

March 11, 2019
File: PE4564-LET.01

CLV Group

200-485 Bank Street
Ottawa, Ontario
K2P 1Z2

Attention: **Mr. Mike Kelly**

Subject: **Phase I - Environmental Site Assessment Update
Vacant Lot – 530 Tremblay Road
Ottawa, Ontario**

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

Geotechnical Engineering
Environmental Engineering
Hydrogeology
Geological Engineering
Materials Testing
Building Science
Archaeological Studies

www.patersongroup.ca

Dear Sir,

Further to your request, Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (Phase I ESA) Update for the aforementioned property. This report updates a previous Phase I ESA report completed by Paterson, dated August 17, 2016, and is intended to meet the requirements of a Phase I ESA, as per the MECP Standard O.Reg. 153/04 amending O.Reg. 153/04 made under the Environmental Protection Act. This report is to be read in conjunction with the previous report.

Site Information

The subject site, addressed 530 Tremblay Road, is located approximately 207 m south of Tremblay Road, immediately south of Avenue S, T and U, in the City of Ottawa, Ontario. The site is zoned for Transited Oriented Development and currently exists as a vacant, treed lot. The subject site has never been developed. It should be noted that this site was previously part of a larger parcel of land, the majority of which was situated to the adjacent east, with the same municipal address. The subject site is shown on Drawing PE4564-1 – Site Plan.

Records Review

Phase I ESA Study Area Determination

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

First Developed Use Determination

According to the city directories, aerial photographs and discussions with individuals involved with the subject property, it is our interpretation that the subject property has never been developed

Previous Engineering Reports

- 'Phase I Environmental Site Assessment, 530 Tremblay Road, Ottawa, Ontario', prepared by Paterson Group, dated August 17, 2016.

No potentially contaminating activities were identified on the subject property. Several potentially contaminating activities (PCAs) were identified on the adjacent lands, although none of them were considered to have had the potential to impact the subject site.

A geotechnical Investigation (PG3836-LET.01) was conducted by Paterson in July 2016. Several test pits were advanced to depths ranging from 1 to 1.9 m below grade. The soil profile generally consisted of topsoil and/or fill material over weathered shale. Glacial till was identified in TP5 and TP6 on the eastern portion of the site only. The fill material extended to depths ranging from 0.12 to 1.6 m below grade. It should be noted that weathered shale bedrock was encountered at depths ranging from 0.12 to 1.9 m below grade. The fill generally consisted of a combination of silt, sand and/or clay with some gravel and traces of organics or topsoil.

Four (4) samples of fill were submitted for metal or PHC (F2-F4) parameters analyses . Based on the analytical test results, the fill material was in compliance with the selected MECP Table 7 Standards as well as MECP Table 1 Background Standards. The fill material is considered to be reworked native material from the development of adjacent streets and residential dwellings and is not considered to pose a concern to the Phase I Property.

Plan of Survey

A plan of survey prepared by Fairhall Moffett & Woodland Ltd. and dated September 10, 2013, was reviewed as part of this assessment. The survey plan shows the subject site in its previous configuration as part of the larger parcel of land to the east

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on March 6, 2019. The subject site was not listed in the NPRI database. No new records of pollutant release were listed in the database for properties located within the Phase I Study Area.

Ministry of the Environment, Conservation and Parks (MECP) Instruments

A request was submitted to the MECP Freedom of Information (FOI) office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site. At the time of issuing this report, a response had not been received from the MECP. It is expected that very little will have changed since the original MECP Response dated in March 2017. No concerns were noted with the 2017 response. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Submissions

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the property. At the time of issuing this report, a response had not been received from the MECP. It is expected that very little will have changed since the original MECP Response dated in March 2017. No concerns were noted with the 2017 response. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Incident Reports

A request was submitted to the MECP FOI office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP for the site or adjacent properties. At the time of issuing this report, a response had not been received from the MECP. It is expected that very little will have changed since the original MECP Response dated in March 2017. No concerns were noted with the 2017 response. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Waste Management Records

A request was submitted to the MECP FOI office for information with respect to waste management records. At the time of issuing this report, a response had not been received from the MECP. It is expected that very little will have changed since the original MECP Response dated in March 2017. No concerns were noted with the 2017 response. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Coal Gasification Plant Inventory

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

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry (ESR) was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. One Record of Site Condition (RSC) was filed for the Phase I Property, addressed 530 Tremblay Road. Based on the ESR, 3075 m³ of impacted soil and/or sediments were removed from the central portion of that property. No additional soil or groundwater remediation was required. Based on the information provided in the ESR, this RSC property is not considered an APEC on the Phase I Property.

MECP Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. There are no former waste disposal sites located within 250 m of the Phase I Study Area.

Water Bodies and Areas of Natural Significance

The Rideau River is located approximately 1.7 km west of the subject property. There are no areas of natural significance within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto, was contacted electronically on March 6, 2019, to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. A response from the TSSA indicated that no records were listed in the TSSA registry for the subject site or the adjacent properties.

City of Ottawa Landfill Document

The document entitled "Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa", was reviewed. There are no closed landfill sites within the vicinity of the Phase I study area.

City of Ottawa Historical Land Use Inventory (HLUI)

A requisition form was sent to the City of Ottawa's Historical Land Use Inventory (HLUI) as part of the original Phase I-ESA for the subject property. The City's HLUI database was last updated in 2005; therefore, an additional HLUI request not submitted as part of this Phase I ESA I Update.

Aerial Photographs

The latest aerial photograph within the original Phase I ESA report was from 2014. A review of the 2017 aerial photograph shows the site as a vacant lot with no buildings or structures. No significant changes were noted on the subject site from 2014 to 2017. No significant changes were noted on the surrounding lands, with the exception of a large transit/LRT station, south of the railway corridor.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. Regionally, the topographic maps indicate a slope down to the north and west. The nearest water body is the Rideau River, situated approximately 1.7 km west of the Phase I Property. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." The subject site is located in the Central St. Lawrence Lowland, which is generally less than 150 m above sea level.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site is reported to consist of shale of the Carlsbad formation. Overburden soils are shown as peat, muck and marl, with a drift thickness on the order of 3 to 5 m. As discussed in Section 6.3, the soil profile identified during a Geotechnical Investigation identified topsoil and/or fill material (reworked native) over shale bedrock or Glacial Till followed by shale bedrock.

Water Well Records

A search of the MECP 's web site for all drilled well records within 250 m of the subject site was conducted on March 6, 2019. The search returned eight (8) water well records, seven (7) of which appear to be monitoring wells, located on the adjacent property to the east, and properties further south, across Belfast Road. Based on the distances and/or orientations of the monitoring wells from the Phase I Property, in combination with information in our files, the wells are not considered to represent potential concerns to the subject land.

One potable well further southwest of the site, along Belfast Road, was identified. This well, installed in 1952, is considered to have been decommissioned at the time of commercial/industrial redevelopment. Properties within the Phase I Study Area are currently serviced with municipal water and sewer.

Site Reconnaissance

Our site reconnaissance visit was conducted on March 7, 2019. Weather conditions were sunny, with a temperature of approximately -16° C. Ms. Mandy Witteman from the Environmental Department of Paterson Group conducted the site inspection. In addition to the site, the uses of neighbouring properties within the Phase I study area were also assessed at the time of the site visit.

The site is undeveloped land covered with trees and low brush. The site was snow covered at the time of the site visit. The site appeared to be relatively flat and at grade with Avenue U. Site drainage consists of infiltration. The regional topography slopes gently down in a westerly direction.

No underground utilities were noted on-site. No drains or private sewage systems were observed at the subject property at the time of the site visit. No evidence of current or former railway or spur lines were observed on the subject property at the time of the site visit. No areas of stained snow or unidentified substances were observed on-site at this time.

The surrounding properties were also observed during the site visit and are shown on Drawing PE4564-2 - Surrounding Land Use Plan.

Review and Evaluation of Information

Land Use History

The following table indicates the current and past uses of the site as well as associated potentially contaminating activities dating back to the first land patent in 1803.

Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photos, FIPs, etc.
1803-1919	Private Individuals	Undeveloped	Agriculture or Other Use	No information available for this period of time.
1919-1970	The Canadian Pacific Railway Company			1945, 1958, 1968 aerials show the property is vacant, undeveloped land; the former railway easement to the south appears to abut the southwest corner of the Phase I Property.
1970-1975	Marathon Realty Company Limited			Phase I Property remains unchanged in 1975 aerial photograph.
1975-2009	The Queen in Right of Ontario			Phase I Property remains unchanged in 1982, 1995, 2002, 2008 aerials.
2009-2014	The Queen in Right of Canada			2014 aerial shows property as it current exists.
2014-present	Canada Lands Company CLC Limited			

Potentially Contaminating Activities and Areas of Potential Environmental Concern

No new potentially contaminating activities (PCAs) were identified at the Phase I Property or within the Phase I Study Area. Therefore, no Areas of Potential Environmental Concern (APECs) were identified on the subject site.

Contaminants of Potential Concern

No Contaminants of Potential Concern (CPCs) were identified on the subject site.

Conceptual Site Model

Geological and Hydrogeological Setting

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site is reported to consist of shale of the Carlsbad formation. Overburden soils are shown as peat, muck and marl, with a drift thickness on the order of 3 to 5 m. As discussed in Section 6.3, the soil profile identified during a previous Geotechnical Investigation identified topsoil and/or fill material (reworked native) over shale bedrock or Glacial Till followed by shale bedrock.

The regional topography slopes downwards towards the north-west/west. The inferred groundwater flows in a westerly direction.

Contaminants of Potential Concern

A previously mentioned, there are no Contaminants of Potential Concern (CPCs) on the subject site.

Existing Buildings and Structures

The subject site is vacant and has never been developed.

Water Bodies and Areas of Natural Significance

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

Drinking Water Wells

Based on well records search on the MECP's website, one domestic water well was identified southwest of the subject property. This well was installed in 1952 and is considered to have been decommissioned at the time of commercial/industrial redevelopment. Properties within the Phase I Study Area are currently serviced with municipal water and sewer.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is currently a mix of commercial office, residential, an LRT station and vacant land. No environmental concerns were identified with the use of neighbouring lands.

Potentially Contaminating Activities and Areas of Potential Environmental Concerns

As previously discussed, no new PCAs were identified on the subject site or within the study area. Therefore, there are no new APECs regarding the Phase I Property.

Assessment of Uncertainty and/or Absence of Information

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

Conclusions

The results of the records review, research, and site inspection indicated that there are no new potential environmental concerns regarding the subject site since the original Phase I ESA report. Based on the results of this Phase I ESA Update, **in our opinion, a Phase II Environmental Site Assessment is not required for the property.**

Statement of Limitations

This Phase I - Environmental Site Assessment Update report has been prepared in general accordance with O.Reg. 153/04. The conclusions presented herein are based on information gathered from a historical review and field inspection program. The findings of the Phase I ESA Update 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 CLV Group. Permission and notification from CLV Group. and this firm will be required to release this report to any other party.

We trust that this submission satisfies your current requirements. Should you have any questions please contact the undersigned.

Paterson Group Inc.



Mandy Witteman, M.A.Sc.



Mark S. D'Arcy, P.Eng.



Report Distribution:

- CLV Group (1 copy)
- Paterson Group (1 copy)

Attachments:

- Figure 1 - Key Plan
- Figure 2 - Topographic Map
- Drawing PE4564-1 - Site Plan
- Drawing PE4564-2 - Surrounding Land Use Plan
- Proposed Development Plan
- Well Records

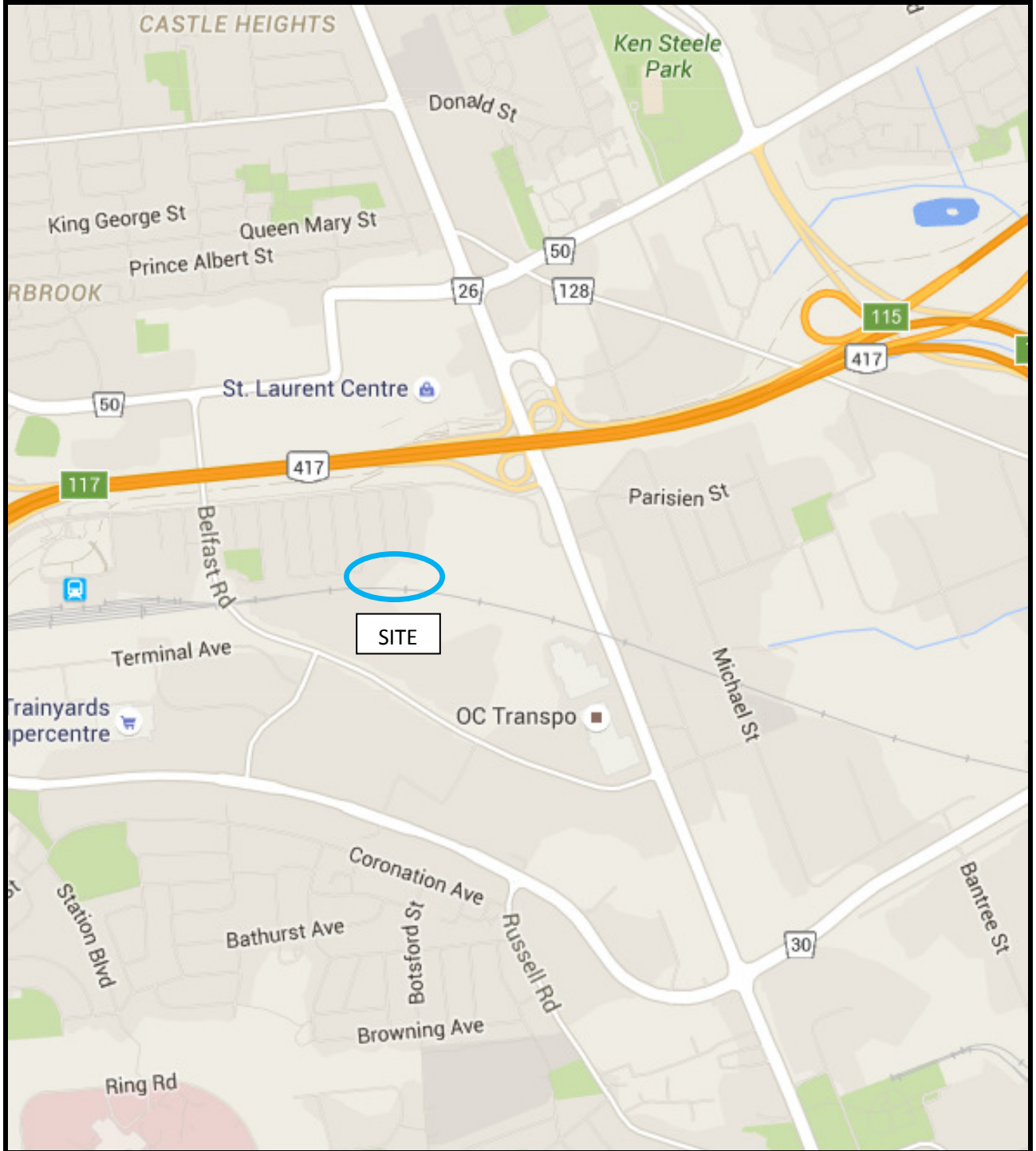


FIGURE 1
KEY PLAN

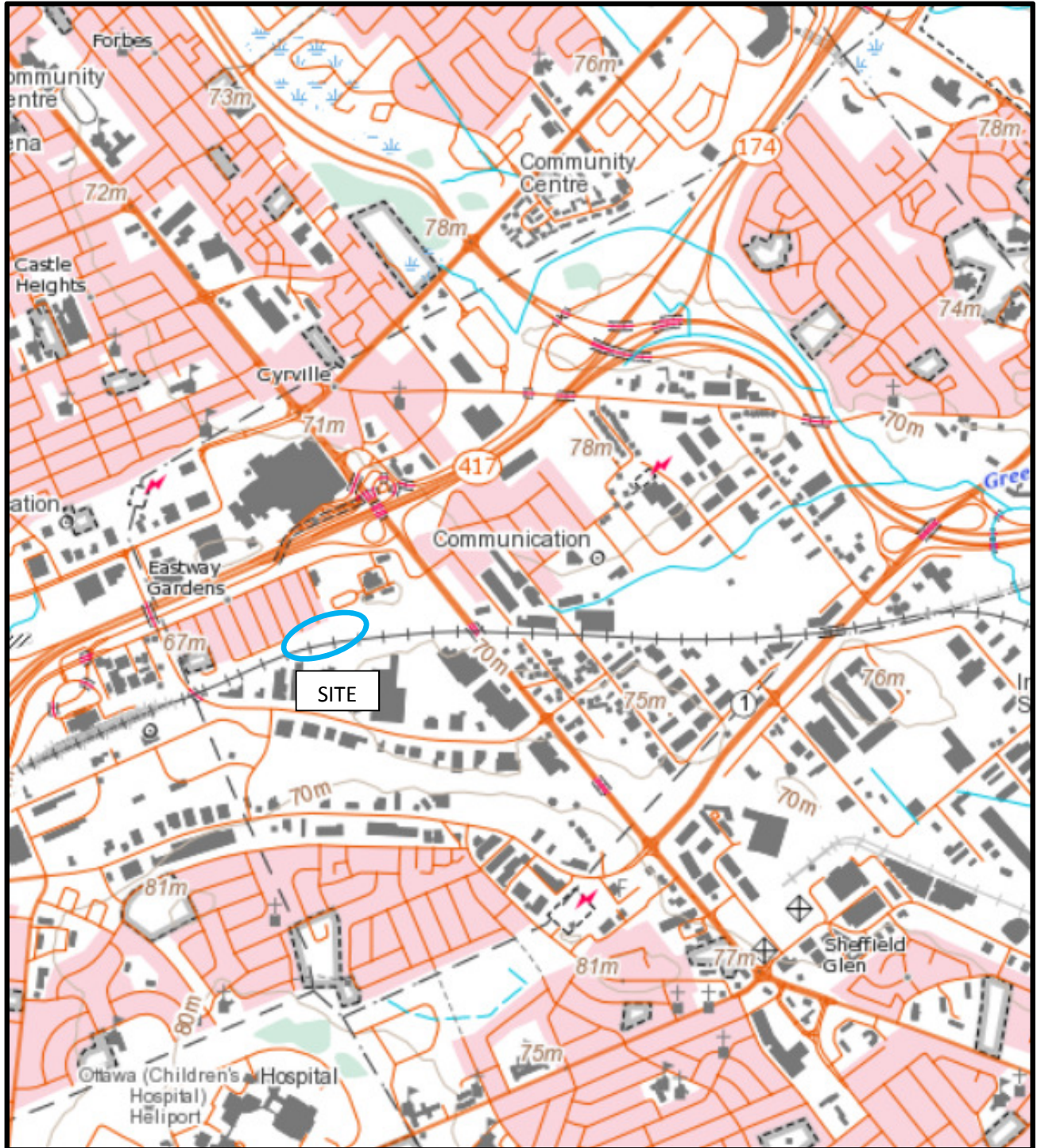
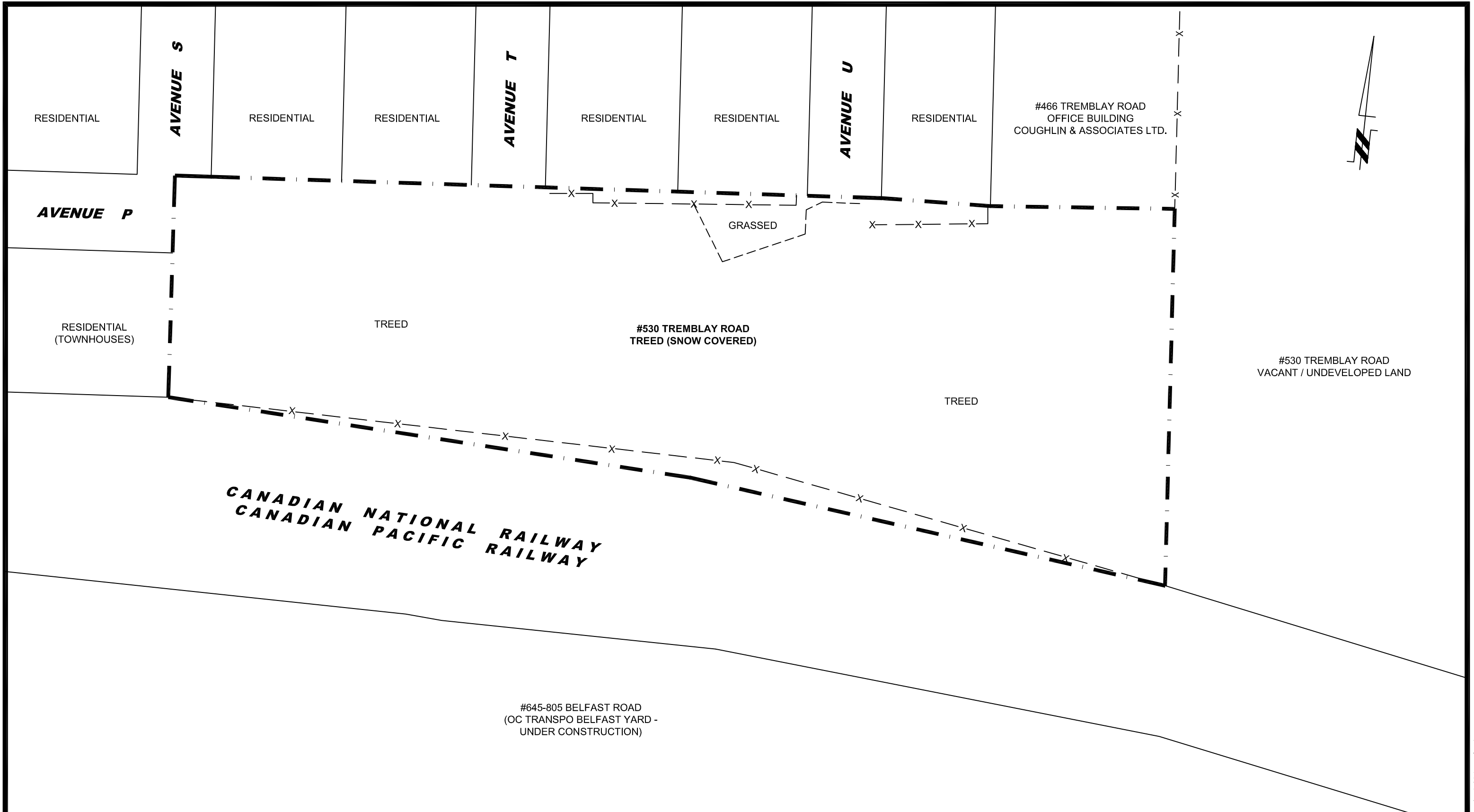


FIGURE 2
TOPOGRAPHIC MAP



patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL
0			

CLV GROUP
PHASE I - ENVIRONMENTAL SITE ASSESSMENT UPDATE
530 TREMBLAY ROAD

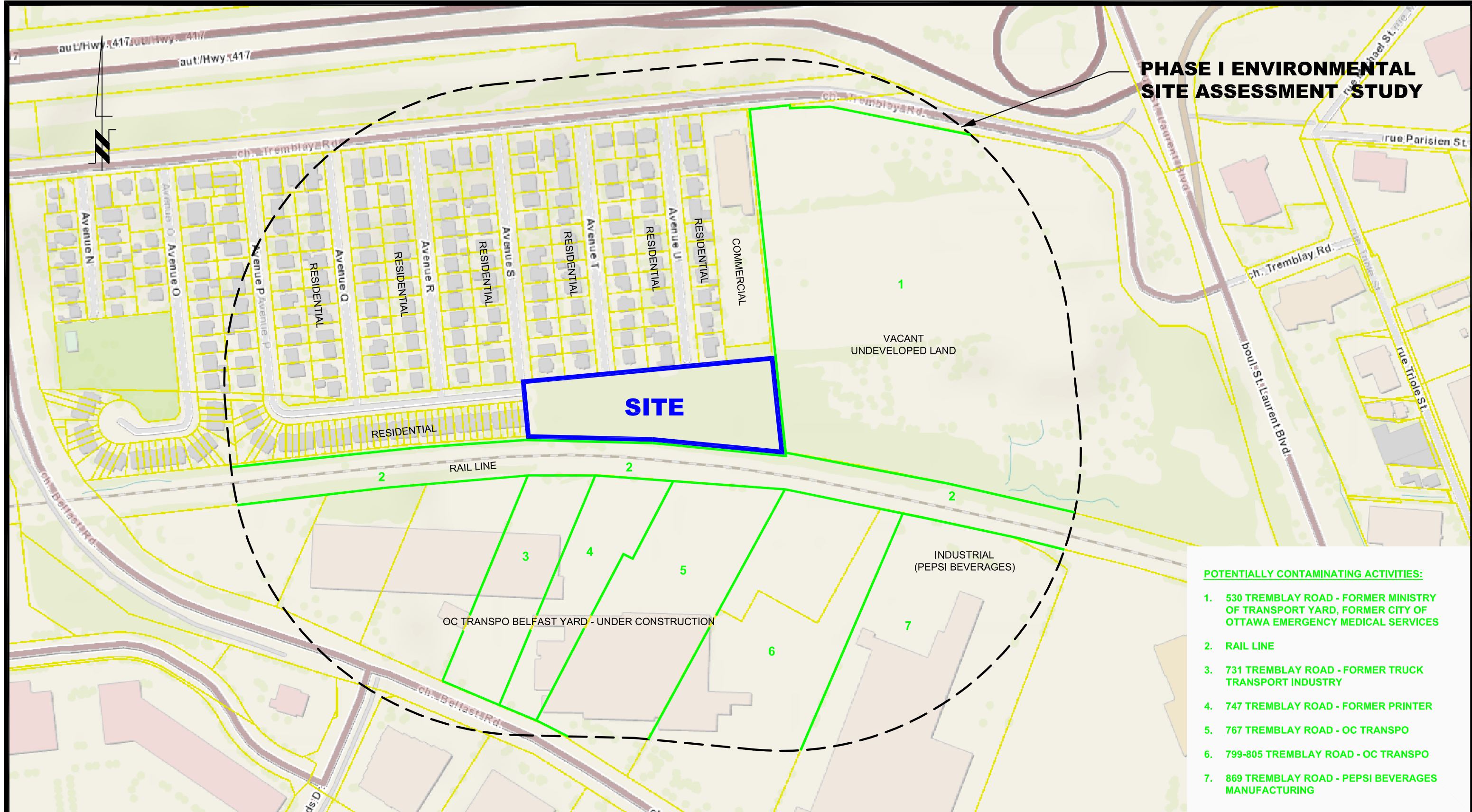
OTTAWA, ONTARIO

Title: **SITE PLAN**

Scale:	1:750	Date:	03/2019
Drawn by:	MPG	Report No.:	PE4564-LET.01
Checked by:	KM	Dwg. No.:	PE4564-1
Approved by:	MSD	Revision No.:	0

p:\autocad drawings\environmental\pe4564\pe4564-1 site plan.dwg

PHASE I ENVIRONMENTAL SITE ASSESSMENT STUDY



- POTENTIALLY CONTAMINATING ACTIVITIES:**
1. 530 TREMBLAY ROAD - FORMER MINISTRY OF TRANSPORT YARD, FORMER CITY OF OTTAWA EMERGENCY MEDICAL SERVICES
 2. RAIL LINE
 3. 731 TREMBLAY ROAD - FORMER TRUCK TRANSPORT INDUSTRY
 4. 747 TREMBLAY ROAD - FORMER PRINTER
 5. 767 TREMBLAY ROAD - OC TRANSPO
 6. 799-805 TREMBLAY ROAD - OC TRANSPO
 7. 869 TREMBLAY ROAD - PEPSI BEVERAGES MANUFACTURING

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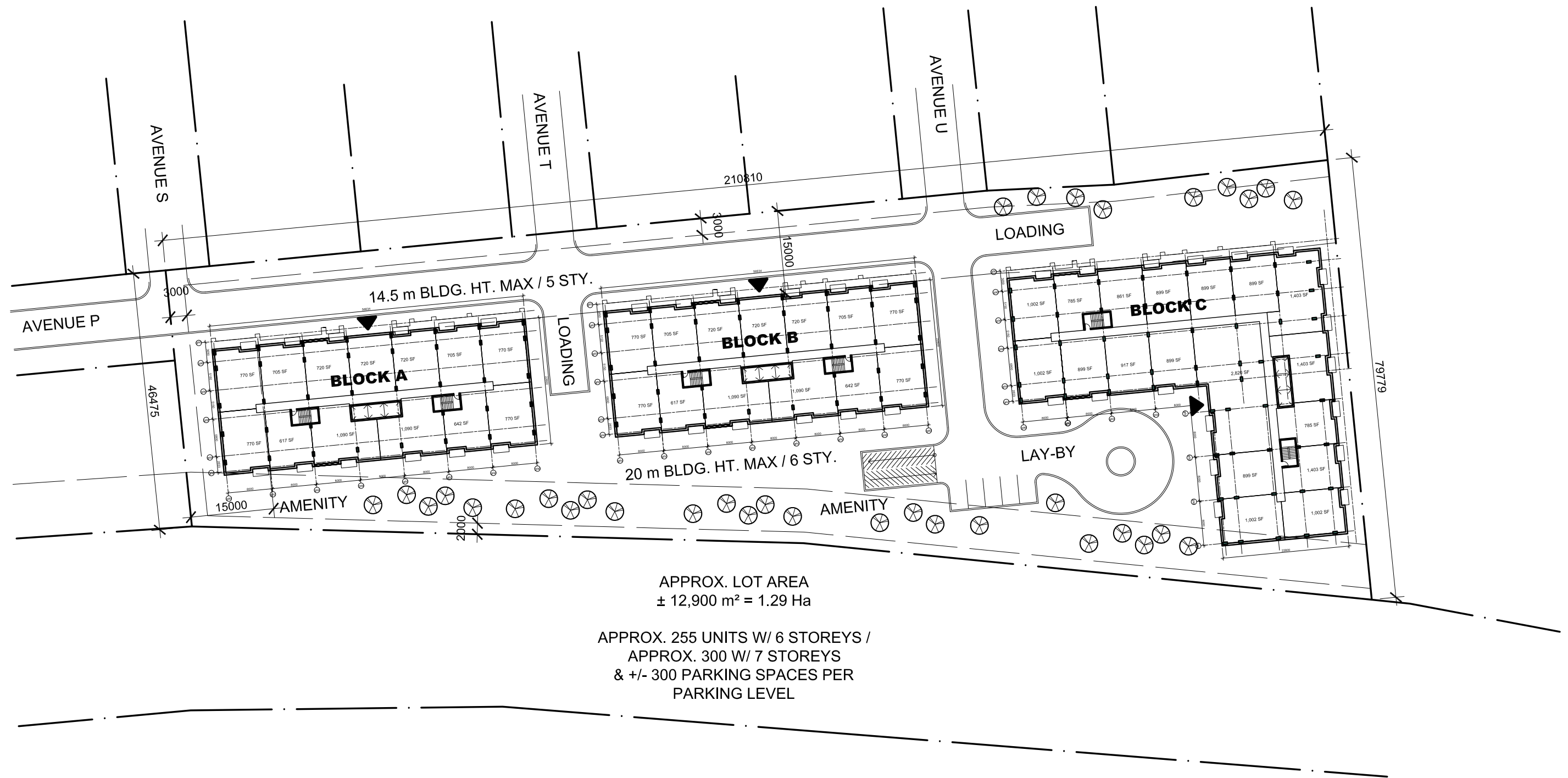
154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL
0			

CLV GROUP
PHASE I - ENVIRONMENTAL SITE ASSESSMENT UPDATE
530 TREMBLAY ROAD
 OTTAWA, ONTARIO
 Title: **SURROUNDING LAND USE PLAN**

Scale:	1:3000	Date:	03/2019
Drawn by:	MPG	Report No.:	PE4564-LET.01
Checked by:	KM	Dwg. No.:	PE4564-2
Approved by:	MSD	Revision No.:	0

p:\autocad drawings\environmental\pe4564\pe4564-2_surrounding_inad_use_plan.dwg



APPROX. LOT AREA
± 12,900 m² = 1.29 Ha

APPROX. 255 UNITS W/ 6 STOREYS /
APPROX. 300 W/ 7 STOREYS
& +/- 300 PARKING SPACES PER
PARKING LEVEL

CLIENT LOGO:

Kristopher D. Benes, OAA, MRAIC, LEED AP
OPA open plan
architects inc.
architecture | interiors | concepts
2305 HILLARY AVE. | OTTAWA | ON | K1H 7J2
613.883.5090 | info@openplan.ca

PROJECT NAME:
530 TREMBLAY ROAD CONDO STUDY

DRAWING TITLE:
CONCEPTUAL SITE PLAN - OPTION 1

DRAWN BY:	KDB	CHECKED BY:	KDB
DATE:	10 MAY 2016	PROJECT No.:	1612
SCALE:	1 : 750		

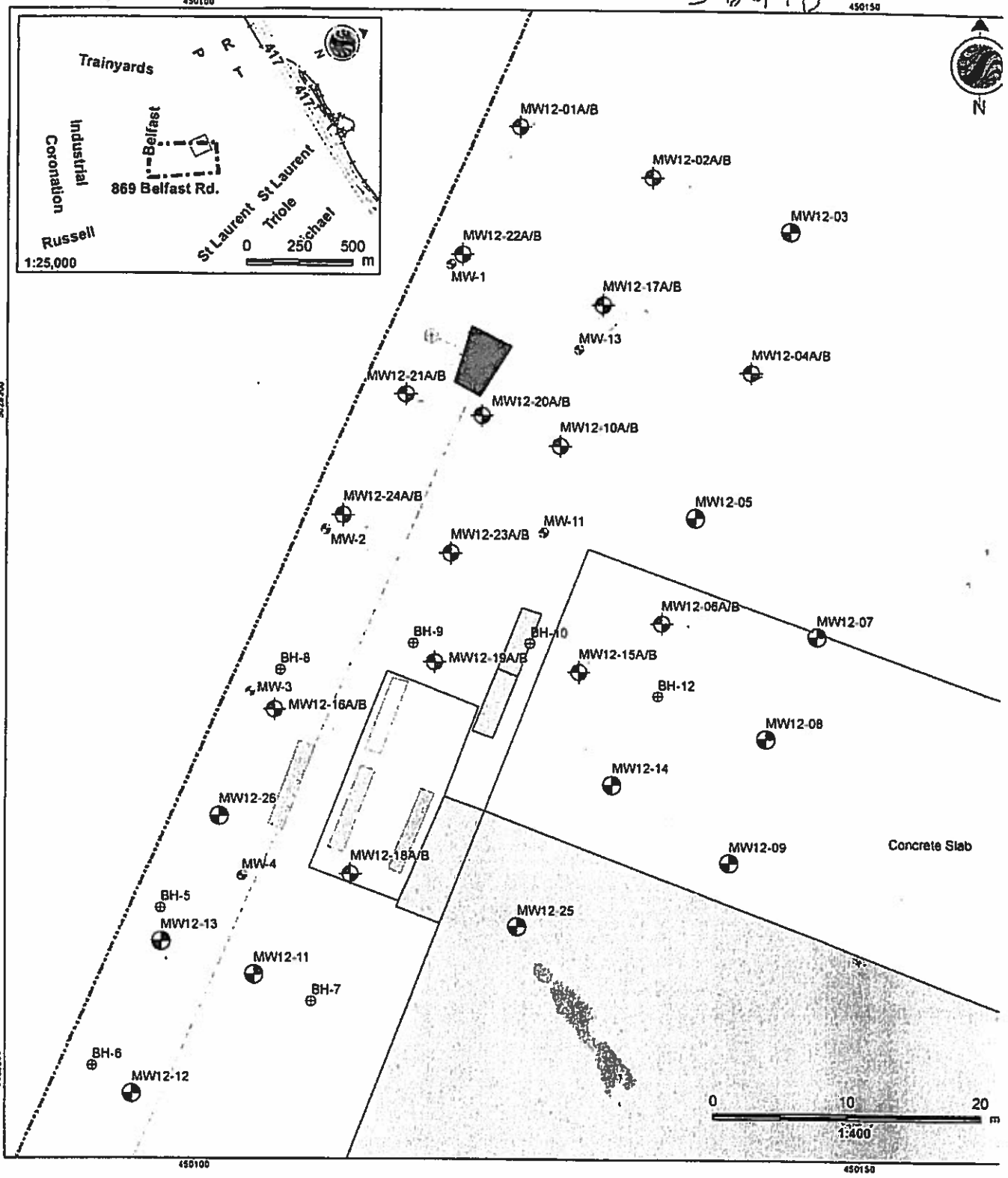
DRAWING NO.

A0

5-12478

MAY 28 2012 C7241 2147095

V:\0123\Buckeye\1225 10667_Pepsi Co_Pepsi PL 869 B\Project\GIS\1225122510667_Fig02_MW12_Plan_Sampling_Location.mxd
 Revised: 2812-04-04 By: mbeuchard
 54292350



Legend

- MW Cluster (Overburden and Bedrock)
- Overburden MW
- Historic Borehole
- Existing MW to be Decommissioned
- Fire Hydrant
- Property Boundary
- Water Main
- Waterman Excavation Limits
- Canopy
- Concrete Slab
- Existing Buildings
- Fuel Pumps
- USTs (5000 Gallon x 2)
- Former Truck Inspection Islands

Notes

- 1 Coordinate System: NAD 1983 UTM Zone 18N
- 2 Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011

Client/Project
 Pepsi Beverage Company
 869 Belfast Road, Ottawa, Ontario
 Remedial Investigation Work Plan

Figure No.
 2

Site Plan and Sampling Locations



Ministry of the Environment

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

5-12478 Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: Metric Imperial

Tag#: A126625 A126625

Page ___ of ___

Well Owner's Information

First Name, Last Name / Organization (Pepsi Beverage Co.), E-mail Address, Mailing Address (869 Belknap Rd.), Municipality (OTTAWA), Province (ON), Postal Code (K1J1J3Z4), Telephone No.

Well Location

Address of Well Location (869 Belknap Rd.), Township, Lot, Concession, City/Town/Village (OTTAWA), Province (Ontario), Postal Code (K1J1J3Z4), UTM Coordinates, Zone, Easting, Northing, Municipal Plan and Sublot Number.

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

Table with columns: General Colour, Most Common Material, Other Materials, General Description, Depth (m/ft) From, To. Rows include Asphalt, Clay, SILT, SHALE, and Fractured.

Annular Space table with columns: Depth Set at (m/ft) From, To; Type of Sealant Used; Volume Placed (m³/ft³). Rows show sealant types like Flushment/cumole and Sand.

Results of Well Yield Testing table with columns: Draw Down (Time, Water Level), Recovery (Time, Water Level). Includes data for pumping rate, duration, and flow rate.

Method of Construction and Well Use checkboxes. Includes options for Cable Tool, Rotary, Boring, Air percussion, and various well uses like Public, Domestic, Livestock, etc.

Construction Record - Casing table with columns: Inside Diameter, Open Hole OR Material, Wall Thickness, Depth (m/ft) From, To. Shows casing details for 5.2 inch diameter plastic casing.

Construction Record - Screen table with columns: Outside Diameter, Material, Slot No., Depth (m/ft) From, To. Shows screen details for 6.03 inch diameter plastic screen.

Water Details and Hole Diameter tables. Water Details include depth and kind of water found. Hole Diameter includes depth and diameter.

Well Contractor and Well Technician Information. Business Name: STRATA SOIL SAMPLING. Well Contractor's Licence No. 1121411.

Business Address: 2-147 WEST BEAVER CREEK RD. RICHMOND HILL, ON. Business E-mail Address: LMB11C6@statasoil.com. Name of Well Technician: Beatty, Brian. Well Technician's Licence No. 316116. Date Submitted: 2011/04/20.

Map of Well Location section with handwritten text: MW 12-196 on Map. Includes Date Package Delivered, Date Work Completed, and Ministry Use Only Audit No. 2147095, Received MAY 28 2012.

3



Ministry of the Environment

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

A 056099

A056099

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Well Owner's Information

First Name: Ontario Realty Corporation
 Last Name: Ontario Realty Corporation
 E-mail Address: _____
 Well Constructed by Well Owner

Mailing Address (Street Number/Name, RR): 14 Gable Lane South Cottage
 Municipality: Kingston
 Province: Ontario
 Postal Code: K7M9A7
 Telephone No. (inc. area code): _____

Part A Construction and/or Major Alteration of a Well

Address of Well Location (Street Number/Name, RR): 530 Tremblay Road
 Township: _____
 Lot: _____
 Concession: _____

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

UTM Coordinates: Zone: Easting: Northing: GPS Unit Make: Model: Mode of Operation: Undifferentiated Averaged Differentiated, specify _____

NAD 83: 18450115105029577
 Garmin Map 76

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
Grey	CLAY	Silty	some Gravel	0	2.44
Grey	Limestone		weathered	2.44	3.05

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From	Depth Set at (Metres) To	Type of Sealant Used (Material and Type)	Volume Placed (Cubic Metres)
0	1.2	Bentonite	0.2

Results of Well Yield Testing

Check box if after test of well yield, water was:
 Clear and sand free
 Cannot develop to sand-free state

If pumping discontinued, give reason: _____

Pumping test method: _____

Pump intake set at (Metres): _____

Pumping rate (Litres/min): _____

Duration of pumping: _____ hrs + _____ min

Final water level end of pumping (Metres): _____

Recommended pump type: Shallow Deep

Recommended pump depth: _____ Metres

Recommended pump rate (Litres/min): _____

If flowing give rate (Litres/min): _____

Time (Min)	Draw Down		Recovery	
	Water Level (Metres)	Time (Min)	Water Level (Metres)	Time (Min)
Static Level	Static Level		Static Level	
1				
2				
3				
4				
5				
10				
15				
20				
25				
30				
40				
50				
60				

Method of Construction

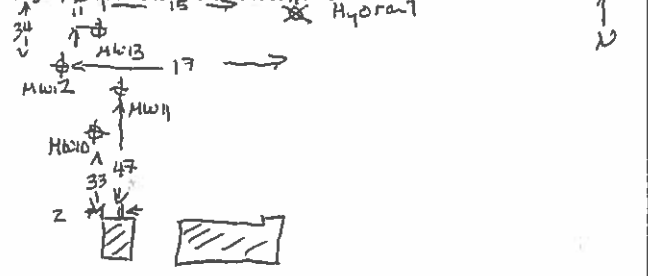
Cable Tool Diamond Public Commercial Not used
 Rotary (Conventional) Jetting Domestic Municipal Dewatering
 Rotary (Reverse) Driving Livestock Test Hole Monitoring
 Rotary (Air) Digging Irrigation Cooling & Air Conditioning
 Air percussion Boring Industrial Other, specify _____
 Other, specify _____

Water Use

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

Location of Well

Please provide a map below showing:
- all property boundaries, and measurements sufficient to locate the well in relation to fixed points,
- an arrow indicating the North direction
- detailed drawings can be provided as attachments no larger than legal size (8.5" by 14")
- vertical pictures of inside of well can also be provided



Water Details

Water found at Depth (Metres)	Kind of Water
2.44	<input type="checkbox"/> Gas <input type="checkbox"/> Fresh <input type="checkbox"/> Salty <input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals
1.1	<input type="checkbox"/> Gas <input type="checkbox"/> Fresh <input type="checkbox"/> Salty <input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals
1.1	<input type="checkbox"/> Gas <input type="checkbox"/> Fresh <input type="checkbox"/> Salty <input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals

Date Well Completed (yyyy/mm/dd): 2007 09 18
 Was the well owner's information package delivered? Yes No
 Date the Well Record and Package Delivered to Well Owner (yyyy/mm/dd): 2007 09 20

SEALANT Well Contractor and Well Technician Information

Business Name of Well Contractor: DST Consulting Engineers Inc
 Well Contractor's Licence No.: 618318
 Business Address (Street No./Name, number, RR): 605 Hewitson St Thunder Bay
 Municipality: _____
 Province: Ont Postal Code: P7B5V5 Business E-mail Address: _____

Bus. Telephone No. (inc. area code): 613 321 3160
 Name of Well Technician (Last Name, First Name): Warner Terry
 Well Technician's Licence No.: 1321360
 Signature of Technician: _____
 Date Submitted (yyyy/mm/dd): 2007 09 20

Casing and Screen Used

Galvanized Galvanized Fibreglass Fibreglass Concrete Concrete

Casing and Well Details

Diameter of the Hole (Centimetres): 80
 Depth of the Hole (Metres): 3.05
 Well Thickness (Metres): 0.002
 No Casing and Screen Used
 Open Hole
 Inside Diameter of the Casing (Metres): 0.2
 Disinfected? Yes No
 Depth of the Casing (Metres): 1.5

Ministry Use Only

Audit No.: 267214
 Well Contractor No.: _____
 Date Received (yyyy/mm/dd): SEP 26 2007
 Date of Inspection (yyyy/mm/dd): _____
 Remarks: _____

2



Ministry of the Environment

Well ID: A 056092
AD 56092

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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

Well Owner's Information and Location of Well Information
First Name: Ontario Realty Corporation
Mailing Address: 14 Gable Lane
Township/City/Town/Village: Kingston
Province: Ontario
Postal Code: K7H 9A7
Address of Well Location: 530 Tremblay Road
City/Town/Village: Ottawa

Log of Overburden and Bedrock Materials (see instructions)
Table with columns: General Colour, Most common material, Other Materials, General Description, Depth From, Metres To.
Row 1: Brown Fill, Silty Sand & Gravel, 0 to 2
Row 2: Dark Brown Till, Sandy Clay, some clast of shale, 2 to 6

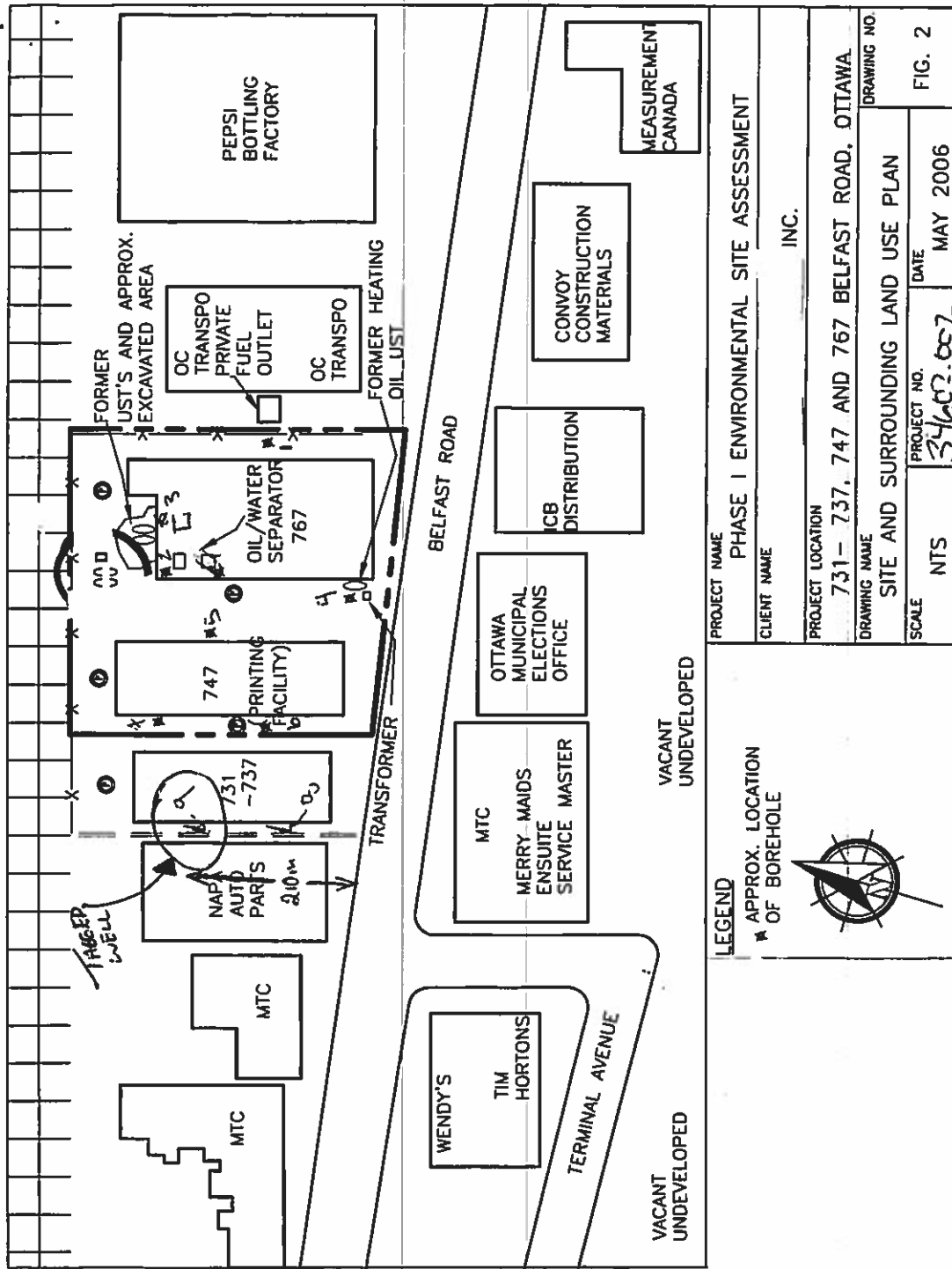
Hole Diameter, Construction Record, Test of Well Yield, Water Record, Plugging and Sealing Record, Location of Well, Method of Construction, Water Use, Final Status of Well, Well Contractor/Technician Information, Ministry Use Only.
Includes diagrams for well location and construction details.

Plugging and Sealing Record: Depth set at 0 to 2.7, Material: Bentonite slurry, Volume Placed: 0.3
Method of Construction: Rotary (conventional)
Water Use: Domestic
Final Status of Well: Water Supply
Well Contractor/Technician Information: DST Consulting Engineers, License No. 6838, Technician: Warren Perry, License No. 73236

7241

Z50150

JUL 19 2006



A044841

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

Well Owner's Information and Location of Well Information

MUN			CON			LOT		
-----	--	--	-----	--	--	-----	--	--

RR#/Street Number/Name: **731-737, 747 & 767 BELFAST RD.** City/Town/Village: **OTTAWA** Site/Compartment/Block/Tract etc.

GPS Reading: **8.3** MAD Zone Easting Northing Unit Make/Model Mode of Operation: Undifferentiated Averaged Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To
BLK.	ORGANICS.	FILL.	LOOSE	0	0.3
BROWN	GRAVEL.	SAND.	LOOSE	0.3	2.14
GRAY	CLAY	SILT.	DENSE./WET.	2.14	4.27
GRAY.	WEATHER SHALE	-	DENSE.	4.27	4.88

N43° 43.038
W079° 27.865

Hole Diameter Depth Metres Diameter Centimetres From To 0 4.88 8.255		Construction Record Inside diam centimetres Material Wall thickness centimetres Depth Metres From To 3.81 <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete 0.25 0 1.83 <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <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 Outside diam <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete Slot No. 10 1.83 4.88 <input type="checkbox"/> Galvanized No Casing or Screen <input type="checkbox"/> Open hole				Test of Well Yield Pumping test method Draw Down Recovery Time Water Level Time Water Level min Metres min Metres Pump intake set at - Static Level (metres) 1 1 Pumping rate - (litres/min) 2 2 Duration of pumping hrs + min 3 3 Final water level end of pumping metres 4 4 Recommended pump type <input type="checkbox"/> Shallow <input type="checkbox"/> Deep Recommended pump depth metres 5 5 Recommended pump rate (litres/min) 10 10 15 15 If flowing give rate (litres/min) 20 20 25 25 If pumping discontinued, give reason. 30 30 40 40 50 50 60 60			
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Plugging and Sealing Record Annular space Abandonment

Depth set at - Metres From To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
0 0.3	CONCRETE	
0.3 1.22	BENTONITE	
1.22 4.88	SILICA SAND #0	

Method of Construction
 Cable Tool Rotary (air) Diamond Digging
 Rotary (conventional) Air percussion Jetting Other
 Rotary (reverse) Boring Driving **GRAVING**

Water Use
 Domestic Industrial Public Supply Other
 Stock Commercial Not used **MONITORING WELL**
 Irrigation Municipal Cooling & air conditioning

Final Status of Well
 Water Supply Recharge well Unfinished Abandoned, (Other)
 Observation well Abandoned, insufficient supply Dewatering **MONITORING WELL**
 Test Hole Abandoned, poor quality Replacement well

Well Contractor/Technician Information
 Name of Well Contractor: **SOLANA SOIL SAMPLING** Well Contractor's Licence No.: **7241**
 Business Address (street name, number, city etc.): **147 WEST KEANER CREEK** T: **2977**
 Name of Well Technician (last name, first name): **MIKE BROWN** Well Technician's Licence No.: **11-2477**
 Signature of Technician/Contractor: **[Signature]** Date Submitted: **2006 06 09**

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

(SEE ATTACHED MAP.)

Audit No. **2 50150** Date Well Completed **2006 06 09**
 Was the well owner's information package delivered? Yes No Date Delivered **2006 06 09**

Ministry Use Only
 Data Source Contractor **7241**
 Date Received **JUL 19 2006** Date of Inspection **2006 06 09**
 Remarks **X** Well Record Number

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- 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 416-235-8203.
- All metre measurements shall be reported to 1/10th of a metre.
- Please print clearly in blue or black ink only.

Ministry Use Only

Well Owner's Information and Location of Well Information

MUN	CON	LOT
-----	-----	-----

RR#/Street Number/Name: **731-267 BELLEVUE RD**
 City/Town/Village: **OTTAWA**
 Site/Compartment/Block/Tract etc.:
 GPS Reading: NAD 83 Zone Easting Northing
 Unit: Make/Model Mode of Operation: Undifferentiated Averaged Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From Metres	To Metres
BRN	FILL	SAND	LOOSE	0	1.22
BRN	CLAY	SAND	DENSE	1.22	3.66
BRN	SAND	SILT	LOOSE / UNSATURATED	3.66	4.88
GLY	CLAY	SILT	SATURATED	4.88	6.71

N - 45° 24.887'
 W - 075° 38.954'

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	6.71	88.7	3.17	Steel Fibreglass	0.25	0	3.66	Pump intake set at - (metres)	Static Level			
Water Record			Screen				Pumping test results					
Water found at / Kind of Water			Outside diam				Pumping rate - (litres/min)					
Fresh Sulphur Gas Salty Mineral			Slot No.				Duration of pumping					
Fresh Sulphur Gas Salty Mineral			10				Final water level end of pumping					
Fresh Sulphur Gas Salty Mineral			3.66				Recommended pump type					
After test of well yield, water was			No Casing or Screen				Recommended pump depth					
Clear and sediment free			Open hole				Recommended pump rate					
Other, specify							If flowing give rate - (litres/min)					
Chlorinated Yes No							If pumping discontinued, give reason					

Plugging and Sealing Record

Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
0	0.3	CONCRETE	
0.3	3.35	BENTONITE	
3.35	6.71	SAND	

Method of Construction

Cable Tool Rotary (air) Diamond Digging
 Rotary (conventional) Air percussion Jetting Other
 Rotary (reverse) Boring Driving **60 OPERATE**

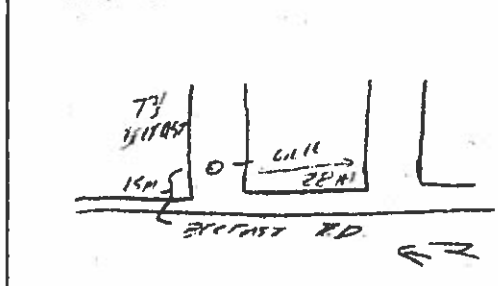
Water Use

Domestic Industrial Public Supply Not used **MONITORING**
 Stock Commercial Cooling & air conditioning **WELL**
 Irrigation Municipal

Final Status of Well

Water Supply Recharge well Unfinished Abandoned (Other) **MONITORING**
 Observation well Abandoned - insufficient supply Dewatering **WELL**
 Test Hole Abandoned - poor quality Replacement well **WELL**

Location of Well



Audit No. **z 51831** Date Well Completed **06 06 11**
 Was the well owner's information package delivered? Yes No

Well Contractor/Technician Information

Name of Well Contractor: **SEARON SOIL SAMPLING** Well Contractor's Licence No.: **7741**
 Business Address (street name, number, city etc.): **1171 WILKIE DRIVE, BELLEVUE RD - PERMANENT WELLS**
 Name of Well Technician (last name, first name): **M. J. J. J.** Well Technician's Licence No.:
 Signature of Well Contractor: **[Signature]** Date Submitted: **06 07 11**

Ministry Use Only

Data Source: Contractor **7241**
 Date Received: **OCT 17 2008** Date of Inspection: **06 06 11**
 Remarks: Well Record Number