input type="checkbox"/> Other:	<input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Salty <input type="checkbox"/> Minerals		Outside diam				Test of Well Yield					
<input type="checkbox"/> m <input type="checkbox"/> Gas <input type="checkbox"/> Other:	<input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Salty <input type="checkbox"/> Minerals		Slot No.				Test of Well Yield					
<input type="checkbox"/> m <input type="checkbox"/> Gas <input type="checkbox"/> Other:	<input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Salty <input type="checkbox"/> Minerals		#10				Test of Well Yield					
After test of well yield, water was			No Casing or Screen				Test of Well Yield					
<input type="checkbox"/> Clear and sediment free			<input type="checkbox"/> Open hole				Test of Well Yield					
<input type="checkbox"/> Other, specify							Test of Well Yield					
Chlorinated <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							Test of Well Yield					

Plugging and Sealing Record			<input checked="" type="checkbox"/> Annular space	<input type="checkbox"/> Abandonment
Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
0.9	1.25	Bentonite 20 kg	20 L.B.	
Method of Construction				
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging	
<input type="checkbox"/> Rotary (conventional)	<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other	
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving		
Water Use				
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input checked="" type="checkbox"/> Other SAMPLE	
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used		
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning		
Final Status of Well				
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input type="checkbox"/> Abandoned, (Other)	
<input checked="" type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering		
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well		

Location of Well			
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.			
Please see site plan (attached)			
Audit No.	Z 31645	Date Well Completed	2005 08 25
Was the well owner's information package delivered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Delivered	YYYY MM DD

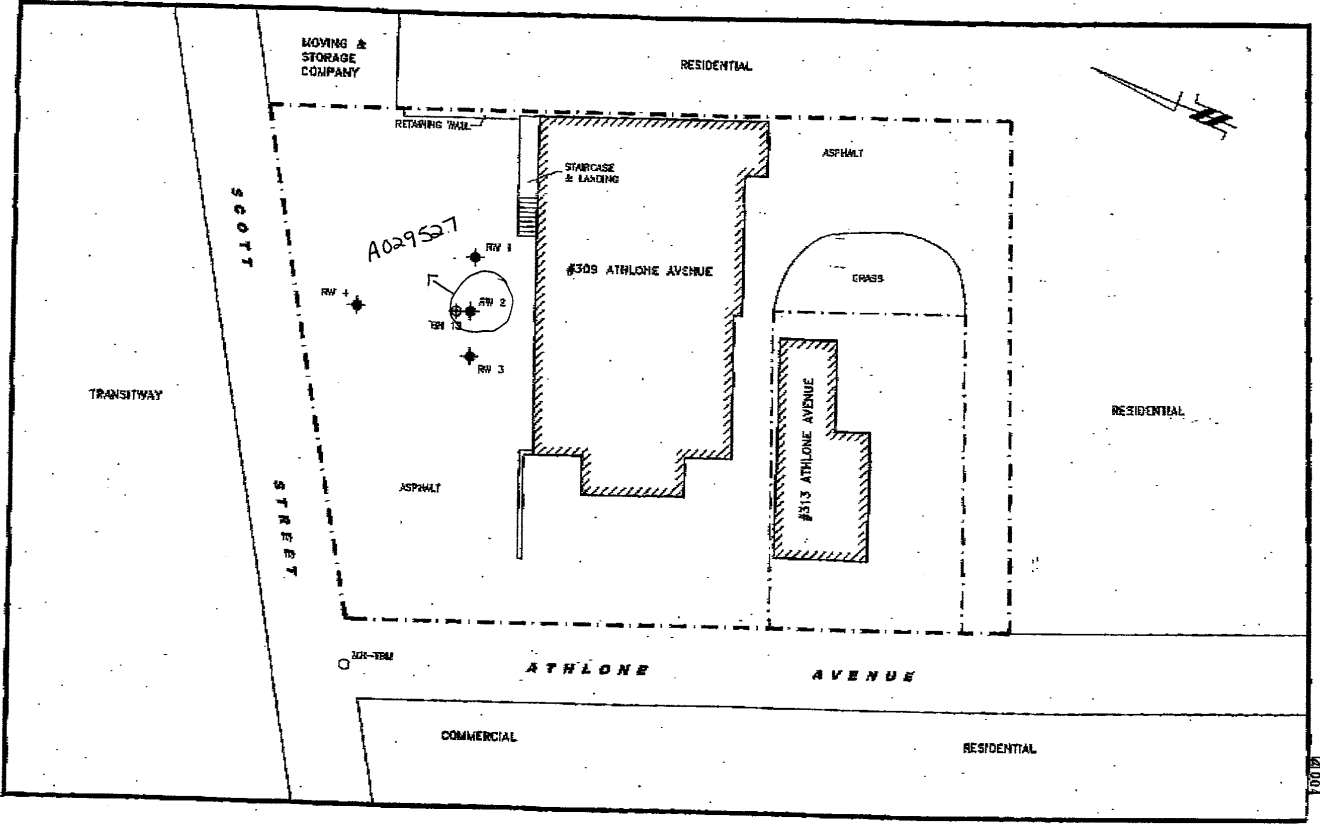
Well Contractor/Technician Information	
Name of Well Contractor George Downing Estate Drilling Ltd	Well Contractor's Licence No. 1844
Business Address (street name, number, city etc.) 410 Main St. Grenville-sur-la-Rouge, QC J0V1B0	
Name of Well Technician (last name, first name) Downing, Bruce	Well Technician's Licence No. T2173
Signature of Technician/Contractor Bruce Downing	Date Submitted 2005 07 10

Ministry Use Only	
Data Source	Contractor 1844
Date Received OCT 12 2005	Date of Inspection YYYY MM DD
Remarks	Well Record Number

OCT 12 2005

Z 31645

1844

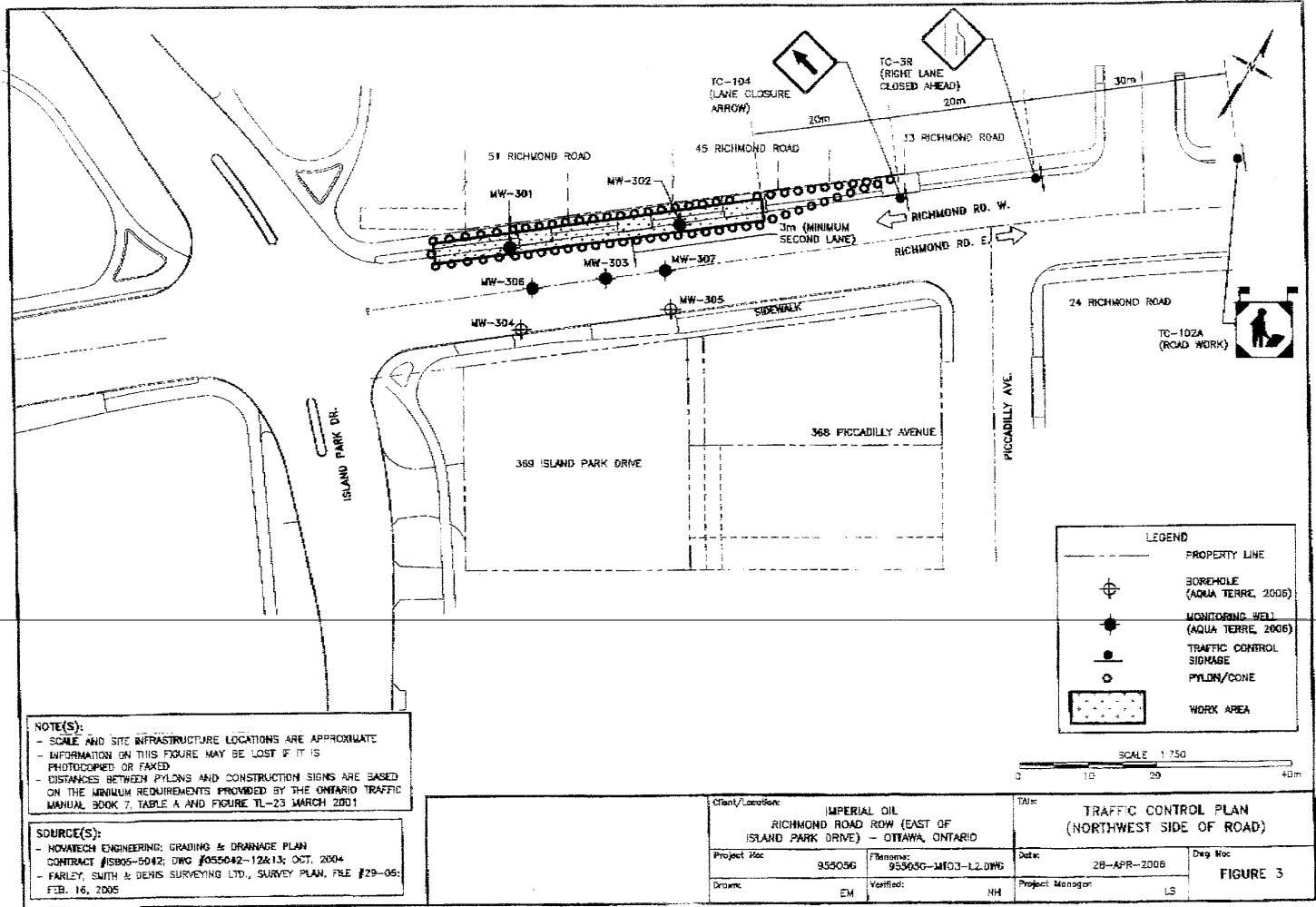


2004

1844

Z 31657

JUN 28 2006



Well abandonment
Tag # A029550

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- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information				MUN				CON				LOT			
First Name Imperial Oil								Mailing Address (Street Number/Name, RR, Lot, Concession) 90 Wynford Drive							
County/District/Municipality Don Mills				Township/City/Town/Village Toronto				Province Ontario		Postal Code M3C 1K5		Telephone Number (include area code) 416-441-7864			
Address of Well Location (County/District/Municipality) Ottawa								Township				Lot		Concession	
RR#/Street Number/Name Island Park at Richmond Road								City/Town/Village Ottawa				Site/Compartment/Block/Tract etc.			
GPS Reading		NAD		Zone		Easting		Northing		Unit		Make/Model		Mode of Operation:	
8.3		18		447962		5027385		Magellan				<input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged		<input type="checkbox"/> Differentiated, specify	

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
			5 boreholes decommissioned. Typical.		
			Remove monitoring wells, and backfill boreholes with bentonite, hole plus to surface as per Ministry Reg 903. Asphalt on top		

Hole Diameter			Construction Record				Test of Well Yield					
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
0	4.21	20						Pump intake set at - (metres)	1	1	1	1
Water Record			Casing				Test of Well Yield					
Water found at <u> </u> Metres / Kind of Water			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Pumping rate - (litres/min) Duration of pumping <u> </u> hrs + <u> </u> min Final water level end of pumping <u> </u> metres Recommended pump type <input type="checkbox"/> Shallow <input type="checkbox"/> Deep Recommended pump depth <u> </u> metres Recommended pump rate (litres/min) If flowing give rate - (litres/min) If pumping discontinued, give reason.					
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other:			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				2 3 4 5 10 15 20 25 30 40 50 60					
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other:			Screen									
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other:			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized									
After test of well yield, water was			No Casing or Screen									
<input type="checkbox"/> Clear and sediment free <input type="checkbox"/> Other, specify			<input type="checkbox"/> Open hole									
Chlorinated <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												

Plugging and Sealing Record				<input type="checkbox"/> Annular space	<input checked="" type="checkbox"/> Abandonment
Depth set at - Metres	From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
0	4.21		Bentonite Typical.	4 Kg	

Location of Well

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

Please see attached site plan

Method of Construction					
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input checked="" type="checkbox"/> Digging		
<input type="checkbox"/> Rotary (conventional)	<input type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other		
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving			
Water Use					
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input checked="" type="checkbox"/> Other		
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used			
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning			
Final Status of Well					
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input checked="" type="checkbox"/> Abandoned, (Other)		
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering			
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well			

Audit No.	z 31657	Date Well Completed	YYYY MM DD
Was the well owner's information package delivered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Delivered	YYYY MM DD

Well Contractor/Technician Information	
Name of Well Contractor George Downes Estate Drilling Ltd.	Well Contractor's Licence No. 1844
Business Address (street name, number, city etc.) 410 Main St Granville Sur La Rouge, Qc J0V 1B0	
Name of Well Technician (last name, first name) Dwayne Bruce	Well Technician's Licence No. 12475
Signature of Technician/Contractor <i>x Dwayne Bruce</i>	Date Submitted YYYY MM DD

Ministry Use Only	
Data Source	Contact 1844
Date received YYYY MM DD JUN 28 2006	Date of Inspection YYYY MM DD
Remarks	Well Record Number

Measurements recorded in: Metric Imperial

A 092413 A092413

6859 Page 3 of 3

Well Owner's Information

First Name: City of Ottawa Last Name / Organization: Carol Holmes E-mail Address: _____ Well Constructed by Well Owner
 Mailing Address (Street Number/Name): 101 Centrepointe Dr Municipality: Nepean Province: ON Postal Code: K2G5K7G Telephone No. (inc. area code): 135802424

Well Location

Address of Well Location (Street Number/Name): Tweedsmuir R. Richmond Rd Ottawa Township: _____ Lot: _____ Concession: _____
 County/District/Municipality: North City/Town/Village: _____ Province: Ontario Postal Code: _____
 UTM Coordinates Zone: 83 Easting: 18441308 Northing: 5026953 Municipal Plan and Sublot Number: _____ Other: _____

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To

Annular Space		
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0' 0.5'	Cement	
0.5' 11'	Bentonite	
11' 22'	Sand	

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

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify _____ <input type="checkbox"/> Other, specify _____
			From	To	
1.25"	Plastic	5/8"	0'	9 1/2'	

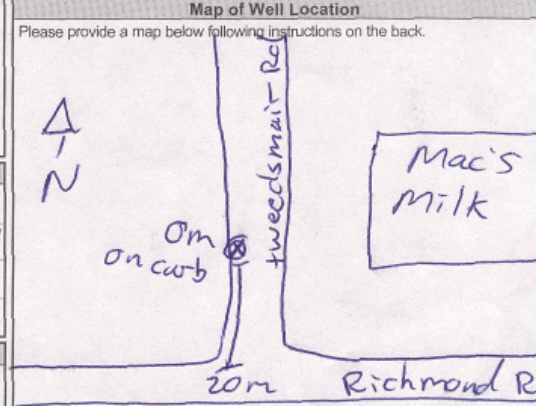
Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
1.5"	Plastic	10	12'	22'

Water Details		Hole Diameter	
Water found at Depth (m/ft): _____	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft): _____	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	0' 22'	3.25"
Water found at Depth (m/ft): _____	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____		

Well Contractor and Well Technician Information

Business Name of Well Contractor: Strata Soil Sampling Well Contractor's Licence No.: 7241
 Business Address (Street Number/Name): 2-147 West Beaver Creek Dr Richmond Hill Municipality: _____
 Province: ON Postal Code: L4B1C6 Business E-mail Address: w.records@strata.soil.ca
 Bus. Telephone No. (inc. area code): 9057649304 Name of Well Technician (Last Name, First Name): Main, Mike
 Well Technician's Licence No.: 3448 Signature of Technician and/or Contractor: [Signature] Date Submitted: 2009/11/15

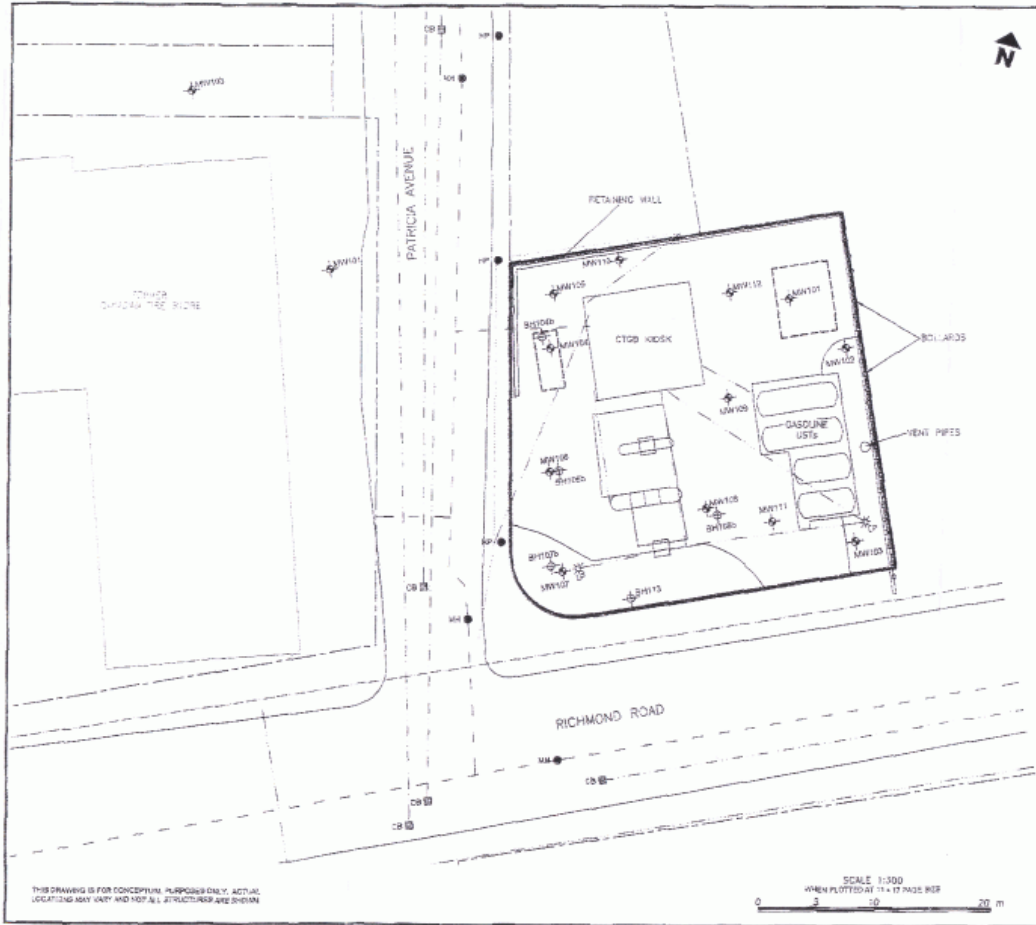
Results of Well Yield Testing				
After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason: Static Level	1		1	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



Comments: _____

DEC 3 0 2008

C-1844 M02895 C01992



THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.

NOTES
DRAWING COMPILED FROM VALHOLZ SITE PLAN AND OTTAWA DEPARTMENT OF PUBLIC WORKS DRAWING E-05-111

- LEGEND**
- PROPERTY BOUNDARY
 - SITE LOCATION
 - FENCE
 - FORMER FACILITY/FEATURE
 - LIMITS OF EXCAVATION
 - ⊕ BOREHOLE LOCATION (VALHOLZ)
 - ⊕ BOREHOLE LOCATION COMPLETED AS A MONITORING WELL (MALHOLZ)
 - CB □ CATCH BASIN
 - MH ● MANHOLE
 - HP ● HYDRO POLE
 - 1/4" ELECTRICAL
 - 1/2" ELECTRICAL
 - 1/2" NATURAL GAS
 - 1/2" SANITARY SEWER
 - 1/2" WATER LINE

CANADIAN TIRE REAL ESTATE LIMITED
CTREL RICHMOND ROAD
109 RICHMOND ROAD
OTTAWA, ON

Project
DECOMMISSIONING

Drawing
UTILITY LOCATIONS

Date: December 03, 2008	Drawn: AS SPICER	Drawing No: 3
This sheet: 6_20080205-0001	Reviewed: ELLIOTT/AS	





Ministry of the Environment

Well Tag No. for Master Well (Print Well Tag No.)
11 M.W.'s Abandoned
Tag A032177

Cluster Well Information for Cluster Well Construction
Regulation 903 Ontario Water Resources Act

Page 1 of 1

Property Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: 2180 Yonge St., 15th Floor P.O. Box 770 Stn K Toronto
 Province: ON Postal Code: M4P 1Z1 E-mail Address: Telephone No. (inc. area code): 416 544 6433

Cluster Well Information

Address of Well Location (Street Number/Name, RR): 109 Richmond Road Lot: 89
 City/Town/Village: Ottawa Province: Ontario Postal Code: GPS Unit Make: Model: Unit Mode of Operation: Undifferentiated Averaged Differentiated, specify:

Consent

Property Owner's Consent to use cluster form

Signature: [Signature] Date (yyyy/mm/dd): 2008/11/25

Consent to release additional information to the Director upon request

Signature of Technician/Contractor: [Signature] Date (yyyy/mm/dd): 2008/10/21

Well # on Sketch	Zone	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
		Easting	Northing						From	To					
MW 102		1844174350	27287	3.8									Bentonite		2008/10/01
MW 103		1844175550	27270	3.8											
MW 104		1844173050	27272	5.2											
MW 105		1844173450	27265	5.8											
MW 106		1844172850	27272	4.4											
MW 107		1844173550	27259	3.8'											
MW 108		1844174450	27267	3.8											
MW 109		1844174550	27279	5.2											
MW 110		1844173950	27285	4.6											
MW 111		1844174950	27270	3.8										abandoned	Abandoned

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Ltd. Business Address (Street Number/Name, RR): 410 Rue Principale Grenville-sur-la-Rouge QC
 Postal Code: J0V 1B0 Business Telephone No. (inc. area code): 819 242 6469 Well Contractor's Licence No.: 1844 Business E-mail Address: downing@xplornet.com
 Name of Well Technician (First Name, Last Name): Bruce Downing Well Technician's Licence No.: 2173 Date Submitted (yyyy/mm/dd): 2008/10/21 Signature of Technician: [Signature]

Date 1st Well in Cluster Constructed (yyyy/mm/dd): 2008/10/01
 Date Last Well in Cluster Constructed (yyyy/mm/dd): 2008/10/01

Ministry Use Only

Date Received (yyyy/mm/dd): DEC 30 2008 Date Inspected (yyyy/mm/dd):
 Audit No.: C 01992 Remarks: IM02895



Ministry of the Environment

Well **A 074567** (Well Tag No.)
A074567

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Property Owner's Information

First Name <u>255 Richmond Road Holdings</u>	Last Name	Mailing Address (Street No./Name, RR) <u>255 Richmond Road</u>	Municipality <u>Ottawa</u>
Province <u>ON</u>	Postal Code	E-mail Address	Telephone No. (inc. area code) <u>613</u>

Cluster Well Information

Address of Well Location (Street Number/Name, RR) <u>255 Richmond Road</u>		Lot	Concession	Township	County/District/Municipality
City/Town/Village <u>Ottawa</u>	Province <u>Ontario</u>	Postal Code	GPS Unit Make <u>GARMIN</u>	Model <u>Etrex</u>	Unit Mode of Operation <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify:

Consent

Property Owner's Consent to use cluster form	
Signature <u>[Signature]</u>	Date (yyyy/mm/dd) <u>NOV 17 2008</u>
Consent to release additional information to the Director upon request	
Signature of Technician/Contractor <u>[Signature]</u>	Date (yyyy/mm/dd) <u>2008/10/29</u>

Well # on Sketch	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
	Zone	Easting						Northing	From					
<u>mwo #4</u>	<u>18</u>	<u>441</u>	<u>2465026977</u>	<u>7.0</u>	<u>HSA/DIA</u>	<u>PVC</u>	<u>2.5</u>	<u>2.5</u>	<u>7.0</u>	<u>Benlate</u>				<u>2008/10/17</u>

Well Contractor and Well Technician Information

Business Name of Well Contractor <u>George Downing Estate Drilling Ltd.</u>		Business Address (Street Number/Name, RR) <u>410 Rue Principale Granville Jean La Rouge</u>		Municipality <u>OC</u>	Province <u>QC</u>
Postal Code <u>J0V 1B0</u>	Business Telephone No. (inc. area code) <u>819 242 6469</u>	Well Contractor's Licence No. <u>1844</u>	Business E-mail Address <u>downingeexplor.net.com</u>		
Name of Well Technician (First Name, Last Name) <u>Bruce Downing</u>		Well Technician's Licence No. <u>2173</u>	Date Submitted (yyyy/mm/dd) <u>2008/10/29</u>	Signature of Technician <u>[Signature]</u>	

Date 1st Well in Cluster Constructed (yyyy/mm/dd) <u>2008/10/17</u>	Date Last Well in Cluster Constructed (yyyy/mm/dd) <u>2008/10/17</u>
--	---

Ministry Use Only	
Date Received (yyyy/mm/dd) <u>NOV 24 2008</u>	Date Inspected (yyyy/mm/dd)
Audit No. <u>C 01995</u>	Remarks <u>mo2900</u>



LEGEND

- MW3 MONITORING WELL LOCATION AND NUMBER
- ◆ BH2 BOREHOLE LOCATION AND NUMBER

Trow Associates Inc. 154 Colonnade Road South, Tel: (613) 225-9940
 Ottawa, Ontario K2E 7J5 Fax: (613) 225-7337

DATE OCT 2008	CLIENT GIBSONS LLP	JOB No. OTEN00019750A
DESIGN CH	CHECKED CTK	SCALE 1:500 ±
DRAWN RG	TITLE BOREHOLE & MONITORING WELL LOCATION PLAN 255 RICHMOND ROAD, OTTAWA, ON.	FIG 2

C-1844 m02900 C01995

NOV 24 2008

A 074626 (Print Well Tag No.)
A074626

Cluster Well Information for Cluster Well Construction
Regulation 903 Ontario Water Resources Act

Property Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: [Redacted] Address (Street No./Name, RR): 2180 Yonge St. P.O. Box 770 Station K Toronto Municipality: Toronto
 Province: ON Postal Code: M4P 2Y8 E-mail Address: [Redacted] Telephone No. (inc. area code): 416 544 6438

Consent

Property Owner's Consent to use cluster form
 Signature: [Redacted] Date (yyyy/mm/dd): [Redacted]

Cluster Well Information

Address of Well Location (Street Number/Name, RR): Patricia Avenue Lot: [Redacted] Concession: [Redacted] Township: [Redacted] County/District/Municipality: [Redacted]
 City/Town/Village: Ottawa Province: Ontario Postal Code: [Redacted] GPS Unit Make: [Redacted] Model: [Redacted] Unit Mode of Operation: Undifferentiated Averaged
 Differentiated, specify: [Redacted]

Consent to release additional information to the Director upon request
 Signature of Technician/Contractor: Bruce Downing Date (yyyy/mm/dd): 2009/06/24

Well # on Sketch	Zone	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
		Easting	Northing						From	To					
MW 09-1				4.9	20	HSA	PVC	3.4	3.4	4.9	Bentonite	3.31			2009/04/20
MW 09-2				4.9				2.5	2.5	4.9		3.26			2009/04/21
MW 09-4				4.6				2.6	2.6	4.6		2.69			2009/04/21
MW 09-5				5.5				2.5	2.5	5.5		3.15			2009/04/22
MW 09-6				5.5				2.5	2.5	5.5		2.54			2009/04/22
MW 09-7				4.9				1.9	1.9	4.9		2.62			2009/04/22
MW 09-8				4.6	▼	▼	▼	1.6	1.6	4.6	▼	2.33			2009/04/22

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Ltd. Business Address (Street Number/Name, RR): 440 Rue Principale Grenville Municipality: Sur la Rouge Province: QC
 Postal Code: J0L 1V1 Business Telephone No. (inc. area code): 811 924 2644 Well Contractor's Licence No.: 1844 Business E-mail Address: downing@hawk.iqs.net
 Name of Well Technician (First Name, Last Name): Bruce Downing Well Technician's Licence No.: 211713 Date Submitted (yyyy/mm/dd): 2009/06/24 Signature of Technician: [Signature]

Date 1st Well in Cluster Constructed (yyyy/mm/dd): 2009/04/20 Date Last Well in Cluster Constructed (yyyy/mm/dd): 2009/04/22

Ministry Use Only

Date Received (yyyy/mm/dd): AUG 31 2009 Date Inspected (yyyy/mm/dd): [Redacted]
 Audit No.: C05190 Remarks: M04483

Well Tag No. for Master Well (Print Well Tag No.)
A 074622 *A074622*

Cluster Well Information for Cluster Well Construction
 Regulation 903 Ontario Water Resources Act

Property Owner's Information												
First Name <i>City of Ottawa</i>			Last Name			Mailing Address (Street No./Name, RR) <i>100 Constellation Crescent</i>			Municipality <i>Ottawa</i>			
Province <i>ON</i>		Postal Code <i>K1Z1G1G1J18</i>		E-mail Address			Telephone No. (inc. area code) <i>6135802424</i>					
Cluster Well Information												
Address of Well Location (Street Number/Name, RR) <i>Tweedsmuir at Carling/Richmond</i>						Lot	Concession	Township		County/District/Municipality		
City/Town/Village <i>Ottawa</i>		Province <i>Ontario</i>	Postal Code		GPS Unit Make <i>Garmin</i>	Model <i>Etrex</i>	Unit Mode of Operation <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged		<input type="checkbox"/> Differentiated, specify:			

Consent	
Property Owner's Consent to use cluster form	
Signature	Date (yyyy/mm/dd)
Consent to release additional information to the Director upon request	
Signature of Technician/Contractor <i>Bruce Downing</i>	Date (yyyy/mm/dd) <i>2009/11/23</i>

Well # on Sketch	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
	Zone	Easting						Northing	From					
<i>BH 4.09</i>	<i>18</i>	<i>441</i>	<i>179450257314</i>	<i>5.1</i>	<i>20/10</i>	<i>HSA/DIA Steel</i>	<i>3.5</i>	<i>3.5</i>	<i>5.1</i>	<i>Bentonite</i>			<i>Richmond Rd.</i>	<i>2009/08/14</i>
<i>BH 9.09</i>	<i>18</i>	<i>441</i>	<i>12955026966</i>	<i>6.1</i>	<i>20</i>	<i>HSA</i>	<i>4.5</i>	<i>4.5</i>	<i>6.1</i>	<i>"</i>			<i>Tweedsmuir at Carling</i>	<i>2009/08/14</i>

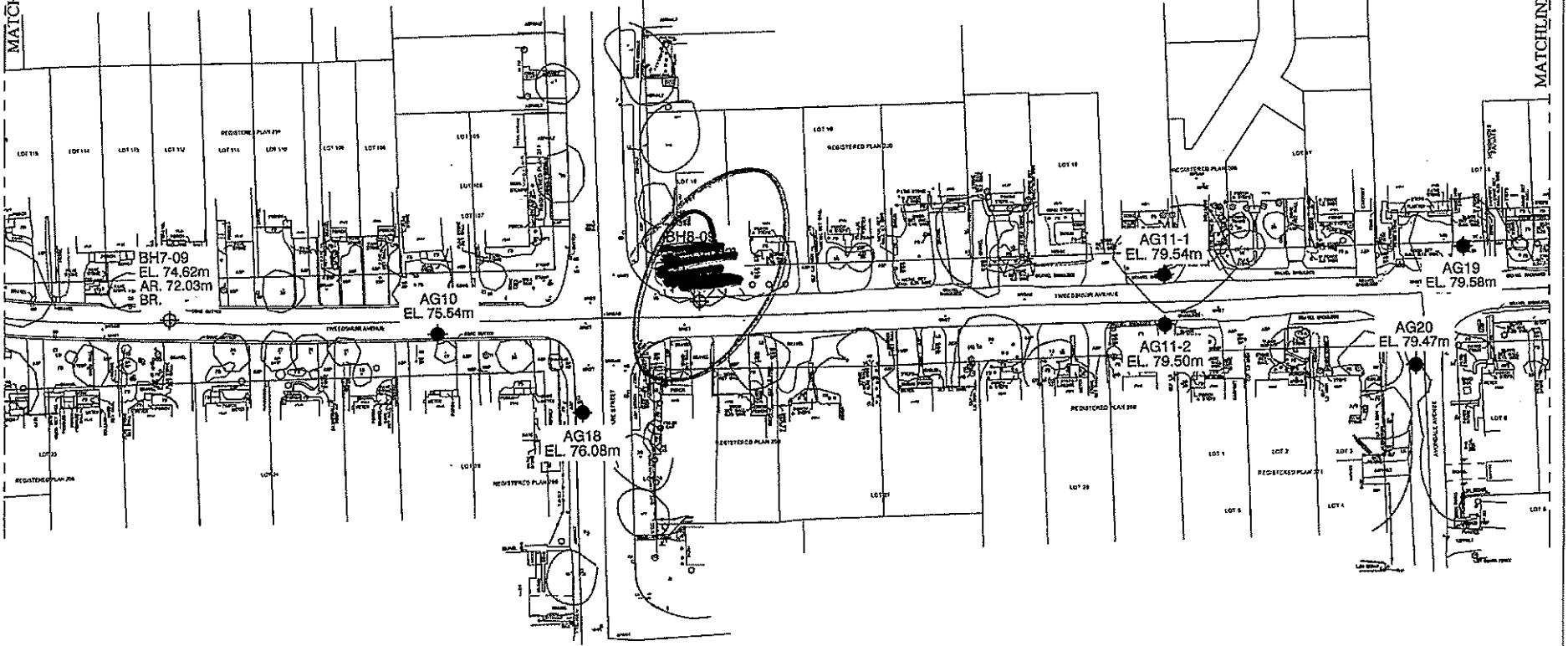
Well Contractor and Well Technician Information											
Business Name of Well Contractor <i>George Downing Estate Drilling Ltd</i>						Business Address (Street Number/Name, RR) <i>410 Rue Principale</i>			Municipality <i>Grenville Sur la Rouge</i>		Province <i>QC</i>
Postal Code <i>J1O1V11B10</i>		Business Telephone No. (inc. area code) <i>811924264169</i>			Well Contractor's Licence No. <i>118144</i>		Business E-mail Address <i>downing@hawk.igs.net</i>				
Name of Well Technician (First Name, Last Name) <i>Bruce Downing</i>				Well Technician's Licence No. <i>211713</i>		Date Submitted (yyyy/mm/dd) <i>2009/11/23</i>		Signature of Technician <i>Bruce Downing</i>			

Date 1st Well in Cluster Constructed (yyyy/mm/dd) <i>2009/08/14</i>	Date Last Well in Cluster Constructed (yyyy/mm/dd) <i>2009/08/17</i>
Ministry Use Only	
Date Received (yyyy/mm/dd) <i>FEB 16 2010</i>	Date Inspected (yyyy/mm/dd)
Audit No. <i>c06140</i>	Remarks <i>m05527</i>

FEB 16 2010



MATCHLINE 2

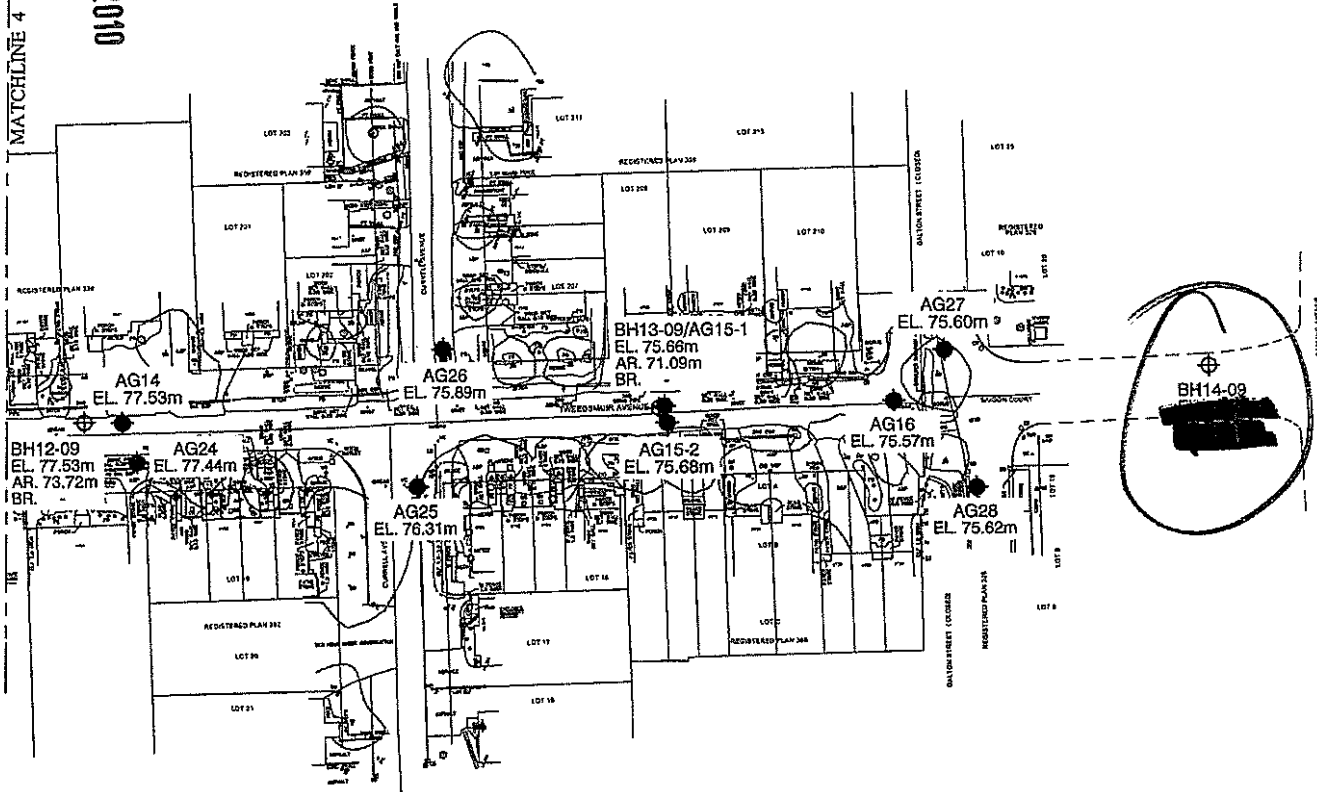


MATCHLINE 3

C-1844
M05527
C06140

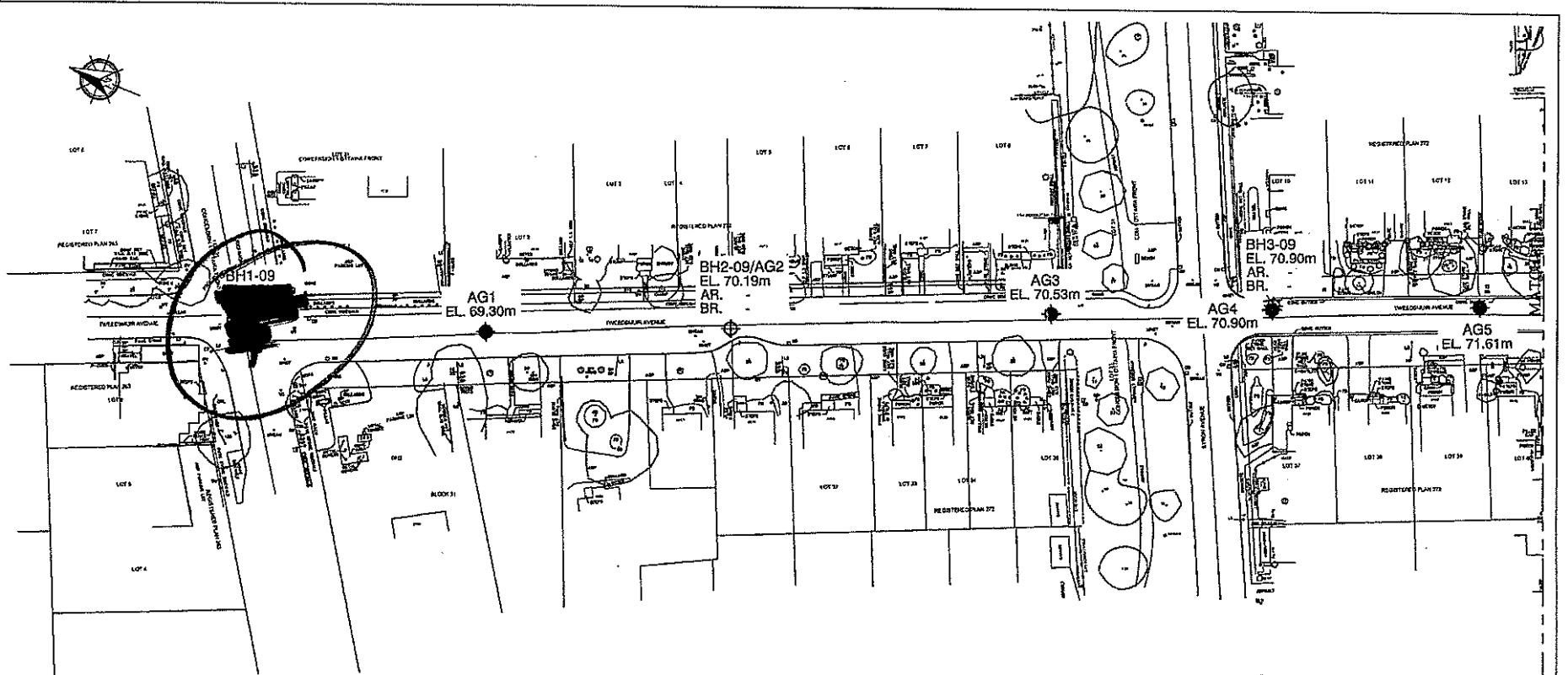
FEB 16 2010

MATCHLINE 4



21844
MOS527
C06140

FEB 16 2010



AUGERHOLE LOCATION			
No.	Northing	Easting	Elevation
AG1	5028439.012	363540.483	69.30m
AG2	5028331.557	363559.068	70.19m
AG3	5028335.030	363645.364	70.53m
AG4	5029295.051	363602.453	70.90m
AG5	5028256.951	363618.133	71.61m

AUGERHOLE LOCATION			
No.	Northing	Easting	Elevation
AG11-1	5027751.068	363827.001	79.54m
AG11-2	5027747.268	363817.609	79.50m
AG12	5027656.566	363802.648	79.20m
AG13-1	5027533.163	363821.408	78.71m
AG13-2	5027531.573	363315.891	78.78m
AG14	5027353.114	363285.017	77.53m
AG15-1	5027297.482	364021.603	75.65m
AG15-2	5027295.201	364019.510	75.68m
AG16	5027281.478	364037.078	75.57m
AG17	5028223.479	363817.396	72.22m

AUGERHOLE LOCATION			
No.	Northing	Easting	Elevation
AG18	5027848.256	363759.553	76.09m
AG19	5027898.120	363854.254	79.58m
AG20	5027838.224	363828.812	79.47m
AG21	5027828.228	363861.850	79.11m
AG22	5027565.949	363314.448	78.04m
AG23	5027421.538	363357.228	77.91m
AG24	5027375.413	363379.878	77.44m
AG25	5027330.255	363392.743	76.31m
AG26	5027334.702	364018.810	75.39m
AG27	5027258.843	364048.325	75.60m
AG28	5027243.330	364028.758	76.62m

BOREHOLE LOCATION			
No.	Northing	Easting	Elevation
BH1-09	5029450.273	363222.171	87.41m
BH2-09	5029393.231	363559.065	70.19m
BH3-09	5029295.052	363602.161	70.93m
BH4-09	5028150.994	363648.587	72.93m
BH5-09	5028118.031	363677.243	74.60m
BH6-09	5028035.765	363707.940	75.06m
BH7-09	5027930.843	363745.351	74.62m
BH8-09	5027831.688	363789.160	78.69m
BH9-09	5027657.985	363884.831	79.50m
BH10-09	5027569.481	363903.672	78.96m

BOREHOLE LOCATION			
No.	Northing	Easting	Elevation
BH11-09	5027478.637	363942.863	78.50m
BH12-09	5027398.479	363982.776	77.63m
BH13-09	5027277.462	364021.608	75.66m
BH14-09	-	-	75.47m

C-1844
 MOSS27
 C06140



Ministry of
the Environment

Well Tag No.)
A 074567
A074567

Cluster Well Information for Cluster Well Construction
Regulation 903 Ontario Water Resources Act

Page 1 of 1

Property Owner's Information

First Name <i>255 Richmond Road Holdings</i>	Last Name	Mailing Address (Street No./Name, RR) <i>255 Richmond Road</i>	Municipality <i>Ottawa</i>
Province <i>ON</i>	Postal Code	E-mail Address	Telephone No. (inc. area code) <i>613</i>

Cluster Well Information

Address of Well Location (Street Number/Name, RR) <i>255 Richmond Road</i>	Lot	Concession	Township	County/District/Municipality
City/Town/Village <i>Ottawa</i>	Province <i>Ontario</i>	Postal Code	GPS Unit Make <i>GARMIN</i>	Model <i>Etrex</i>
Unit Mode of Operation		<input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify:		

Consent

Property Owner's Consent to use cluster form	
Signature <i>[Signature]</i>	Date (yyyy/mm/dd) <i>Nov 17 2008</i>
Consent to release additional information to the Director upon request	
Signature of Technician/Contractor <i>[Signature]</i>	Date (yyyy/mm/dd) <i>2008/10/29</i>

Well # on Sketch	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
	Zone	Eastings						Northings	From					
<i>muc #4</i>	<i>18</i>	<i>441246502</i>	<i>7.0</i>	<i>20/10</i>	<i>MSA/DIA</i>	<i>PVC</i>	<i>2.5</i>	<i>2.5</i>	<i>7.0</i>	<i>Bentonite</i>				<i>2008/10/17</i>

Well Contractor and Well Technician Information

Business Name of Well Contractor <i>George Downing Estate Drilling Ltd.</i>	Business Address (Street Number/Name, RR) <i>410 Rue Principale Granville Jean La Rouge</i>	Municipality <i>OC</i>	Province <i>QC</i>
Postal Code <i>J0V 1B0</i>	Business Telephone No. (inc. area code) <i>819 242 6469</i>	Well Contractor's Licence No. <i>1844</i>	Business E-mail Address <i>downingeexplor.net.com</i>
Name of Well Technician (First Name, Last Name) <i>Bruce Downing</i>	Well Technician's Licence No. <i>2173</i>	Date Submitted (yyyy/mm/dd) <i>2008/10/29</i>	Signature of Technician <i>[Signature]</i>

Date 1st Well in Cluster Constructed (yyyy/mm/dd) <i>2008/10/17</i>	Date Last Well in Cluster Constructed (yyyy/mm/dd) <i>2008/10/17</i>
--	---

Ministry Use Only	
Date Received (yyyy/mm/dd) <i>NOV 24 2008</i>	Date Inspected (yyyy/mm/dd)
Audit No. C 01995	Remarks <i>mo2900</i>

1991 (11/2006)

Ministry's Copy



Trow Associates Inc. 154 Colonnade Road South, Ottawa, Ontario K2E 7J5 Tel: (613) 225-9940 Fax: (613) 225-7337

DATE OCT 2008	CLIENT GIBSONS LLP	JOB No. OTEN00019750A
DESIGN CH	CHECKED CTK	SCALE 1:500 ±
DRAWN RG	TITLE BOREHOLE & MONITORING WELL LOCATION PLAN 255 RICHMOND ROAD, OTTAWA, ON.	FIG 2

C-1844 m02900 C01995

NOV 24 2008

A 074626 (Print Well Tag No.)
A074626

Cluster Well Information for Cluster Well Construction
Regulation 903 Ontario Water Resources Act

Property Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: [Redacted] Address (Street No./Name, RR): 2180 Yonge St. P.O. Box 770 Station K Toronto Municipality: Toronto
 Province: ON Postal Code: M4P 2Y8 E-mail Address: [Redacted] Telephone No. (inc. area code): 416 544 6438

Consent

Property Owner's Consent to use cluster form
 Signature: [Redacted] Date (yyyy/mm/dd): [Redacted]

Cluster Well Information

Address of Well Location (Street Number/Name, RR): Patricia Avenue Lot: [Redacted] Concession: [Redacted] Township: [Redacted] County/District/Municipality: [Redacted]
 City/Town/Village: Ottawa Province: Ontario Postal Code: [Redacted] GPS Unit Make: [Redacted] Model: [Redacted] Unit Mode of Operation: Undifferentiated Averaged
 Differentiated, specify: [Redacted]

Consent to release additional information to the Director upon request
 Signature of Technician/Contractor: Bruce Downing Date (yyyy/mm/dd): 2009/06/24

Well # on Sketch	Zone	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
		Easting	Northing						From	To					
MW 09-1				4.9	20	HSA	PVC	3.4	3.4	4.9	Bentonite	3.31			2009/04/20
MW 09-2				4.9				2.5	2.5	4.9		3.26			2009/04/21
MW 09-4				4.6				2.6	2.6	4.6		2.69			2009/04/21
MW 09-5				5.5				2.5	2.5	5.5		3.15			2009/04/22
MW 09-6				5.5				2.5	2.5	5.5		2.54			2009/04/22
MW 09-7				4.9				1.9	1.9	4.9		2.62			2009/04/22
MW 09-8				4.6	▼	▼	▼	1.6	1.6	4.6	▼	2.33			2009/04/22

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Ltd. Business Address (Street Number/Name, RR): 440 Rue Principale Grenville Municipality: Sur la Rouge Province: QC
 Postal Code: J0L 1V1 Business Telephone No. (inc. area code): 811 924 2644 Well Contractor's Licence No.: 1844 Business E-mail Address: downing@hawk.iqs.net
 Name of Well Technician (First Name, Last Name): Bruce Downing Well Technician's Licence No.: 211713 Date Submitted (yyyy/mm/dd): 2009/06/24 Signature of Technician: [Signature]

Date 1st Well in Cluster Constructed (yyyy/mm/dd): 2009/04/20 Date Last Well in Cluster Constructed (yyyy/mm/dd): 2009/04/22

Ministry Use Only

Date Received (yyyy/mm/dd): AUG 31 2009 Date Inspected (yyyy/mm/dd): [Redacted]
 Audit No.: C05190 Remarks: M04483

Well Tag No. for Master Well (Place Sticker and/or Print Below)
 11 M.W. abandonments
 Tag # A032177

Master Well Owner's and Land Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: E-mail Address: _____

Mailing Address (Street Number/Name, RR): 7190 Yonge Street, 15th Floor, South P.O. Box 770 Toronto, ON M4P 2V8 Telephone No. (inc. area code): 416 544 6433

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR): 109 Richmond Road Township: _____ Lot: 89 Concession: _____

County/District/Municipality: _____ City/Town/Village: Ottawa Province: Ontario Postal Code: _____

UTM Coordinates: NAD 83 Zone: 18 Easting: 441752 Northing: 5027282 GPS Unit: Garmin Model: Etrex Mode of Operation: Undifferentiated Averaged Differentiated, specify _____

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres)	
				From	To
			11 Monitoring well abandonments		
			Remove casing + screen; backfill boreholes with bentonite to surface as per MOE Reg 903.		

Hole Details

Depth (Metres)		Diameter (Centimetres)
From	To	

Water Use

Public Industrial Not used Other, specify _____

Domestic Commercial Dewatering

Livestock Municipal Monitoring

Irrigation Test Hole Cooling & Air Conditioning

Method of Construction

Cable Tool Air Percussion Digging

Rotary (Conventional) Diamond Boring

Rotary (Reverse) Jetting Other, specify _____

Rotary (Air) Driving

Status of Well

Test Hole Abandoned, Insufficient Supply

Replacement Well Abandoned, Poor Water Quality

Dewatering Well Other, specify _____

Alteration (Construction) Abandoned, other, specify *Monitoring wells*

No Casing and Screen Used Yes No

Static Water Level Test _____ Metres

Screen

Galvanized Steel Fibreglass Concrete Plastic

Outside Diameter (Centimetres): _____ Slot No.: _____

Construction Details

Inside Diameter (Centimetres)	Material (steel, plastic, fibreglass, concrete, galvanized)	Wall Thickness	Depth (Metres)	
			From	To

Water Details

Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Disinfected Yes No. If no, provide reason: _____ Date Master Well Completed (yyyy/mm/dd): 2008/10/01

Annular Space/Abandonment Sealing Record

Depth Set at (Metres)	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
From	To	
0	4.1 Bentonite	40 kys

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Total Wells in Cluster: 11 Please indicate Number of Cluster Well Information Log Sheets Submitted: _____

Total Wells on this Property: unknown

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.

Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Signature of Technician/Contractor: _____ Date (yyyy/mm/dd): 2008/10/21

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Well Contractor's Licence No.: 1181414

Business Address (Street No./Name, number, RR): 410 Rue Principale, Grenville-sur-la-Rouge, QC J0V 1B0 Municipality: _____

Province: QC Postal Code: J0V 1B0 Business E-mail Address: downing@xplornet.com

Bus. Telephone No. (inc. area code): 819 244 2646 Name of Well Technician (Last Name, First Name): Downing, Bruce

Well Technician's Licence No.: 2173 Signature of Technician: _____ Date Submitted (yyyy/mm/dd): 2008/10/21

Master Well Owner's/Land Owner's consent to use Cluster Form

Signature: _____ Date (yyyy/mm/dd): 2009/11/25

Ministry Use Only

Audit No.: M 02895 Well Contractor No.: _____

Date Received (yyyy/mm/dd): DEC 30 2008 Date of Inspection (yyyy/mm/dd): _____

Remarks: _____

Master Well Owner's and Land Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: [Redacted] Mailing Address: 2180 Yonge St. P.O. Box 270 Stn K Toronto ON M4P 2V8 Telephone No. 416 544 6438

Location and Construction of the Master Well in the Cluster

Address of Well Location: Patricia Avenue Township: [Redacted] City/Town/Village: Ottawa Province: Ontario

UTM Coordinates: NAD 83 118 44 171 15 51 02 7 2 7 9 GPS Unit: Garmin Model: Etrex Mode of Operation: Averaged

Overburden and Bedrock Materials (see instructions on the back of this form)

Table with columns: General Colour, Most Common Material, Other Materials, General Description, Depth (Metres) From, To. Rows include: Brown Sand cobbles + boulders, Grey Sandy clay, some silt loose, Grey Boulders, Grey Silty clay, fine to med sand soft loose wet.

Hole Details

Table with columns: Depth (Metres) From, To, Diameter (Centimetres). Row: 0 to 5.6, 20.

Water Use: Public, Industrial, Not used, Domestic, Commercial, Dewatering, Livestock, Municipal, Monitoring, Irrigation, Test Hole, Cooling & Air Conditioning.

Method of Construction: Cable Tool, Air Percussion, Digging, Rotary (Conventional), Diamond, Boring, Rotary (Reverse), Jetting, Other, specify HSA, Rotary (Air), Driving.

Status of Well: Test Hole, Abandoned, Insufficient Supply, Replacement Well, Abandoned, Poor Water Quality, Dewatering Well, Other, specify, Alteration (Construction), Abandoned, other, specify.

No Casing and Screen Used: Open Hole, Yes, No. Static Water Level Test: 12.95 Metres.

Screen: Galvanized, Steel, Fibreglass, Concrete, Plastic. Outside Diameter: 2.8, Slot No. 10.

Construction Details

Table with columns: Inside Diameter (Centimetres), Material, Wall Thickness, Depth (Metres) From, To. Row: 5.1, PVC, Sched 40, 0, 2.6.

Water Details

Water found at Depth: Metres, Kind of Water: Gas, Fresh, Salty, Sulphur, Minerals.

Annular Space/Abandonment Sealing Record

Table with columns: Depth Set at (Metres) From, To, Type of Sealant Used, Volume Used (Cubic Metres). Row: 0.2, 2.0, Bentonite, 44Kgs.

Disinfected: Yes, No. Date Master Well Completed: 2009/04/21.

Cluster Information: Total Wells in Cluster: 8, Total Wells on this Property: unknown.

Location of Well Cluster: Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14").

Consent to release additional information concerning the cluster to the Director upon request.

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Ltd. Well Contractor's Licence No. 118 14 14. Business Address: 410 Rue Principale Grenville Sur La Ronge. Well Technician: Bruce Downing, Licence No. 211 7 13.

Signature of Technician/Contractor: Bruce Downing, Date: 2009/06/24. Master Well Owner's/Land Owner's consent to use Cluster Form: [Signature], Date: 2009/07/24.

Ministry Use Only: Audit No. M 04483, Well Contractor No. [Redacted], Date Received: AUG 31 2009, Date of Inspection: [Redacted].

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Sent: Friday, May 30, 2008 12:22 PM
Subject: GPS coordinates - 109 Richmond Road

Hi [REDACTED]

Here are the GPS coordinates for the monitoring wells installed at 109 Richmond Rd.

Monitoring well ID	Easting	Northing	Accuracy (+/-)m
MW 101	441748	5027285	6
MW102	441751	5027286	5
MW103	441757	5027271	5
MW104	441726	5027282	6
MW105	441731	5027276	6
MW106	441736	5027265	6
MW107	441737	5027258	5
MW108	441751	5027263	5
MW109	441746	5027276	5
MW110	441728	5027293	8
MW111	441751	5027269	5
MW112	441742	5027285	5

I hope this helps out, let me know if there is anything else I can provide you with, have a good weekend,

Regards,
[REDACTED]

No virus found in this incoming message.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.24.4/1474 - Release Date: 5/30/2008 7:44 AM

M 00593

JUN 12 2008

C-6964

5/30/2008

Project: 646, Ottawa, Ontario

Client: Canadian Tire Real Estate

File: p:\576\field results\borehole logs

Driller: OGS

Equipment: CME75

Monitor Number: MW112

Ground Elevation (m): 101.00

Top of Monitor (m): 100.910

Datum: NAD 83, Zone 18

UTM (m): 441742 E, 5027285 N

Borehole Log: 112

Sheet: 1 of 1

Field Observer: DH + LM

Field Instrument: CGI + PID

Date: 08-04-17

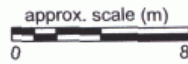
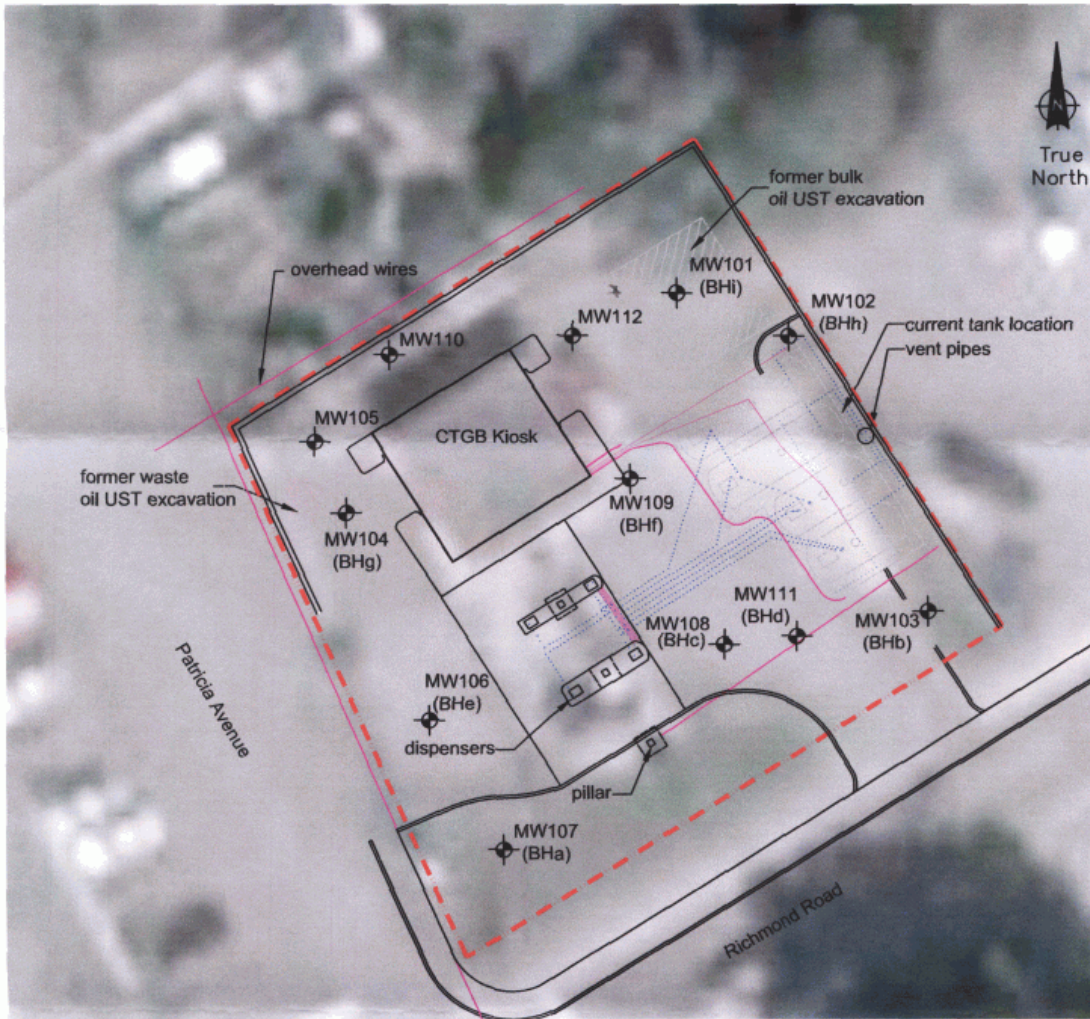
SUBSURFACE PROFILE								
Mon. Data	Depth	Lithology	Description	Sample #	Type	% Recovery	CGI Vapours (ppm)	Remarks
	0		Ground Surface					
	0		Asphalt					soil cuttings contained for off-site disposal MOE water well tag A032177
	1		Sandy Gravel occasional cobble	S01		60	75 / NR	
	2			S02		50	70 / NR	
	3			S03		50	65 / NR	
	4			S04		50	75 / NR	
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
	19							
	20							
	21							
	22							
	23							
								Well Construction Details: - flushmount finish - 50mm schedule 40 PVC riser & screen



M00593
C-6964
JUN 12 2008

This borehole log should not be separated from the accompanying report.





*for discussion purposes
(conditions may change as
more information becomes
available)*

Legend

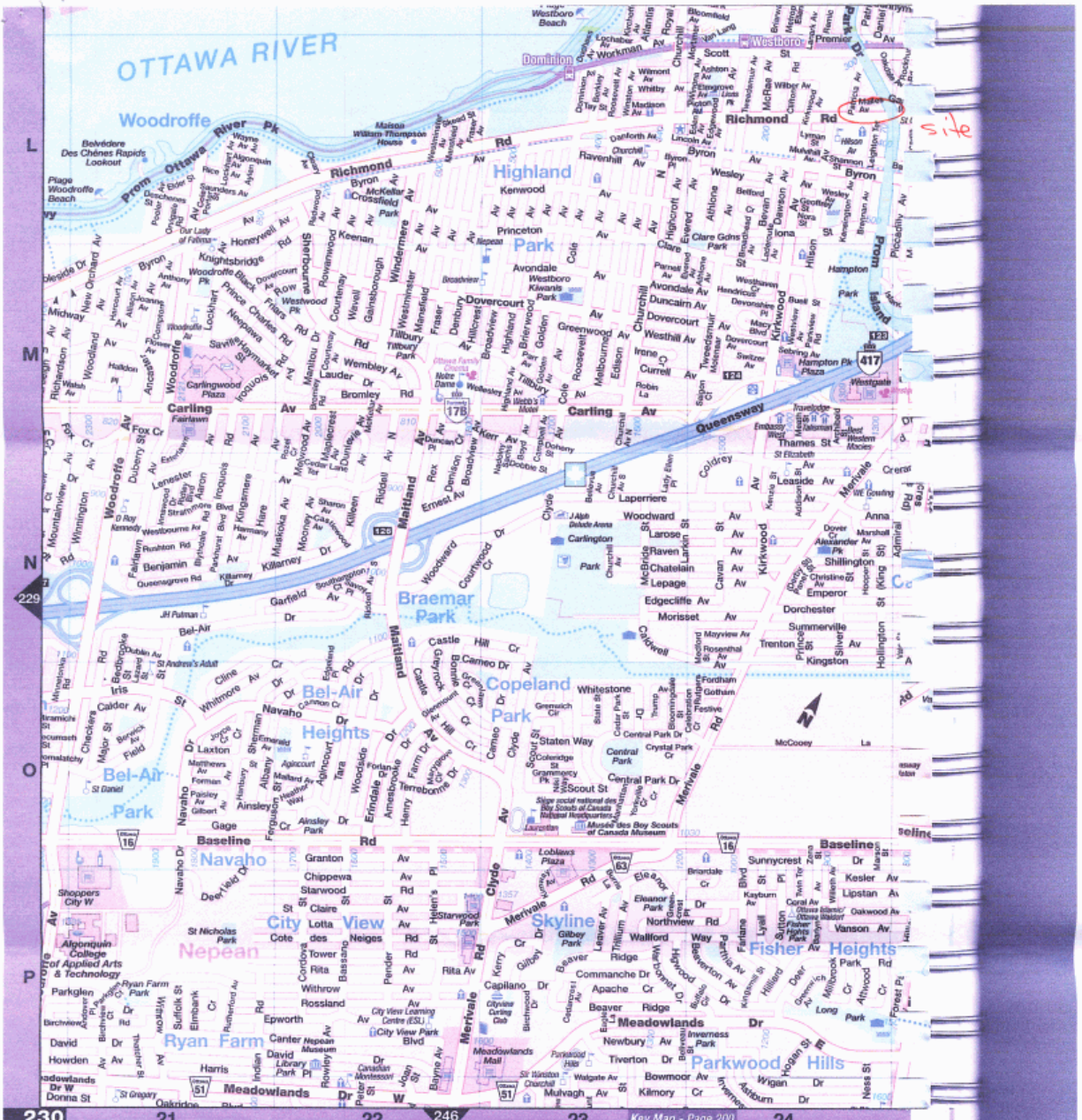
- monitoring well location
- building foot print
- approximate property boundary
- edge of pavement
- tank lines
- electrical lines
- former bulk oil UST excavation

file: 646/116
revised: 08/04/21

M 00593

JUN 12 2008

C - 6964



M 00593 JUN 12 2008 C-6964

Well Tag No. for Master Well (Place Sticker and/or Print Below)
 11 M.W. abandonments
 Tag # A032177

Master Well Owner's and Land Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: E-mail Address: _____

Mailing Address (Street Number/Name, RR): 7190 Yonge Street, 15th Floor, South P.O. Box 770 Toronto, ON M4P 2V8 Telephone No. (inc. area code): 416 544 6433

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR): 109 Richmond Road Township: _____ Lot: 89 Concession: _____

County/District/Municipality: _____ City/Town/Village: Ottawa Province: Ontario Postal Code: _____

UTM Coordinates: Zone: 83 Easting: 18441 Northing: 7525027282 GPS Unit Make: Garmin Model: Etrex Mode of Operation: Undifferentiated Averaged Differentiated, specify _____

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres)	
				From	To
			11 Monitoring well abandonments		
			Remove casing + screen; backfill boreholes with bentonite to surface as per MOE Reg 903.		

Hole Details

Depth (Metres)		Diameter (Centimetres)
From	To	

Water Use

Public Industrial Not used Other, specify _____

Domestic Commercial Dewatering

Livestock Municipal Monitoring

Irrigation Test Hole Cooling & Air Conditioning

Method of Construction

Cable Tool Air Percussion Digging

Rotary (Conventional) Diamond Boring

Rotary (Reverse) Jetting Other, specify _____

Rotary (Air) Driving

Status of Well

Test Hole Abandoned, Insufficient Supply

Replacement Well Abandoned, Poor Water Quality

Dewatering Well Other, specify _____

Alteration (Construction) Abandoned, other, specify *Monitoring wells*

No Casing and Screen Used Yes No

Static Water Level Test _____ Metres

Screen

Galvanized Steel Fibreglass Concrete Plastic

Outside Diameter (Centimetres): _____ Slot No.: _____

Construction Details

Inside Diameter (Centimetres)	Material (steel, plastic, fibreglass, concrete, galvanized)	Wall Thickness	Depth (Metres)	
			From	To

Water Details

Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Water found at Depth: _____ Metres Gas Fresh Salty Sulphur Minerals

Disinfected Yes No If no, provide reason: _____ Date Master Well Completed (yyyy/mm/dd): 2008/10/01

Annular Space/Abandonment Sealing Record

Depth Set at (Metres)	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
From	To	
0	4.1 Bentonite	40 kys

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Total Wells in Cluster: 11 Please indicate Number of Cluster Well Information Log Sheets Submitted: _____

Total Wells on this Property: unknown

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.

Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Signature of Technician/Contractor: *Bruce Downing* Date (yyyy/mm/dd): 2008/10/21

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Well Contractor's Licence No.: 1181414

Business Address (Street No./Name, number, RR): 410 Rue Principale, Grenville-sur-la-Rouge Municipality: _____

Province: QC Postal Code: J0V1B0 Business E-mail Address: downing@xplornet.com

Bus. Telephone No. (inc. area code): 819 244 2646 Name of Well Technician (Last Name, First Name): Downing, Bruce

Well Technician's Licence No.: 2173 Signature of Technician: *Bruce Downing* Date Submitted (yyyy/mm/dd): 2008/10/21

Master Well Owner's/Land Owner's consent to use Cluster Form

Signature: *[Signature]* Date (yyyy/mm/dd): 2009/11/25

Ministry Use Only

Audit No.: M 02895 Well Contractor No.: _____

Date Received (yyyy/mm/dd): DEC 30 2008 Date of Inspection (yyyy/mm/dd): _____

Remarks: _____

Master Well Owner's and Land Owner's Information

First Name: 255 Richmond Road Holdings
Last Name: [blank]
E-mail Address: [blank]
Mailing Address (Street Number/Name, RR): 255 Richmond Road
Municipality: Ottawa
Province: ON
Postal Code: [blank]
Telephone No. (inc. area code): 613

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR): 255 Richmond Road
Township: [blank]
Lot: [blank]
Concession: [blank]
City/Town/Village: Ottawa
Province: Ontario
Postal Code: [blank]

UTM Coordinates: NAD 83
Zone: 18
Easting: 441257
Northing: 5026972
GPS Unit Make: Garmin
Model: Etrex
Mode of Operation: Undifferentiated Averaged
 Differentiated, specify

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres)	
				From	To
Brown	Fill	Sand/gravel	dry	0	2.3
Brown	Fill	Boulders + Cobbles		2.3	4.5
Grey	Bedrock	limestone		4.5	7.5

Hole Details

Depth (Metres)	Diameter (Centimetres)	
	From	To
0	4.57	20
4.57	7.5	10

Water Use

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

Method of Construction

Cable Tool Air Percussion Digging
 Rotary (Conventional) Diamond Boring
 Rotary (Reverse) Jetting Other, specify
 Rotary (Air) Driving HSA

Status of Well

Test Hole Abandoned, Insufficient Supply
 Replacement Well Abandoned, Poor Water Quality
 Dewatering Well Other, specify
 Alteration (Construction) Abandoned, other, specify

No Casing and Screen Used Yes No

Static Water Level Test
Open Hole: [blank] Metres

Screen
 Galvanized Steel Fibreglass Concrete Plastic
Outside Diameter (Centimetres): 5.8 Slot No.: 10

Construction Details

Inside Diameter (Centimetres)	Material (steel, plastic, fibreglass, concrete, galvanized)	Wall Thickness	Depth (Metres) From To
5.1	PVC	Sched 40	0 50

Water Details

Water found at Depth: [blank] Metres Gas Fresh Salty Sulphur Minerals
 Water found at Depth: [blank] Metres Gas Fresh Salty Sulphur Minerals
 Water found at Depth: [blank] Metres Gas Fresh Salty Sulphur Minerals

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From To	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
0 0.3	Bentonite	40 Kgs
4.8 5.0	*	

Disinfected Yes No If no, provide reason: [blank]
Date Master Well Completed (yyyy/mm/dd): 2005/10/17

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Total Wells in Cluster: 2
Please indicate Number of Cluster Well Information Log Sheets Submitted: 1
Total Wells on this Property: unknown

Location of Well Cluster
Detailed Map must be provided as an attachment no larger than legal size (8.5" x 11"). Sketches are not allowed.
 Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Well Contractor and Well Technician Information

Business Name of Well Contractor: George Downing Estate Drilling Ltd
Well Contractor's Licence No.: 11844
Business Address (Street No., Name, number, RR): 410 Rue Principale Grenville-sur-la-Rouge
Municipality: [blank]
Province: QC
Postal Code: J0V1B0
Business E-mail Address: downing@xplonet.com
Bus. Telephone No. (inc. area code): 819 242 6469
Name of Well Technician (Last Name, First Name): Downing, Bruce
Well Technician's Licence No.: 1173
Signature of Technician: [Signature]
Date Submitted (yyyy/mm/dd): 2008/16/29

Signature of Technician/Contractor: [Signature] Date (yyyy/mm/dd): 2008/10/29
Master Well Owner's/Land Owner's consent to use Cluster Form
Signature: [Signature] Date (yyyy/mm/dd): Nov 17 2008

Ministry Use Only

Audit No.: M 02900
Well Contractor No.: [blank]
Date Received (yyyy/mm/dd): NOV 24 2008
Date of Inspection (yyyy/mm/dd): [blank]
Remarks: [blank]

Master Well Owner's and Land Owner's Information

First Name: Canadian Tire Real Estate Ltd. Last Name: [Redacted] Mailing Address: 2180 Yonge St. P.O. Box 270 Stn K Toronto ON M4P 2V8 Telephone No. 416 544 6438

Location and Construction of the Master Well in the Cluster

Address of Well Location: Patricia Avenue Township: [Redacted] Lot: [Redacted] Concession: [Redacted] City/Town/Village: Ottawa Province: Ontario Postal Code: [Redacted]

UTM Coordinates: NAD 83 Zone 18 Easting 118441 Northing 1711551027 GPS Unit: Garmin Model: Etrex Mode of Operation: Averaged

Table with 5 columns: General Colour, Most Common Material, Other Materials, General Description, Depth (Metres) From/To. Rows include: Brown Sand cobbles + boulders, Grey Sandy clay, some silt loose, Grey Boulders, Grey Silty clay, fine to med sand soft loose wet.

Hole Details table with 3 columns: Depth (Metres) From/To, Diameter (Centimetres). Row: 0 to 5.6, 20.

Water Use section with checkboxes for Public, Industrial, Domestic, Commercial, Livestock, Municipal, Irrigation, etc.

Method of Construction section with checkboxes for Cable Tool, Rotary, Air Percussion, etc.

Status of Well section with checkboxes for Test Hole, Replacement Well, Dewatering Well, etc.

No Casing and Screen Used / Static Water Level Test section.

Screen section with checkboxes for Galvanized, Steel, Fibreglass, etc.

Construction Details table with 4 columns: Inside Diameter (Centimetres), Material, Wall Thickness, Depth (Metres) From/To. Row: 5.1, PVC, Sched 40, 0 to 2.6.

Water Details section with multiple rows for Water found at Depth, Kind of Water (Gas, Fresh, Salty, Sulphur, Minerals).

Annular Space/Abandonment Sealing Record table with 4 columns: Depth Set at (Metres) From/To, Type of Sealant Used, Volume Used (Cubic Metres). Row: 0.2 to 2.0, Bentonite, 44Kgs.

Disinfected section with checkboxes and date: Monitoring wells 2009/04/21

Cluster Information section with fields for Total Wells in Cluster (8) and Total Wells on this Property (unknown).

Location of Well Cluster section with a note about detailed maps.

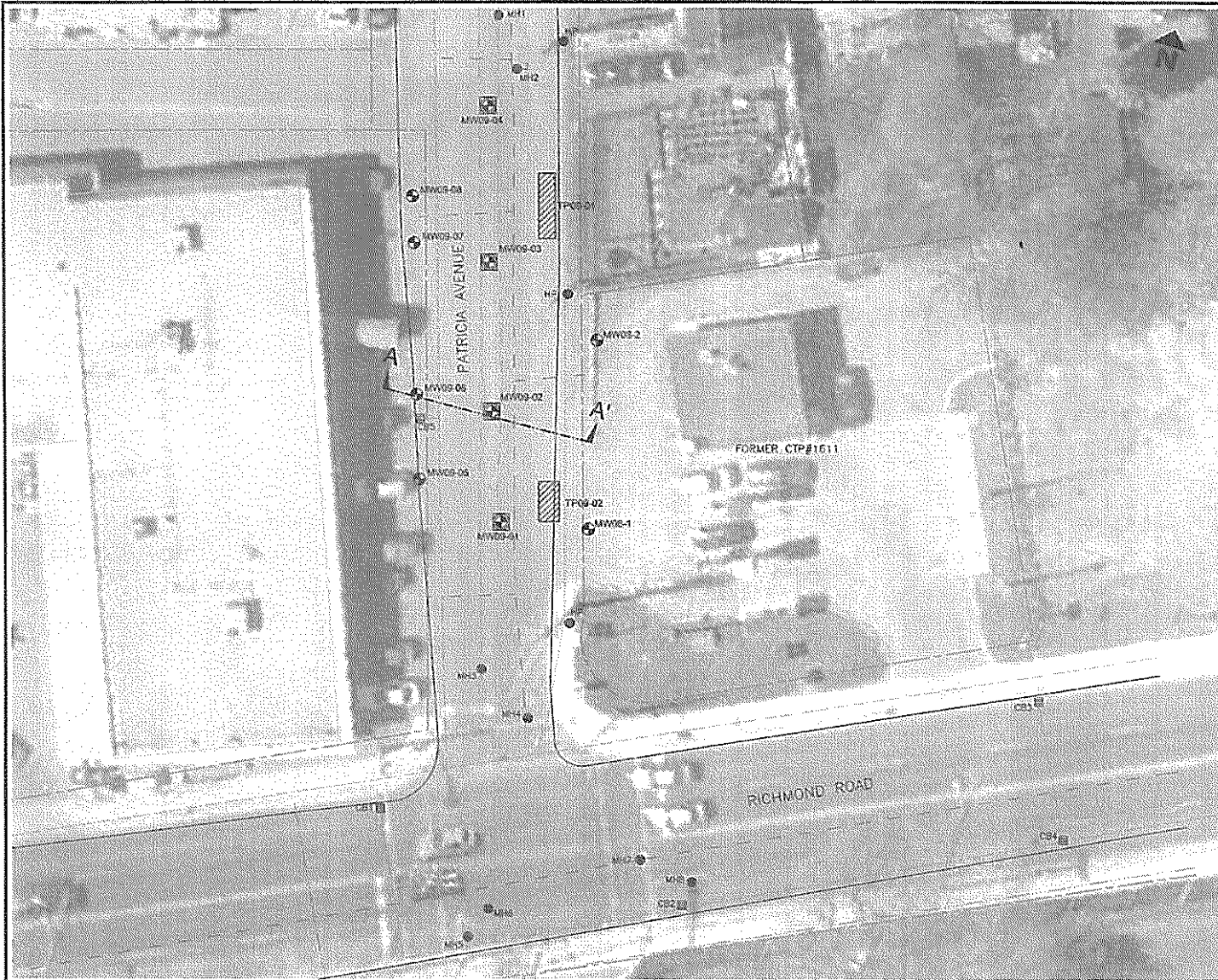
Consent to release additional information section with signatures and dates.

Well Contractor and Well Technician Information section with details for George Downing Estate Drilling Ltd.

Ministry Use Only section with Audit No. M 04483, Date Received, Date of Inspection, etc.

AUG 31 2009

2-1844 m04483 c05192



NOTES
 DRAWING COMPILED FROM FARHALL, MCFATT AND WOODLAND LIMITED, DWG No TP200EM, DATE APRIL 23, 2009 AND MALROZ SITE PLAN AND UTILITY DEPARTMENT OF PUBLIC WORKS DRAWING 0-05-11 AND FROM S.L.R. DWG No S-216-02051-03-01

- LEGEND**
- PROPERTY BOUNDARY
 - ⊕ BORE-HOLE LOCATION COMPLETED AS A MONITORING WELL (SUR)
 - ⊕ HYDRS EXCAVATION AND MONITORING WELL LOCATION
 - ▨ TEST PIT TRENCH
 - UTILITIES AND SYMBOLS**
 - CB ⊕ CATCH BASIN
 - MH ⊕ MANHOLE
 - HP ⊕ HYDRO POLE
 - O/H ELECTRICAL
 - U/G ELECTRICAL
 - U/G NATURAL GAS
 - U/G SANITARY SEWER
 - U/G WATER LINE
 - U/G STORM SEWER

A A' CROSS SECTION LINE

CANADIAN TIRE REAL ESTATE LIMITED
 CTP#1611R
 PATRICIA AVENUE
 OTTAWA, ON

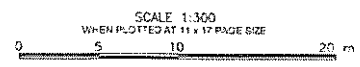
Report
 PHASE II ENVIRONMENTAL SITE ASSESSMENT

Drawing
 SITE PLAN

Date	May 21, 2009	Scale	A.S. DIMENSION	Drawing No.	3
File Name	S_216-02051-03-01	Project No.	216-02051-03		



THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.





Ministry of the Environment

A 074622

1408-9

Master Well Record for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 1 of 4

Master Well Owner's and Land Owner's Information

First Name: City of Ottawa, Last Name, E-mail Address, Mailing Address: 100 Constellation Crescent, Municipality: Ottawa, Province: ON, Postal Code: K1A 6J6, Telephone No.

Location and Construction of the Master Well in the Cluster

Address of Well Location: Tweedsmuir at Clare St., Township, Lot, Concession, City/Town/Village: Ottawa, Province: Ontario, Postal Code

UTM Coordinates, Zone, Easting, Northing, GPS Unit Make: Garmin, Model: Etrex, Mode of Operation: Averaged

Overburden and Bedrock Materials (see instructions on the back of this form)

Table with columns: General Colour, Most Common Material, Other Materials, General Description, Depth (Metres) From, To. Includes entries for Asphaltic Concrete, Grey Granular base crushed stone, Brown Fill, Sand, silt compact, moist, Grey Silty clay very stiff, moist, Grey Bedrock limestone.

Hole Details

Table with columns: Depth (Metres) From, To, Diameter (Centimetres). Includes entries for 0 to 0.2, 4.5 to 6.0.

Water Use section with checkboxes for Public, Domestic, Livestock, Irrigation, Industrial, Commercial, Municipal, Test Hole, Cooling & Air Conditioning, Not used, Other, specify.

Method of Construction section with checkboxes for Cable Tool, Rotary (Conventional), Rotary (Reverse), Rotary (Air), Air Percussion, Diamond, Jetting, Driving, Digging, Boring, Other, specify.

Status of Well section with checkboxes for Test Hole, Replacement Well, Dewatering Well, Alteration (Construction), Abandoned, Insufficient Supply, Abandoned, Poor Water Quality, Other, specify.

No Casing and Screen Used, Static Water Level Test section with checkboxes for Open Hole, Yes, No, Metres.

Construction Details

Table with columns: Inside Diameter (Centimetres), Material, Wall Thickness, Depth (Metres) From, To. Includes entry for 5.1, PVC, 40, 0, 4.5.

Screen

Screen section with checkboxes for Galvanized, Steel, Fibreglass, Concrete, Plastic. Includes Outside Diameter: 2.8, Slot No.: 10.

Water Details

Water Details section with checkboxes for Water found at Depth, Kind of Water (Fresh, Salty, Sulphur, Minerals), Gas.

Annular Space/Abandonment Sealing Record

Table with columns: Depth Set at (Metres) From, To, Type of Sealant Used (Material and Type), Volume Used (Cubic Metres). Includes entry for 0 to 0.8, Bentonite, 50 kgs.

Disinfected section with checkboxes for Yes, No. If no, provide reason: Monitoring well, Date Master Well Completed: 2009/08/17.

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Cluster Information section with fields for Total Wells in Cluster, Total Wells on this Property, Please indicate Number of Cluster Well Information Log Sheets Submitted.

Location of Well Cluster

Location of Well Cluster section with text: Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed. Check box to confirm detailed map is provided as per Section 11.1 (3).

Consent to release additional information concerning the cluster to the Director upon request

Consent to release additional information section with Signature of Technician/Contractor: Bruce Downing, Date: 2009/11/23.

Master Well Owner's/Land Owner's consent to use Cluster Form

Master Well Owner's/Land Owner's consent section with Signature: Carol Adams, Date: 2010/02/01.

Well Contractor and Well Technician Information

Well Contractor and Well Technician Information section with fields for Business Name of Well Contractor: George Downing Estate Drilling, Well Contractor's Licence No.: 11844, Business Address: 410 Rue Principale, Grenville Sur La Ronge, Province: QC, Postal Code: J0V 1R0, Business E-mail Address: downing@hawk.igs.net, Name of Well Technician: Downing, Bruce, Well Technician's Licence No.: 21173, Signature of Technician: Bruce Downing, Date Submitted: 2009/11/23.

Ministry Use Only

Ministry Use Only section with fields for Audit No.: M 05527, Well Contractor No., Date Received: FEB 18 2010, Date of Inspection: (yyyy/mm/dd), Remarks.

Measurements recorded in: Metric Imperial

A 085405 A085405

6859 Page 1 of 2

Well Owner's Information

First Name: City of Ottawa - Carol Holmes; Last Name / Organization: City of Ottawa - Carol Holmes; E-mail Address: ; Well Constructed by Well Owner: ; Mailing Address: 101 Centrepointe Dr; Municipality: Nepean; Province: ON; Postal Code: K2G 1R7; Telephone No.: 613 580 2424

Well Location

Address of Well Location: Tweedsmuir North of Richmond Rd; Township: Ottawa; Lot: ; Concession: ; County/District/Municipality: ; City/Town/Village: Ottawa; Province: Ontario; Postal Code: ;

UTM Coordinates: Zone 18; Easting 18441; Northing 2995026953; Municipal Plan and Sublot Number: ;

Overburden and Bedrock Materials/Abandonment Sealing Record

Table with 5 columns: General Colour, Most Common Material, Other Materials, General Description, Depth (m/ft) From To.

Annular Space table with 3 columns: Depth Set at (m/ft) From To, Type of Sealant Used (Material and Type), Volume Placed (m³/ft³).

Method of Construction and Well Use checkboxes: Cable Tool, Rotary, Boring, Air percussion, etc.

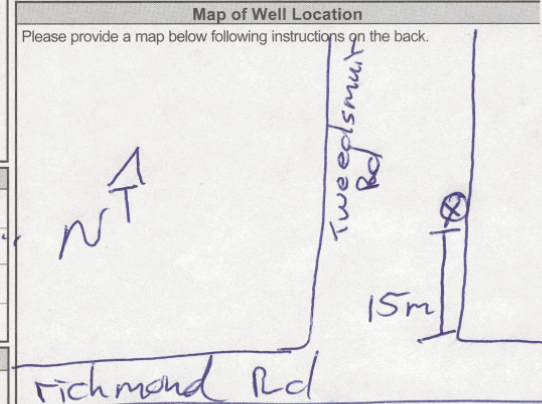
Construction Record - Casing table with 4 columns: Inside Diameter, Open Hole OR Material, Wall Thickness, Depth (m/ft).

Construction Record - Screen table with 4 columns: Outside Diameter, Material, Slot No., Depth (m/ft).

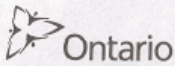
Water Details and Hole Diameter tables with columns for depth, water type, and diameter.

Well Contractor and Well Technician Information: Stada Soil Sampling, 2-147 West Beaver Creek, Nepean, ON. Technician: Mait, Mike.

Results of Well Yield Testing table with columns for Draw Down, Recovery, Time, Water Level.



Ministry Use Only section: Audit No. Z106621, Date Work Completed 2009/1/05, Received DEC 21 2009.



Measurements recorded in: Metric Imperial

A 092322

A092322

Well Owner's Information

First Name: City of Ottawa - Carol Holmes
 Last Name / Organization: City of Ottawa - Carol Holmes
 E-mail Address: [Blank]
 Well Constructed by Well Owner
 Mailing Address (Street Number/Name): 101 center pointe Dr
 Municipality: Nepean
 Province: ON
 Postal Code: K2G5K7A1
 Telephone No. (inc. area code): 35802424

Well Location

Address of Well Location (Street Number/Name): Tweedsmuir North of Richmond Rd
 Township: Ottawa
 Lot: [Blank]
 Concession: [Blank]
 County/District/Municipality: Ottawa
 City/Town/Village: Ottawa
 Province: Ontario
 Postal Code: [Blank]
 UTM Coordinates: NAD 83 18 44 13015026945
 Municipal Plan and Sublot Number: [Blank]
 Other: [Blank]

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To

Annular Space			
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)	
0' 0.5'	cement		
0.5' 9'	Benbrite		
9' 20'	sand		

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

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

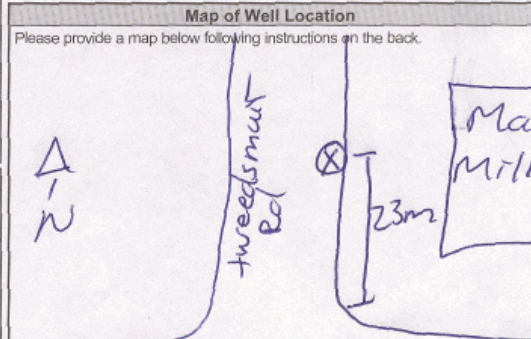
Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input checked="" type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify
			From	To	
1.25"	Plastic	0.25"	0'	10'	

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	
1.5"	Plastic	10	10' 20'	

Water Details		Hole Diameter	
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	Depth (m/ft) From To	Diameter (cm/in)
		0' 20'	3.25"

Well Contractor and Well Technician Information

Business Name of Well Contractor: Strata Soil Sampling
 Well Contractor's Licence No.: 7240
 Business Address (Street Number/Name): 2-147 West Beaver Creek Dr Richmond Hill
 Municipality: Richmond Hill
 Province: ON
 Postal Code: L4B1C6
 Business E-mail Address: wrecords@strataoil.com
 Bus. Telephone No. (inc. area code): 905 764 9304
 Name of Well Technician (Last Name, First Name): Muld, Mike
 Well Technician's Licence No.: 3448
 Signature of Technician and/or Contractor: [Signature]
 Date Submitted: 2009/11/15



Comments: [Blank]

Well owner's information package delivered <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Package Delivered Y Y Y Y M M D D 2009 11 05	Ministry Use Only Audit No.: Z 106622 Date Work Completed DEC 21 2009
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Instructions for Completing Form

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

Well Owner's Information and Location of Well Information		Ministry Use Only	
MUN		CON	
LOT			
First Name	Last Name	Mailing Address (Street Number/Name, RR, Lot, Concession)	
CANADIAN TIME Real Estate LTD.		2180 Youngs ST. 15TH Floor	
County/District/Municipality	Township/City/Town/Village	Province	Postal Code
R.M. of York	Toronto	Ontario	M4P 2A8
Address of Well Location (County/District/Municipality)		Township	Lot
CITY of Ottawa		Hampton Park	
RR#/Street Number/Name		City/Town/Village	Site/Compartment/Block/Tract etc.
119 Richmond RD.		OTTAWA	
GPS Reading	NAD	Zone	Easting
	83	18	441710
			Northing
			5027240
Unit Make/Model	Mode of Operation:		
Garmin	<input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged		
	<input type="checkbox"/> Differentiated, specify		

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
Brown	SAND	Cobbles		0	1.52
Grey	Silt	SAND + Cobbles		1.52	3.65
		Four TEST Holes (monitoring wells) Installed on site			

Hole Diameter	Construction Record		Test of Well Yield	
Depth From To	Inside diam centimetres	Material	Wall thickness centimetres	Depth From To
Metres To				Metres To
Diameter Centimetres				
0 3.65 15.24	5.08	<input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	5.08 40	0 2.43
Water Record				
Water found at	Kind of Water			
Metres				
0				
Screen				
Outside diam	Slot No.			
5.08	0.10	2.43 3.65		
No Casing or Screen				
<input type="checkbox"/> Open hole				

Plugging and Sealing Record		
Depth set at - Metres	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
From To		
0 0.45	Slush and cement	
0.45 2.13	Bentonite chips	
2.13 3.65	#3 Sand	

Location of Well	
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
Audit No.	Date Well Completed
Z 64429	2007 07 05
Was the well owner's information package delivered?	Date Delivered
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	YYYY MM DD

Method of Construction			
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (conventional)	<input type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (reverse)	<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Driving	
Water Use			
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	Monitor
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	
Final Status of Well			
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input type="checkbox"/> Abandoned, (Other)
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	
<input checked="" type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	

Well Contractor/Technician Information	
Name of Well Contractor	Well Contractor's Licence No.
G. E. T. Drilling LTD	7083
Business Address (street name, number, city etc.)	
RR #6 Nepean	
Name of Well Technician (last name, first name)	Well Technician's Licence No.
Turnbull, Mike	1-3042
Signature of Technician/Contractor	Date Submitted
	2007 07 09

Ministry Use Only	
Data Source	Contractor
	12085
Date Received	Date of Inspection
OCT 09 2007	YYYY MM DD
Remarks	Well Record Number

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

POSITION

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

EDUCATION

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

MEMBERSHIPS

Ottawa Geotechnical Group
Professional Engineers of Ontario

EXPERIENCE

1991 to Present

Paterson Group Inc.

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

SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island
Agricultural Supply Facilities - Eastern Ontario
Laboratory Facility – Edmonton (Alberta)
Ottawa International Airport - Contaminant Migration Study - Ottawa
Richmond Road Reconstruction - Ottawa
Billings Hurdman Interconnect - Ottawa
Bank Street Reconstruction - Ottawa
Environmental Review – Various Laboratories across Canada - CFIA
Dwyer Hill Training Centre – Ottawa
Nortel Networks Environmental Monitoring - Carling Campus – Ottawa
Remediation Program - Block D Lands – Kingston
Investigation of former landfill sites – City of Ottawa
Record of Site Condition for Railway Lands – North Bay
Commercial Properties – Guelph and Brampton
Brownfields Remediation – Alcan Site - Kingston
Montreal Road Reconstruction - Ottawa
Appleford Street Residential Development - Ottawa
Remediation Program - Ottawa Train Yards
Remediation Program - Bayshore and Heron Gate
Gladstone Avenue Reconstruction - Ottawa

**Environmental
Engineering**

**Geotechnical
Engineering**

**Materials Testing
Quality Control**

Building Science

Hydrogeology

**Environmental
Engineering**

**Geotechnical
Engineering**

**Materials Testing
Quality Control**

Building Sciences

Hydrogeology

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