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Phase I-Environmental Site Assessment

Block 1 & 2,
3288 Greenbank Road
Ottawa, Ontario

Prepared For

Nepean Town Centre Development Corp.

Paterson Group Inc.

Consulting Engineers
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January 25, 2021

Report: PE4558-1R

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	ii
1.0 INTRODUCTION.....	1
2.0 PHASE I PROPERTY INFORMATION.....	2
3.0 SCOPE OF INVESTIGATION	3
4.0 RECORDS REVIEW	4
4.1 General.....	4
4.2 Environmental Source Information	5
4.3 Physical Setting Sources	8
5.0 INTERVIEWS	10
6.0 SITE RECONNAISSANCE	10
6.1 General Requirements.....	10
6.2 Specific Observations at Phase I Property	10
7.0 REVIEW AND EVALUATION OF INFORMATION	12
7.1 Land Use History	12
7.2 Conceptual Site Model.....	12
8.0 CONCLUSIONS	14
9.0 STATEMENT OF LIMITATIONS	15
10.0 REFERENCES.....	16

List of Figures

Figure 1 - Key Plan
Figure 2 - Topographic Map
Drawing PE4558-1 - Site Plan
Drawing PE4558-2 - Surrounding Land Use Plan

List of Appendices

Appendix 1 Plan of Subdivision
 Aerial Photographs
 Site Photograph

Appendix 2 MECP Freedom of Information Response
 TSSA Correspondence
 HLUI Response
 MECP Well Records

Appendix 3 Qualifications of Assessors

EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Nepean Town Centre Development Corp. to conduct a Phase I-Environmental Site Assessment (ESA) for the property located at 3288 Greenbank Road, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the subject site and Phase I study area and to identify any environmental concerns with the potential to have impacted the Phase I property.

According to the historical research, the Phase I Property has always been used for residential and agricultural purposes. Based on a review of aerial photographs the property was first developed with the existing farmstead (residential dwelling and associated structures) as early as 1954. Historical land use of the neighbouring properties was also for residential and agricultural purposes. No potentially contaminating activities were identified with the historical use of the subject site or surrounding lands.

Following the historical research, a site visit was conducted. The subject site exists as vacant land. No potential environmental concerns were noted with the current use of the Phase I Property. Neighbouring properties in the Phase I Study Area consist of vacant lands to the west and south, residential to the east, and commercial to the north. No potentially contaminating activities were identified on the Phase I Property or in the Study Area. Therefore, no areas of potential environmental concern with respect to the Phase I Property were identified.

To date, no changes that would result in areas of potential environmental concerns were identified on the Phase I Property or in the neighbouring area that would affect our conclusion of the 2019 Phase I ESA report, in that, it is **our opinion that a Phase II-Environmental Site Assessment is not required for the subject property.**

1.0 INTRODUCTION

At the request of Nepean Town Centre Development Corp., Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) of the property located at 3288 Greenbank 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. Frank Cairo with Nepean Town Centre Development Corp.. The head office is located at 302-2934 Baseline Road, Ottawa, Ontario. Mr. Cairo can be reached by telephone at (613) 518-1864.

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

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

2.0 PHASE I PROPERTY INFORMATION

Address:	3288 Greenbank Road, Ottawa, Ontario
Legal Description:	Part of lot 14, Concession 3 Rideau Front, in the City of Ottawa
Location:	The site is located on the west side of Greenbank Road, 100 m south of the Jockvale Road and Greenbank Road intersection, in the City of Ottawa, Ontario. Refer to Figure 1 - Key Plan in the Figures section following the text.
PIN:	04590-0058
Latitude and Longitude:	45° 15' 48.42" N, 75° 44' 44.83" W
Site Description:	
Configuration:	Rectangular
Area:	5 Hectares (approximately)
Zoning:	Development Reserve Zone
Current Use:	The subject site is currently vacant land.
Services:	The subject site and adjacent lands are situated in a municipally serviced area.

3.0 SCOPE OF INVESTIGATION

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

- ☐ Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases, and regulatory agencies;
- ☐ Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
- ☐ Conduct interviews with persons knowledgeable of current and historic operations on the subject property, and if warranted, neighbouring properties;
- ☐ Present the results of our findings in a comprehensive report in general accordance with the requirements of O.Reg. 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- ☐ Provide a preliminary environmental site evaluation based on our findings;
- ☐ Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

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

First Developed Use Determination

Based on a review of aerial photographs, the Phase I Property has been occupied by a farmstead since at least 1954. Earlier aerial photographs, fire insurance plans and city directories were not available for the Phase I Property and 250m study area, as noted below. Based on the limited historical information available, the Phase I Property is considered to have been first developed for residential purposes as early as 1954.

Fire Insurance Plans

Fire Insurance Plans (FIPs) are not available for the subject area.

City of Ottawa Street Directories

The 2011 city directories for the subject site and study area were available. The subject site was listed as a residence, while the study area was listed primarily as either residential or unlisted.

Chain of Title

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

Previous Engineering Reports

The report entitled “Geotechnical Investigation, Proposed Residential Development, 3288 Greenbank Road, Ottawa”, prepared by Paterson and dated March 6, 2019, was reviewed. Based on the findings of the geotechnical investigation, the subsurface conditions at the site consist of topsoil underlain by native silty clay to clayey silt, followed by Glacial Till at depth.

No evidence of fill material or potential signs of contamination were observed during the field program.

Plan of Subdivision

No survey plan was provided, however, a plan of the proposed development for the site has been provided by Korsiak Urban Planning, dated December 11, 2018. A copy of the proposed development plan 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 February 20, 2019. The subject site and adjacent properties were not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I study area.

PCB Inventory

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

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

A request was submitted to the MECP Freedom of Information (FOI) office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site. Based on the MECP response dated March 13, 2019, no records were located responsive our request. A copy of the MECP response letter is provided in Appendix 2.

MECP Submissions

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the property. Based on the MECP response dated March 13, 2019, no records were located responsive our request. A copy of the MECP response letter is provided in Appendix 2.

MECP Incident Reports

A request was submitted to the MECP FOI office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP for the site or adjacent properties. Based on the MECP response dated March 13, 2019, no records were located responsive our request. A copy of the MECP response letter is provided in Appendix 2.

MECP Waste Management Records

A request was submitted to the MECP FOI office for information with respect to waste management records. Based on the MECP response dated March 13, 2019, no records were located responsive our request. A copy of the MECP response letter is provided in Appendix 2.

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 was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No Records of Site Condition (RSCs) were filed for the subject property or properties within the Phase I ESA study area.

MECP Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. There are no former waste disposal sites located within 1 km of the Phase I study area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the website of the Ontario Ministry of Natural Resources (MNR) on February 20, 2019. The search did not reveal 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 February 20, 2019, to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. No records are listed in the TSSA registry for the subject site or the adjacent properties. A copy of the TSSA correspondence is included in Appendix 2.

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 search of the City of Ottawa’s Historical Land Use Inventory (HLUI) database was conducted as part of this assessment. Based on the City’s response letter dated April 2, 2019, no potentially contaminating activities were identified on the Phase I Property. Based on the nature of the off-site activities identified, they are not considered to be PCAs and do not represent a concern to the Phase I Property (it should be noted that Meehan’s Carpet and Upholstery Cleaners identified at 3283 Greenbank Road is considered to have been a home-based company and not an operational dry-cleaning facility).

According to the response, the City’s Environmental Remediation Unit has environmental records on file pertaining to rights of way and/or other properties adjacent to the subject property. A request for additional information has been submitted under the Municipal Freedom of Information and Protection of Privacy Act. Based on the response, there were no records pertaining to the Phase I Property. A copy of the HLUI response is provided in Appendix 2.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. Based on the review, the following

1954	The subject site is occupied by a farmstead on the northeast corner of the lot. Most of the subject land is agricultural. The surrounding lands appear as either farmsteads or residential and agricultural fields. Greenbank Road and Jockvale Road are present at this time.
1968	The subject property and surrounding properties to the south appear to remain unchanged from the previous photograph. Apparent residential development has occurred on the adjacent property to the east across Greenbank Road. Adjacent and neighbouring properties to the north and west are not covered in this photograph.
1976	No significant changes appear to have been made to the subject land or to the adjacent and neighbouring lands.
1991	No significant changes are apparent to the subject site. A culvert or storm management pond can be seen to the west of the property. The surrounding area appears unchanged from the previous photograph, with the exception of a residential development to the northwest.
2002	The subject site appears unchanged from the previous photograph. Lands further to the north and southeast are under development with a commercial development to the north and an institutional building (school) to the southeast. Lands to south and west appear unchanged from the previous photograph.
2011	No significant changes are apparent to the subject site. More commercial development can be seen further north and northeast, as well as new roadways.
2017	No significant changes are apparent to the subject site or surrounding area.
2019	The subject site and surrounding area remains unchanged from the previous photograph.

Copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the regional topography in the general area of the site slopes down in a south-westerly direction towards the Jock River. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

The Ontario Geological Survey publication ‘The Physiography of Southern Ontario, Third Edition’ was reviewed as a part of this assessment. According to the publication, the site is situated within the Ottawa Clay Plain physiographic region.

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 northeastern area of the site consists of sandstone and dolomite, interbedded, of the March Formation, and the in southwestern area of the site consists of limestone and dolomite, interbedded, of the Gull River Formation. The site is located in an area where offshore marine sediments consisting of marine deposits of clay and silt are present. The drift thickness in the area ranges from 10 to 15 m.

Water Well Records

A Well Record search was conducted on February 20, 2019 for all drilled wells within 250 m of the subject site. The well record search returned twenty-four (24) well records; fifteen (15) of which were domestic wells; seven (7) monitoring wells and two (2) abandoned wells. One domestic well was indicated on the subject site. Two monitoring wells were located on the adjacent properties to the south, both used for construction/alteration purposes. The remaining well records were identified approximately 200 m away from the subject site. No potential environmental concerns have been identified with respect to the subject site. Copies of the well records has been included in Appendix 2.

Water Bodies and Areas of Natural Significance

A small ditch that drains to Jock River is situated on the subject site. The Jock River is located approximately 200 m south of the Phase I property. No other water bodies or areas of natural significance were identified in the Phase I Study Area.

5.0 INTERVIEWS

Property Owner Representative

Caivan Communities was contacted via email as part of this assessment. Nepean Town Centre Development Corp. is the current landowner of the property in partnership with Caivan Communities. The land had been used for residential and agricultural purposes. Caivan Communities is not aware of any potential environmental concerns with respect to the subject or adjacent properties. The current property owner was unavailable for an interview.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site visit was conducted on January 25, 2021. Weather conditions were overcast with a temperature of approximately -10°C. Ms. Mandy Witteman from the Environmental Department of Paterson conducted the site assessment. 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 Phase I Property is presently vacant land, while the neighbouring area remains unchanged since the last site visit in March of 2019.

6.2 Specific Observations at Phase I Property

Site Features

The subject property is primarily agricultural fields.

Site drainage consists primarily of infiltration. The site topography is relatively flat and at grade with Greenbank Road. The regional topography slopes down in a south-westerly/southerly direction towards the Jock River.

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 on the subject property was observed at the time of the site visit. No areas of stained snow or unidentified substances were observed on-site at this time.

Buildings and Structures

There are no buildings or structures present on the Phase I Property.

Neighbouring Properties

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

- ☐ North - Commercial business (Mini Putt Golf), followed by vacant land;
- ☐ South - Vacant land, followed by Jock River;
- ☐ East - Greenbank Road, followed by residential dwellings;
- ☐ West - Culvert, followed by vacant land.

The current use of the immediately adjacent properties is not considered to pose an environmental concern to the subject site. No properties within the Phase I study area are occupied by potentially contaminating activities. Current land use in the Phase I Study area is illustrated on Drawing PE4558-2 – Surrounding Land Use Plan in the Figures section of this report.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

Based on the available historical records, the Phase I Property was first developed with a farmstead as early as 1954. No potential environmental concerns were noted with the historical and current land use.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

No potentially contaminating activities (PCAs) were identified on 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.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, the overburden thickness in the area of the subject site is estimated to be on the order of 10 to 15 m. The overburden consists of offshore marine deposits of clay and silt. Bedrock in the area is comprised of both sandstone and dolomite (interbedded) and limestone and dolomite (interbedded) in the northeastern and southwestern parts of the site, respectively.

Groundwater flow is interpreted to be in a south-westerly direction towards the Jock River.

Existing Buildings and Structures

No buildings or structures are present on the Phase I Property.

Water Bodies and Areas of Natural Significance

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

Drinking Water Wells

One domestic well record from 1961 was indicated on the subject property and fifteen (15) domestic well records were identified within the study area.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area consists of vacant/agricultural land, farmsteads and/or residential dwellings and an institution (high school).

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, PCAs were not identified on the subject property or within the Phase I Study Area. Therefore, no APECs are present on the Phase I Property.

Contaminants of Potential Concern

As per Section 7.1 of this report, no Contaminants of Potential Concern (CPCs) were identified on the subject site.

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.

8.0 CONCLUSIONS

Assessment

Paterson Group was retained by Nepean Town Centre Development Corp. to conduct a Phase I-Environmental Site Assessment (ESA) for the property located at 3288 Greenbank Road, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the subject site and Phase I study area and to identify any environmental concerns with the potential to have impacted the Phase I property.

According to the historical research, the Phase I Property has always been used for residential and agricultural purposes. Based on a review of aerial photographs the property was first developed with the existing farmstead (residential dwelling and associated structures) as early as 1954. Historical land use of the neighbouring properties was also for residential and agricultural purposes. No potentially contaminating activities were identified with the historical use of the subject site or surrounding lands.

Following the historical research, a site visit was conducted. The subject site exists as vacant land. No potential environmental concerns were noted with the current use of the Phase I Property. Neighbouring properties in the Phase I Study Area consist of vacant lands to the west and south, residential to the east, and commercial to the north. No potentially contaminating activities were identified on the Phase I Property or in the Study Area. Therefore, no areas of potential environmental concern with respect to the Phase I Property were identified.

To date, no changes that would result in areas of potential environmental concerns were identified on the Phase I Property or in the neighbouring area that would affect our conclusion of the 2019 Phase I ESA report, in that, it is **our opinion that a Phase II- Environmental Site Assessment is not required for the subject property.**

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared under the supervision of a QP_{ESA}, in general accordance with O.Reg. 153/04, as amended, 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 Nepean Town Centre Development Corp. Permission and notification from Nepean Town Centre Development Corp. and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Mandy Witteman, B.Eng., M.A.Sc.



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



Report Distribution:

- ☐ Nepean Town Centre Development Corp.
- ☐ Paterson Group

10.0 REFERENCES

Federal Records

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

Provincial Records

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

Municipal Records

City of Ottawa Document “Old Landfill Management Strategy, Phase I - Identification of Sites.”, prepared by Golder Associates, 2004.
Intera Technologies Limited Report “Mapping and Assessment of Former Industrial Sites, City of Ottawa”, 1988.
geoOttawa: City of Ottawa electronic mapping website.
City of Ottawa Historical Land Use Inventory (HLUI) Database

Local Information Sources

Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4558-1 – SITE PLAN

DRAWING PE4558-2 – SURROUNDING LAND USE PLAN



FIGURE 1
KEY PLAN

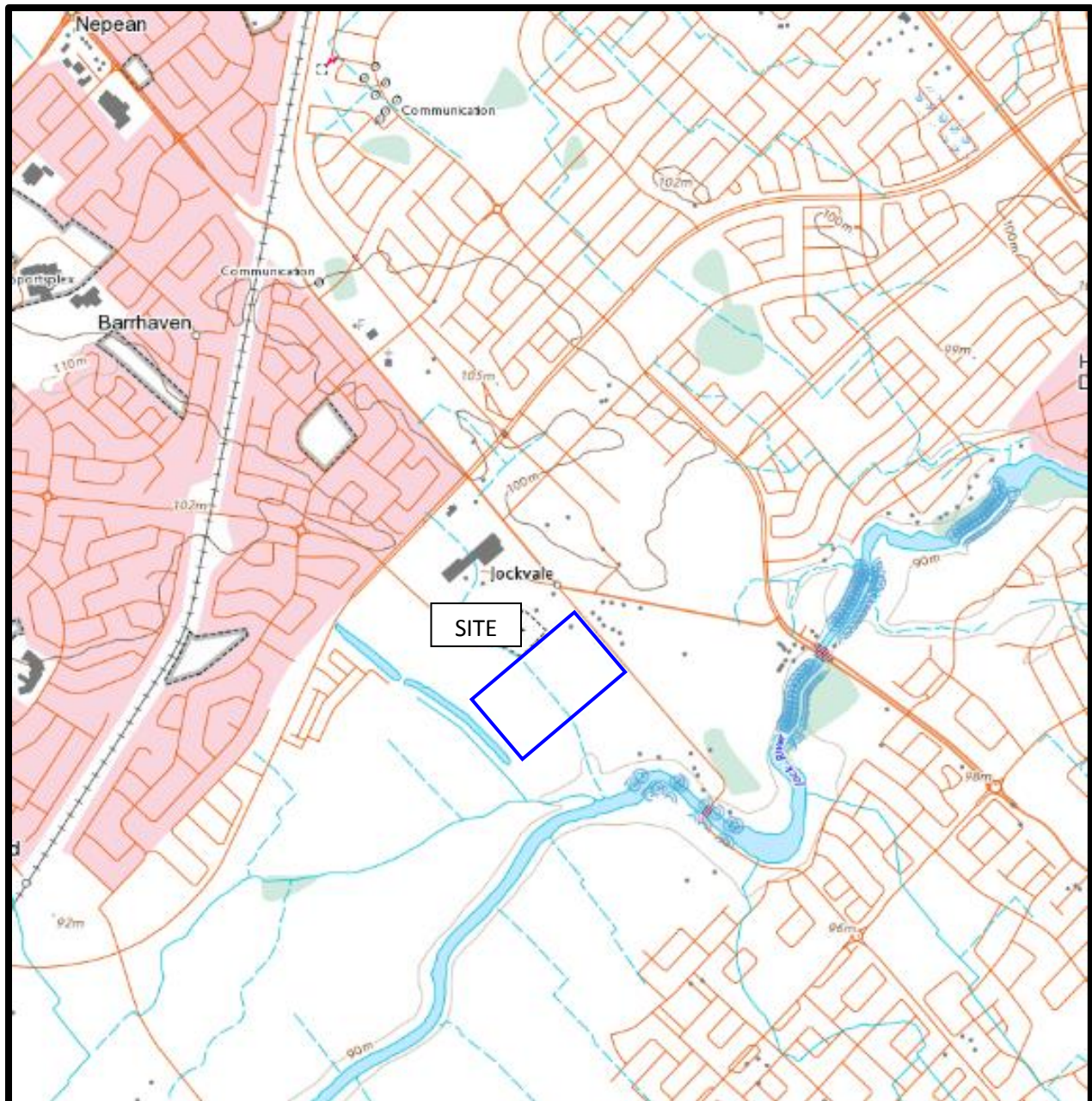
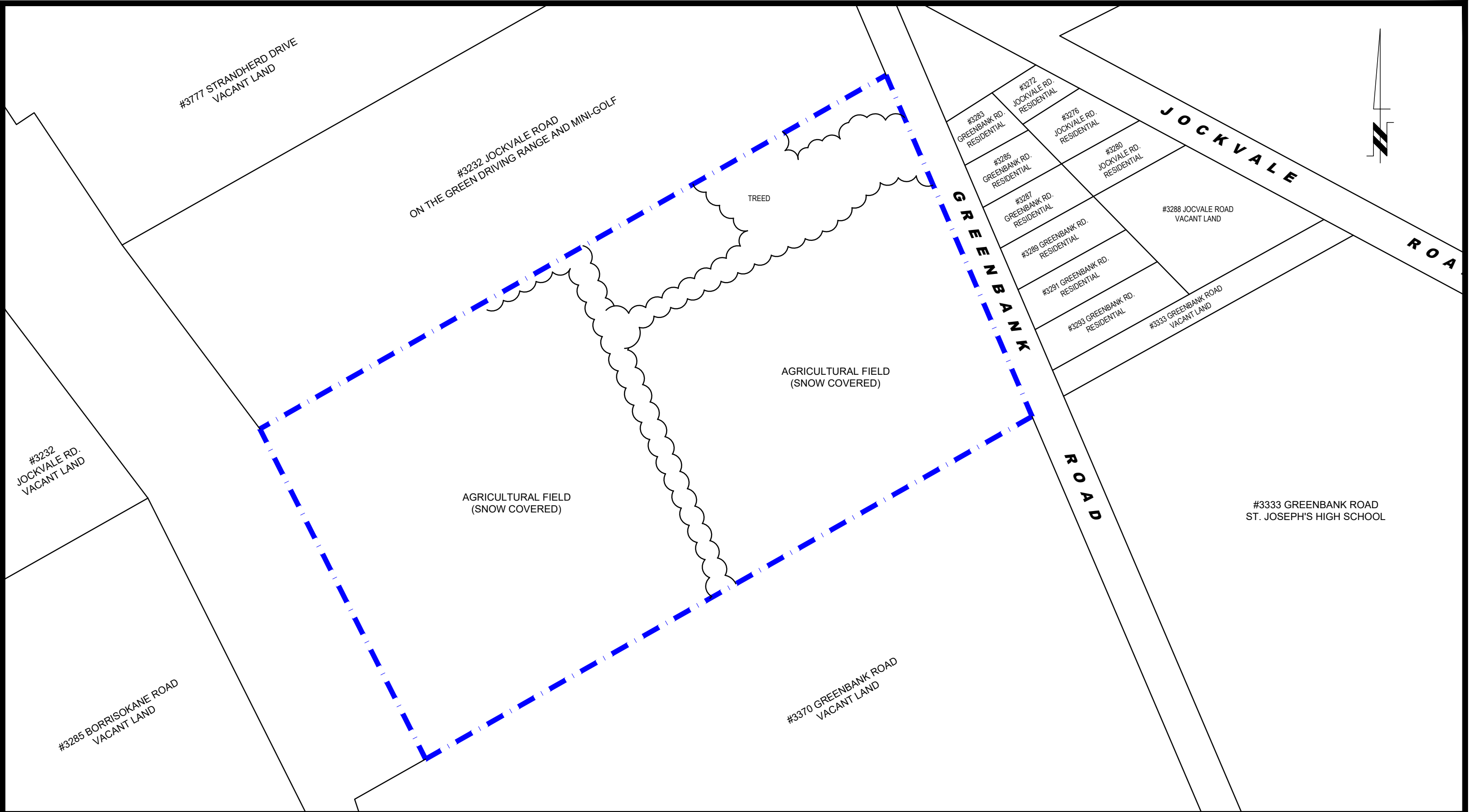


FIGURE 2
TOPOGRAPHIC MAP



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Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

CAIVAN COMMUNITIES

PHASE I - ENVIRONMENTAL SITE ASSESSMENT

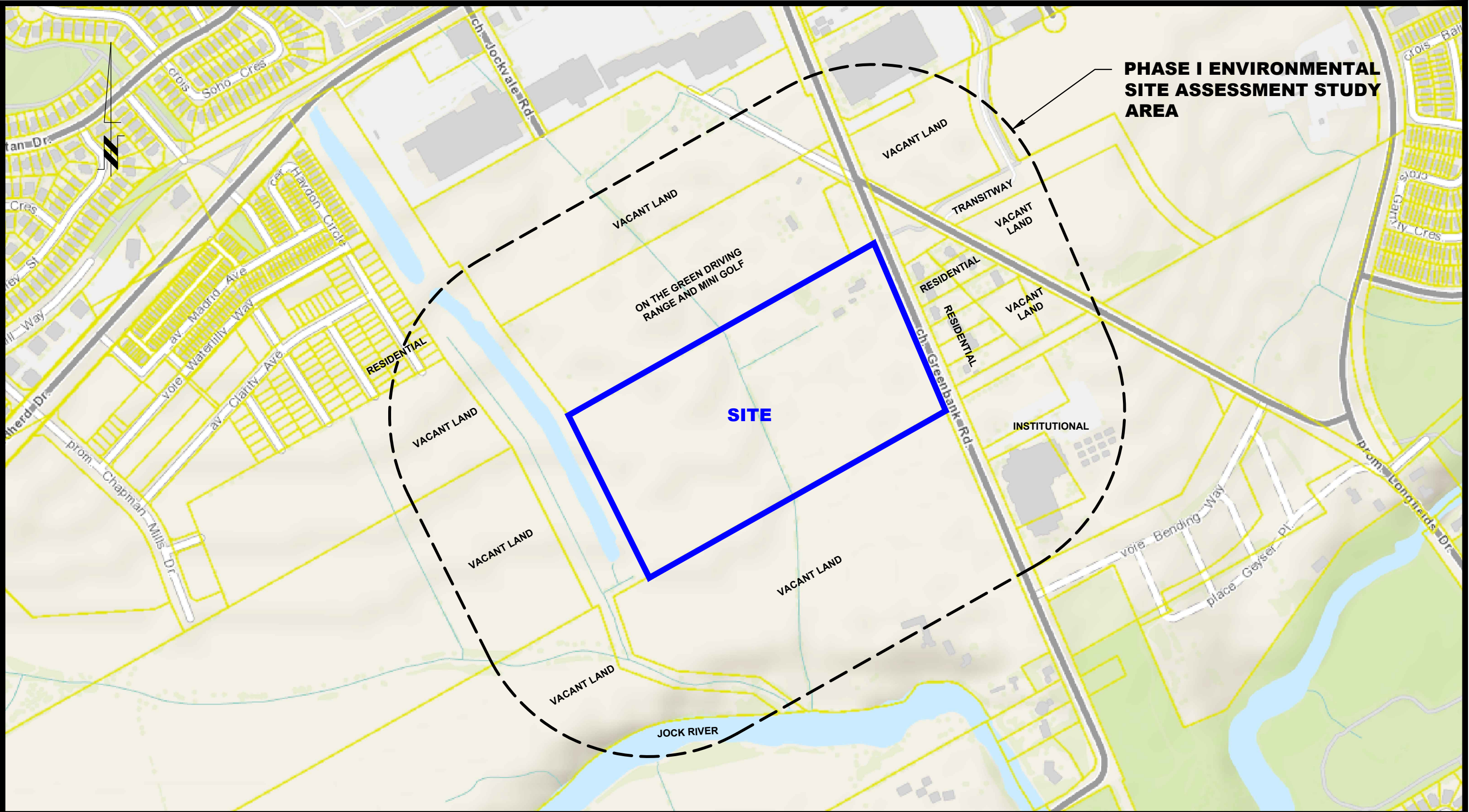
3288 GREENBANK ROAD

OTTAWA, ONTARIO

Title:

SITE PLAN

Scale:	1:2500	Date:	01/2021
Drawn by:	MPG	Report No.:	PE4558-1
Checked by:	MW	DWG No.:	PE4558-1-R
Approved by:	MSD	Revision No.:	



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

NO.	REVISIONS	DATE	INITIAL

CAIVAN COMMUNITIES

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
3288 GREENBANK ROAD

OTTAWA, ONTARIO

Title: SURROUNDING LAND USE PLAN

Scale:	1:5000	Date:	01/2021
Drawn by:	MPG	Report No.:	PE4558-1
Checked by:	MW	Dwg No.:	PE4558-2-R
Approved by:	MSD	Revision No.:	

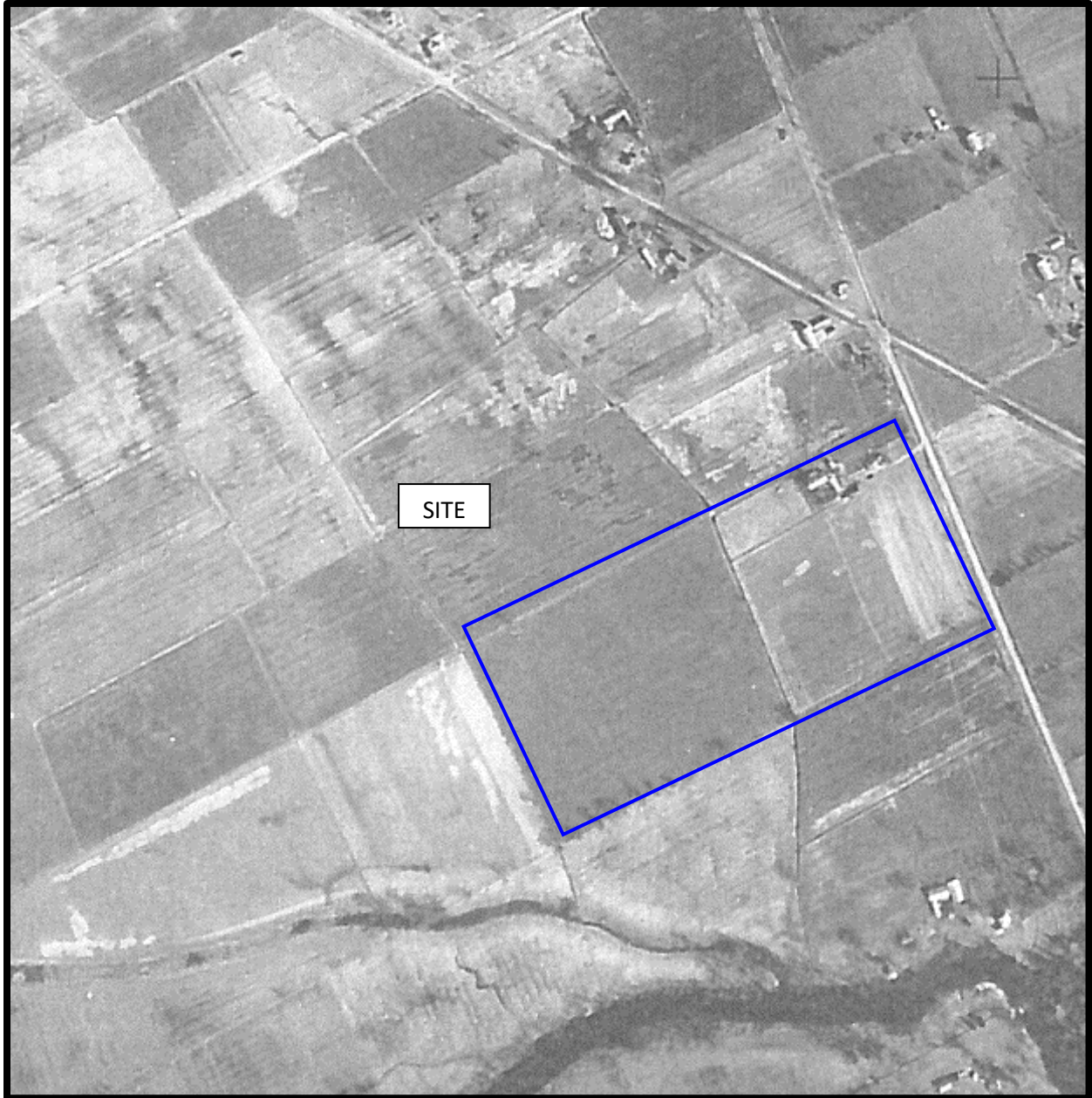
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APPENDIX 1

PLAN OF SUBDIVISION

AERIAL PHOTOGRAPHS

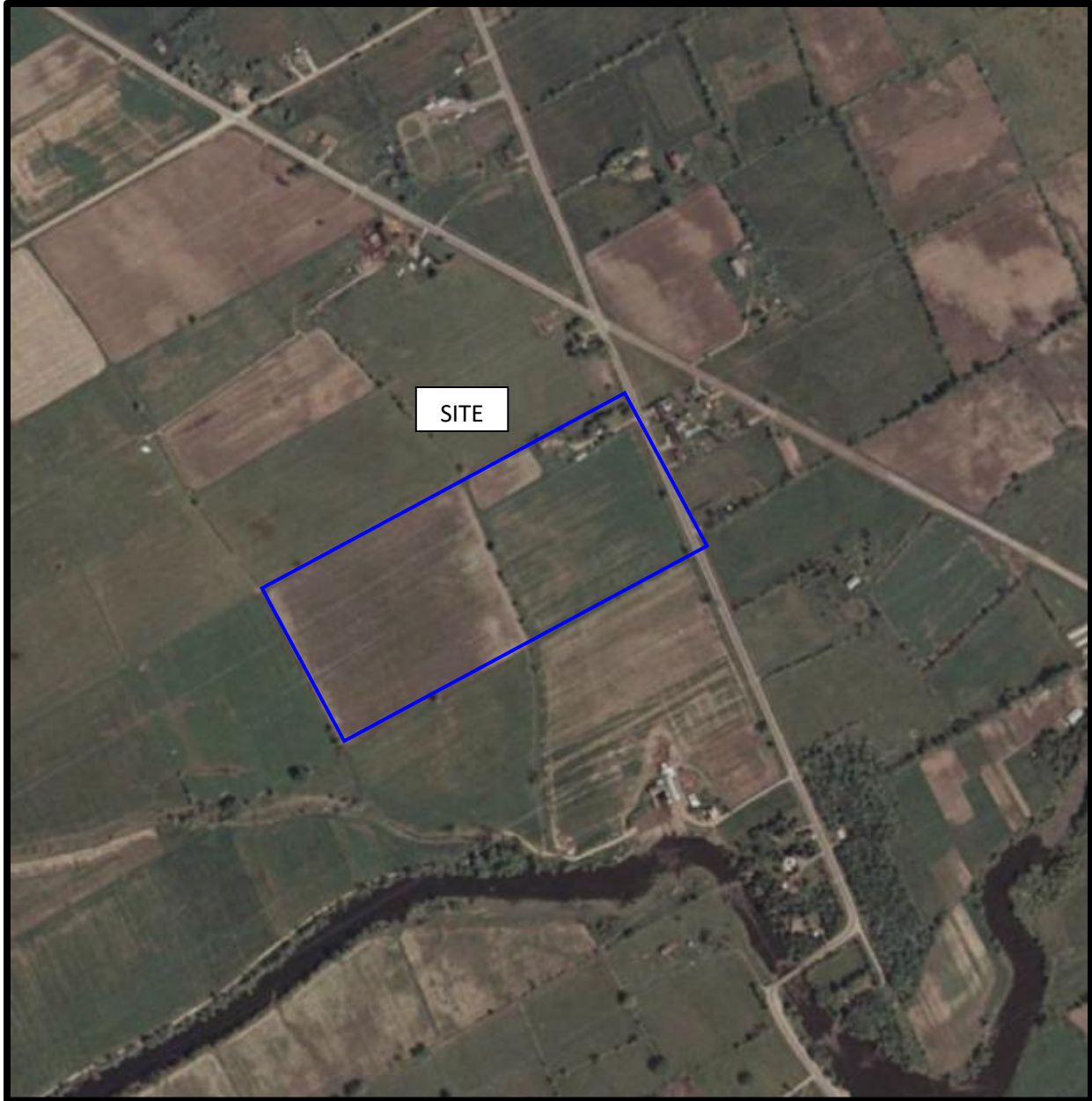
SITE PHOTOGRAPHS



AERIAL PHOTOGRAPH
1954



AERIAL PHOTOGRAPH
1968



AERIAL PHOTOGRAPH
1976



AERIAL PHOTOGRAPH
1991



AERIAL PHOTOGRAPH
2002



AERIAL PHOTOGRAPH
2011



AERIAL PHOTOGRAPH
2017



AERIAL PHOTOGRAPH
2019

Site Photographs

PE4558

3288 Greenbank Road, Ottawa, ON

March 7, 2019



Photograph 1. View of residential dwelling situated on the northeast corner of the Phase I Property.



Photograph 2: View of the agricultural field, looking southwest

APPENDIX 2

MECP FREEDOM OF INFORMATION

TSSA CORRESPONDENCE

HLUI RESPONSE

MECP WELL RECORDS

Ministry of the Environment,
Conservation and Parks

Access and 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, de
la Protection de la nature et des
Parcs

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



March 13, 2019

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

Dear Mandy Witteman:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2019-01060, Your Reference PE4558

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 3288 Greenbank Road, Ottawa.

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

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

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

Yours truly,

Janet Dadufalza
Manager, Access and Privacy

Mandy Witteman

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: February-21-19 6:01 PM
To: Mandy Witteman
Subject: RE: Records Search Request (PE4558)

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Mandy,

Thank you for your request for confirmation of public information.

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

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

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

Kind regards,

Yalini



Yalini Kanagendran | Public Information Agent

Facilities

345 Carlingview Drive

Toronto, Ontario M9W 6N9

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

www.tssa.org



From: Mandy Witteman <MWitteman@Patersongroup.ca>
Sent: February 20, 2019 4:29 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: Records Search Request (PE4558)

Good Afternoon,

Could you please complete a search of your records for **underground/aboveground storage tanks, historical spills or other incidents/infractions** for the following addresses in Ottawa, ON:

Greenbank Rd: 3288, 3248, 3270, 3283, 3285, 3287, 3289, 3293, 3333

Jockvale Rd: 3232,

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



File Number: D06-03-19-0034

April 2, 2019

Paterson Group
154 Colonnade Road South
Ottawa, Ontario
K2E 7J5
Attn: Mandy Witteman

Sent via email to mwitteman@patersongroup.ca

Dear Mandy Witteman,

**Re: Information Request
3288 Greenbank Road, Ottawa, Ontario ("Subject Property")**

Internal Department Circulation

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

- Waste Services: The subject property is located within 3.5 kilometers of the Trail Waste Facility, 3.5 kilometers of the Plasco Waste Conversion Facility, and 5 kilometers of the Barnsdale YLW
- The City's Environmental Remediation Unit has environmental records on file pertaining to rights of way and/or other properties adjacent to the subject property
 - Visit <https://ottawa.ca/en/city-hall/accountability-and-transparency/accountability-framework/freedom-information-and-protection-privacy/access-information> to submit requests for information under the *Municipal Freedom of Information and Protection of Privacy Act* to submit requests for information under the Municipal Freedom of Information and Protection of Privacy Act..

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.

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Planning, Infrastructure and Economic
Development Department

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

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

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

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

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

- There are 2 activities associated with properties located within 50m of the Subject Property: Activity Numbers 9176 and 13123.

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.

Additional information may be obtained by contacting:

Ontario's Environmental Registry

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

The Ontario Land Registry Office

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

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

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all

information from the HLUI database is provided on an “as is” basis with no representation or warranty by the City with respect to the information’s accuracy or exhaustiveness in responding to the request.

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

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

If you have any further questions or comments, please contact me, Bess MacLaughlin Nakashima, at 613-580-2424 ext. 14743 or HLUI@ottawa.ca

Sincerely,

A handwritten signature in black ink, appearing to read 'B. MacLaughlin', with a long horizontal flourish extending to the right.

Bess MacLaughlin Nakashima

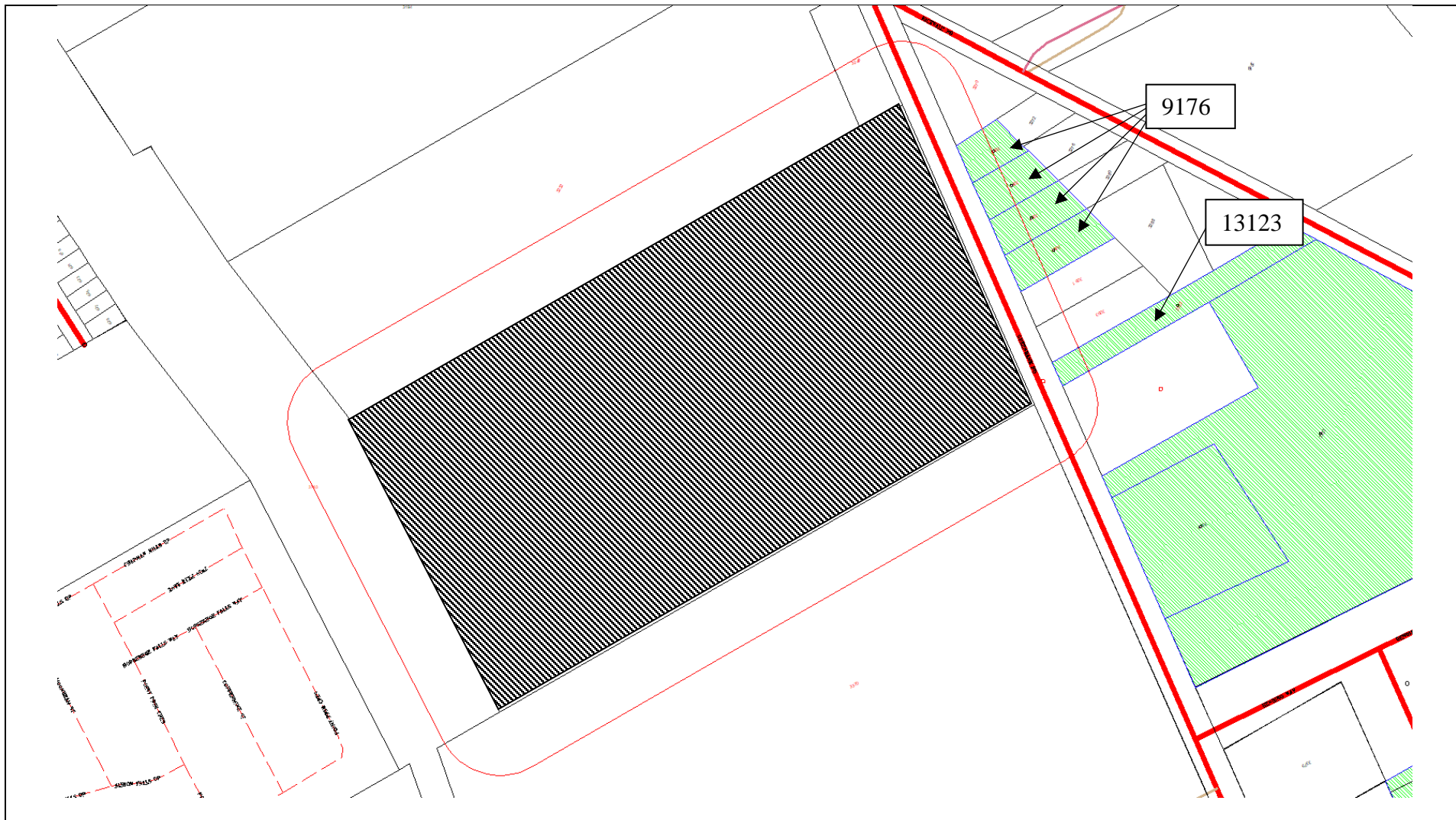
Per:

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

MB/BMN

Attach: 6

cc: File no. D06-03-19-0034




Scale 1: n/a

3288 Greenbank Road
Ottawa, ON
File # D06-03-19-0034
Bess MacLaughlin Nakashima



Overview

ID# = Activity Identification Number

 = Subject Site



CITY OF OTTAWA
HLUI ID: __67993R
AREA (Square Metres): 1454.043

Report: RPTC_OT_DEV0122
Run On: 22 Mar 2019 at: 08:39:33

Study Year
2005

PIN
047320021

Multi-NAIC
N

Multiple Activities
N

Activity ID: 9176 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 4757
Related PINS: 047320021
Name: MEEHAN'S CARPET AND UPHOLSTERY CLEANERS
Address: 3283 GREENBANK ROAD, NEPEAN
Facility Type: Laundries and Cleaners
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3: 2001 Employment Survey

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

Company Name	Year of Operation
MEEHAN'S CARPET AND UPHOLSTERY CLEANERS	c. 2001
Meehan's Carpet and Upholstery Cleaners	c. 1998



CITY OF OTTAWA

HLUI ID: __679FUC

AREA (Square Metres): 1803.367

Report: RPTC_OT_DEV0122

Run On: 22 Mar 2019 at: 08:42:53

Study Year
1998

PIN
047320022

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 9176 Multiple PINS: N
PIN Certainty: 1 Previous Activity ID(s) : 4757
Related PINS: 047320021
Name: MEEHAN'S CARPET AND UPHOLSTERY CLEANERS
Address: 3283 GREENBANK ROAD, NEPEAN
Facility Type: Laundries and Cleaners
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3: 2001 Employment Survey

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

Company Name

MEEHAN'S CARPET AND UPHOLSTERY CLEANERS
Meehan's Carpet and Upholstery Cleaners

Year of Operation

c. 2001
c. 1998



CITY OF OTTAWA
HLUI ID: __679F1S
AREA (Square Metres): 2081.439

Report: RPTC_OT_DEV0122
Run On: 22 Mar 2019 at: 08:43:42

Study Year
1998

PIN
047320024

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 9176 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 4757
Related PINS: 047320021
Name: MEEHAN'S CARPET AND UPHOLSTERY CLEANERS
Address: 3283 GREENBANK ROAD, NEPEAN
Facility Type: Laundries and Cleaners
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3: 2001 Employment Survey

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

Company Name	Year of Operation
MEEHAN'S CARPET AND UPHOLSTERY CLEANERS	c. 2001
Meehan's Carpet and Upholstery Cleaners	c. 1998



CITY OF OTTAWA
HLUI ID: __679F4N
AREA (Square Metres): 2435.283

Report: RPTC_OT_DEV0122
Run On: 22 Mar 2019 at: 08:44:44

Study Year
1998

PIN
047320026

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 9176 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 4757
Related PINS: 047320021
Name: MEEHAN'S CARPET AND UPHOLSTERY CLEANERS
Address: 3283 GREENBANK ROAD, NEPEAN
Facility Type: Laundries and Cleaners
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3: 2001 Employment Survey

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

Company Name	Year of Operation
MEEHAN'S CARPET AND UPHOLSTERY CLEANERS	c. 2001
Meehan's Carpet and Upholstery Cleaners	c. 1998



CITY OF OTTAWA
HLUI ID: __679A4Q
AREA (Square Metres): 4465.599

Report: RPTC_OT_DEV0122
Run On: 22 Mar 2019 at: 08:45:17

Study Year
2005

PIN
047320032

Multi-NAIC
N

Multiple Activities
N

Activity ID: 13123 Multiple PINS: Y
PIN Certainty: 1 Previous Activity ID(s) :
Related PINS: 047320032
Name: ST JOSEPH HIGH SCHOOL
Address: 3333 GREENBANK ROAD, NEPEAN
Facility Type: Elementary and Secondary Education
Comments 1:
Comments 2: St. Joseph High School
Generator Number: ON8832880
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2003 PID

NAICS SIC
611110 0

Company Name	Year of Operation
ST JOSEPH HIGH SCHOOL	c. 2003
ST JOSEPH HIGH SCHOOL	c. 2005

Well ID Number: 7287120
Well Audit Number: Z226860
Well Tag Number:

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	3370 GREENBANK ROAD
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	NEPEAN
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441707.00 Northing: 5012160.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

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

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
13.71 m	0 m	GROUTED 3/4 BENTONITE HOLEPLUG	

Method of Construction & Well Use

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

Status of Well

Abandoned-Other

Construction Record - Casing

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

Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1558

Results of Well Yield Testing

After test of well yield, water was	
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	Y

Draw Down & Recovery

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

Water Details

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

Hole Diameter

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

Audit Number: Z226860

Date Well Completed: December 20, 2016

Date Well Record Received by MOE: May 25, 2017

Updated: June 28, 2018

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Tags

L.P. 706



31G56

GROUND WATER BRANCH

NOV 14 1961 N^o

ONTARIO WATER
RESOURCES COMMISSION

5980

UTM 18 1441735 E

5 50112370 N

Elev. 4 0320

WATER WELL RECORD

Basin 25 | *Carlton*

Township, Village, Town or City *Nepean*

Con. 2 RP Lot 14

Date completed 21 July 61
(day month year)

Address *Jockville*

Casing and Screen Record

Inside diameter of casing *5"*
Total length of casing *26'*
Type of screen _____
Length of screen _____
Depth to top of screen _____
Diameter of finished hole *5"*

Pumping Test

Static level *6*
Test-pumping rate *6* G.P.M.
Pumping level *18*
Duration of test pumping *1 1/2 hr*
Water clear or cloudy at end of test *clear*
Recommended pumping rate *5* G.P.M.
with pump setting of *35* feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
<i>clay</i>	<i>0</i>	<i>10</i>		
<i>hard pan</i>	<i>10</i>	<i>22</i>		
<i>limestone</i>	<i>22</i>	<i>55</i>	<i>5-3</i>	<i>fresh</i>

For what purpose(s) is the water to be used? *home*

Is well on upland, in valley, or on hillside? *upland*

Drilling or Boring Firm *B S DAPHS*

Address *PORT KENNEDY*

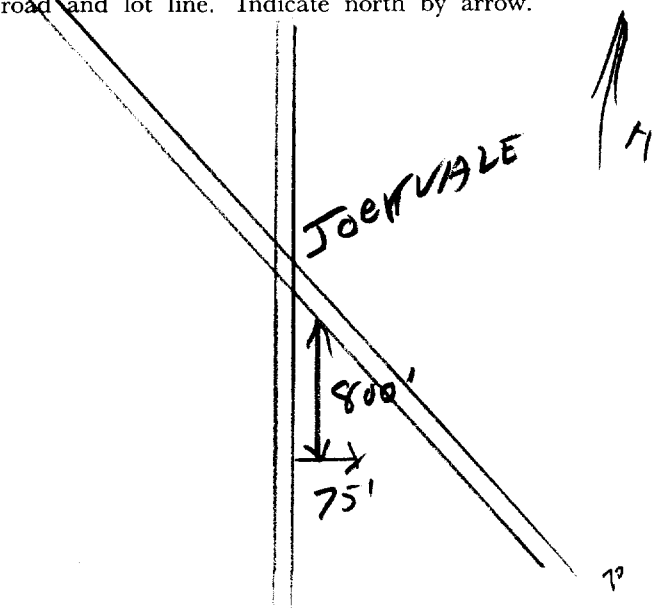
Licence Number *244*

Name of Driller or Borer _____

Address _____
Date *Nov 8/61*
Ben E. Sparks
(Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



Lt-14



The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

p, Village, Town or City..... *Nepean*
 Town or City).....
 s. *Celtic View*

Date Completed Sept 16 1959 Cost of Well (excluding pump).....

Pipe and Casing Record

Pumping Test

Casing diameter(s).....	4	Date.....	Sept 16 / 57
Length(s) of casing(s).....	30	Static level.....	10
Type of screen.....		Pumping level.....	20
Length of screen.....		Pumping rate.....	1200 Gals/hr
Distance from top of screen to ground level.....		Duration of test.....	1 hr
Is well a gravel-wall type?.....	Gravel	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
Quality (hard, soft, contains iron, sulphur, etc.)	32	Fresh	22
Appearance (clear, cloudy, coloured)			
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

[illegible]

Location of Well

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

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

Drilling Firm... J.B. Dufresne #

Address..... 51870 Earling Ave Ottawa

Name of Driller, J. Connelley, Address, 662 - Belmont St.
305

Date: Sept 16 / 54 Licence Number: 30 510

UTM 118 4 41171615 E

R: 51 50 7121417P N

Elef 4 1931210

Basin 1251 11 Carl

County or District 2 RF Part of Lot 14



31256

The Ontario Water Resources Commission Act

GROUND WATER BRANCH
15 No 5992
MAY 21 1963
ONTARIO WATER
RESOURCES COMMISSION

WATER WELL RECORD

Township, Village, Town or City Nepean

Date completed 11 Apr 63
(day month year)

Address 934 Kirkwood Ave Ottawa

Casing and Screen Record

Inside diameter of casing 5"
Total length of casing 45'
Type of screen
Length of screen
Depth to top of screen
Diameter of finished hole 5"

Pumping Test

Static level 14'
Test-pumping rate 10 G.P.M.
Pumping level 14'
Duration of test pumping 3 hrs
Water clear or cloudy at end of test cloudy
Recommended pumping rate 10 G.P.M.
with pump setting of 30' feet below ground surface

Well Log

Overburden and Bedrock Record

clay
boulders & hardpan
gravel

From ft.

To ft.

Depth(s) at which water(s) found

Kind of water (fresh, salty, sulphur)

0 25
25 40
40 45

45 fresh

For what purpose(s) is the water to be used?

household

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

upland

Drilling or Boring Firm

Capital Water Supply

Address 1243 Heron Rd Ottawa

Licence Number 976

Name of Driller or Borer S Huff

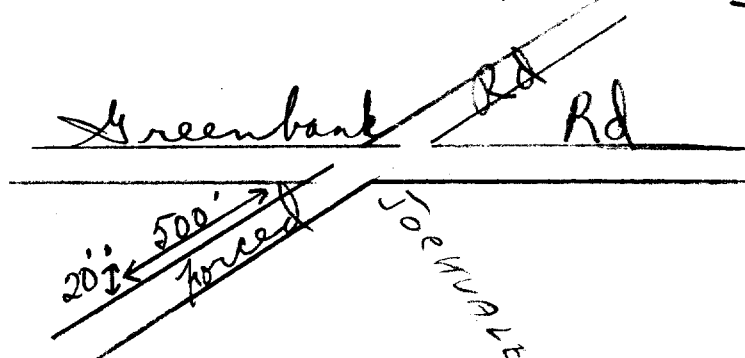
Address

Date Apr 11 1963

Halter Kavanagh
(Signature of Licensed Drilling or Boring Contractor)

Location of Well

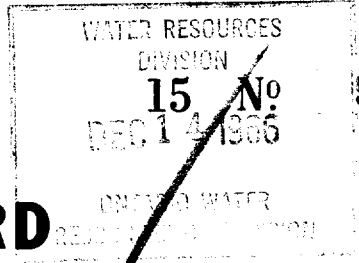
In diagram below show distances of well from road and lot line. Indicate north by arrow.



20



31G5b



UTM 11812 44117110E

5R 501124010N

The Ontario Water Resources Commission Act

Elev. 4R 0320

WATER WELL RECORD

Basin 25111 @ Carl

Township, Village, Town or City Nepean

Con. 2 RF Lot 14

Date completed 9 Aug 1966

Address 50 Furlton Ave Ottawa

Casing and Screen Record

Pumping Test

Inside diameter of casing 5"
 Total length of casing 45'
 Type of screen
 Length of screen
 Depth to top of screen
 Diameter of finished hole 5"

Static level 15'
 Test-pumping rate 5 G.P.M.
 Pumping level 57
 Duration of test pumping 1 hr
 Water clear or cloudy at end of test cloudy
 Recommended pumping rate 5 G.P.M.
 with pump setting of 65' feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
clay + boulders	0	18	72	fresh
hardpan	18	40		
limestone	40	74		

For what purpose(s) is the water to be used?

new house

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

Drilling or Boring Firm Capital Water Supply

Address 1243 14 Ashford Dr

Licence Number 21 58

Name of Driller or Borer H Mains

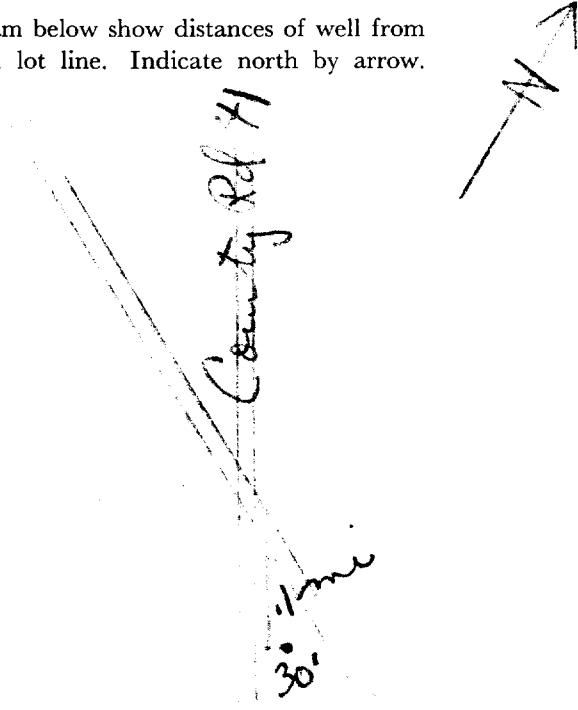
Address

Date Aug 10

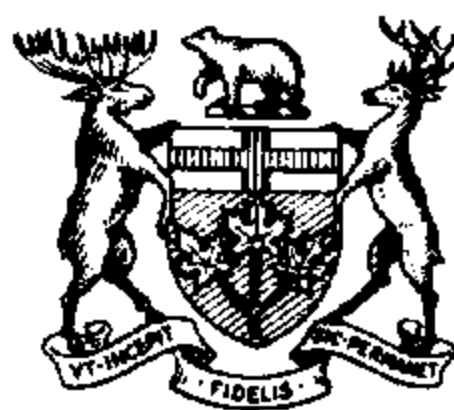
Walter Xavonagh
 (Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



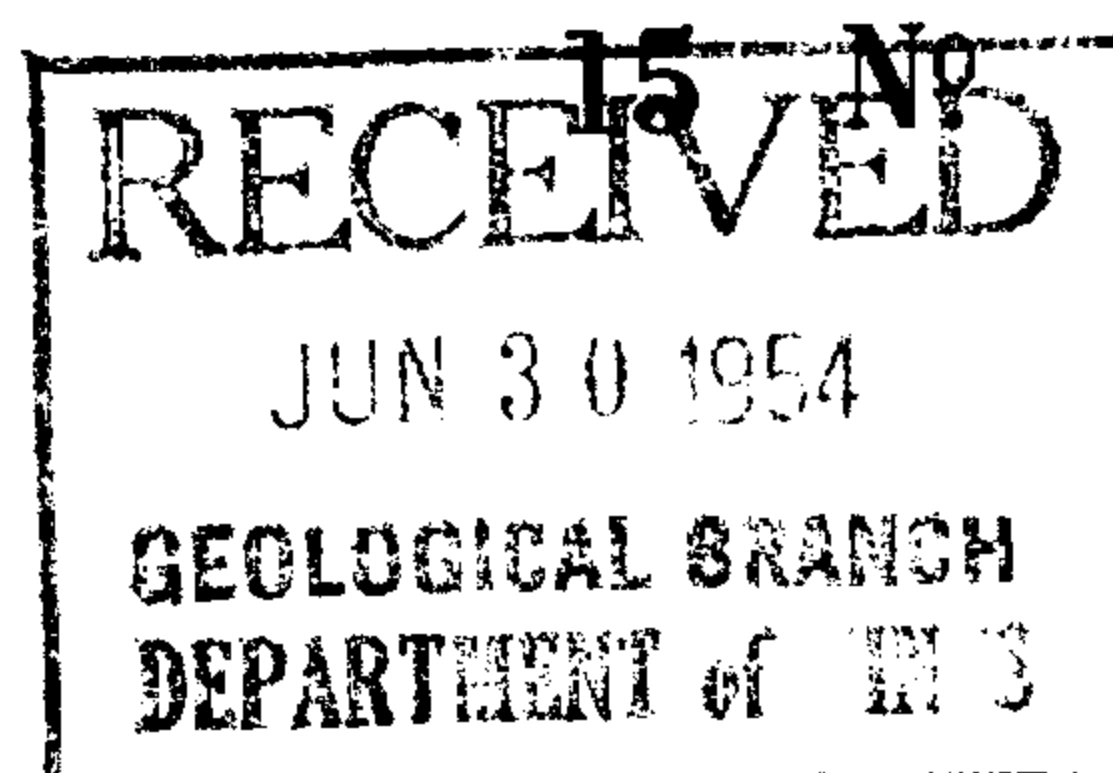
Lot-13



ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario



6043

Water Well Record

County or Territorial District Carterton Township, Village, Town or City Nepesin
Con... 3 HP Lot 13 Roadside Front Record Number (if in Village, Town or City)
Owner... [REDACTED] Address... Jockville
Date Completed... 15 Feb. 54 Cost of Well (excluding pump).....
(day) (month) (year)

Pipe and Casing Record

Pumping Test

Casing diameter(s).....	5"	Date.....	15 Feb 54
Length(s) of casing(s).....	23'	Static level.....	10-12 ft
Type of screen.....		Pumping level.....	14 ft
Length of screen.....		Pumping rate.....	500 GPN
Distance from top of screen to ground level.....		Duration of test.....	25 min
Is we'll a gravel-wall type?.....		Distance from cylinder or bowls to ground level.....	

Water Record

Kind (fresh or mineral).....	fresh	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur, etc.).....	hard			
Appearance (clear, cloudy, coloured).....	clear	52-65	fresh	to 10-12 ft
For what purpose(s) is the water to be used?.....	stock, house			
.....				
How far is well from possible source of contamination?.....	50 ft			
What is the source of contamination?.....	Barn yard			
Enclose a copy of any mineral analysis that has been made of water.....				

Well Log

Overburden and Bedrock Record

From

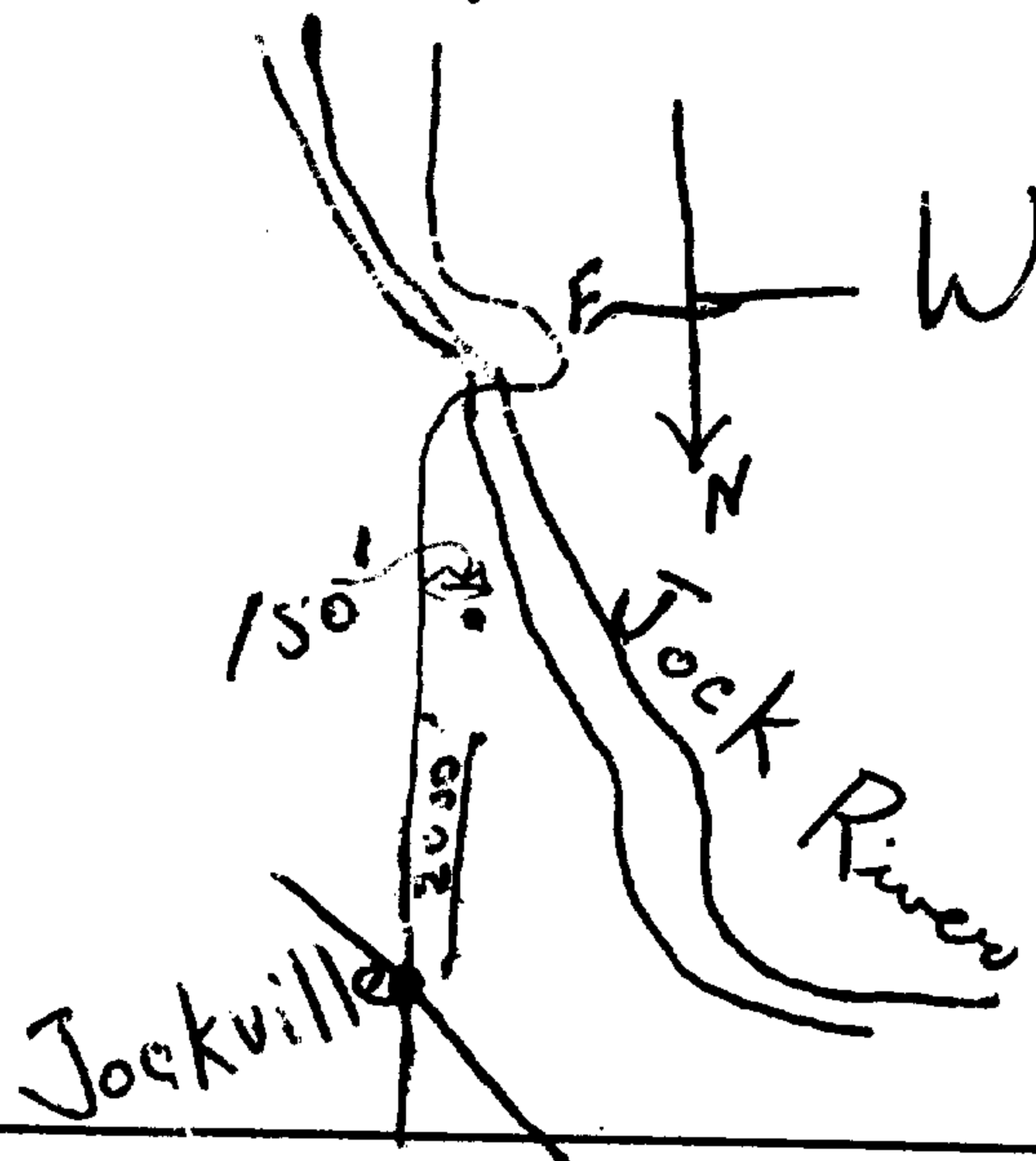
To

0 ft.

1.9.ft.

Location of Well

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



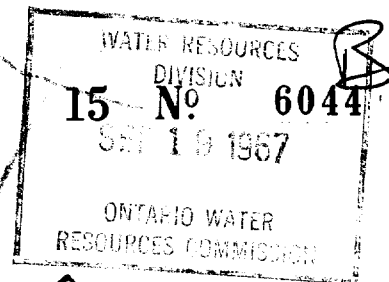
Situation: Is well on upland, in valley, or on hillside? *valley*
 Drilling Firm.....
 Address.....
 Name of Driller *Ben E. Sparks* Address.....
 Date *Feb 16/54* Licence Number *420*

Licence Number... **420**

Signature of Licensee

UTM 11812 44114510E

31656

Elev. 545R 501281710N

The Ontario Water Resources Commission Act

Basin 251 11 Carlton

WATER WELL RECORD

County or District 11 CarltonTownship, Village, Town or City NapanCon. 3 RF Lot 15Date completed 31 July 1967
(day month year)Address Shoosne Ave

Casing and Screen Record

Inside diameter of casing 5"
 Total length of casing 34'
 Type of screen
 Length of screen
 Depth to top of screen
 Diameter of finished hole 5"

Pumping Test

Static level flowing 10' QUIT FLOWING
 Test-pumping rate 10 G.P.M.
 Pumping level 10'
 Duration of test pumping 2 hrs
 Water clear or cloudy at end of test cloudy
 Recommended pumping rate 5 G.P.M.
 with pump setting of 70 feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record

clay with boulders
sand & boulders
limestone
sandstone

From
ft.To
ft.Depth(s) at
which water(s)
foundKind of water
(fresh, salty,
sulphur)0'12'215'fresh12'29'29'200'200'217'

For what purpose(s) is the water to be used?

new houseIs well on upland, in valley, or on hillside?

Drilling or Boring Firm

Capital Water Supply Ltd

Address

14 Ashford Ave
Ottawa 6 Ont

Licence Number

2381

Name of Driller or Borer

M Xavanagh

Address

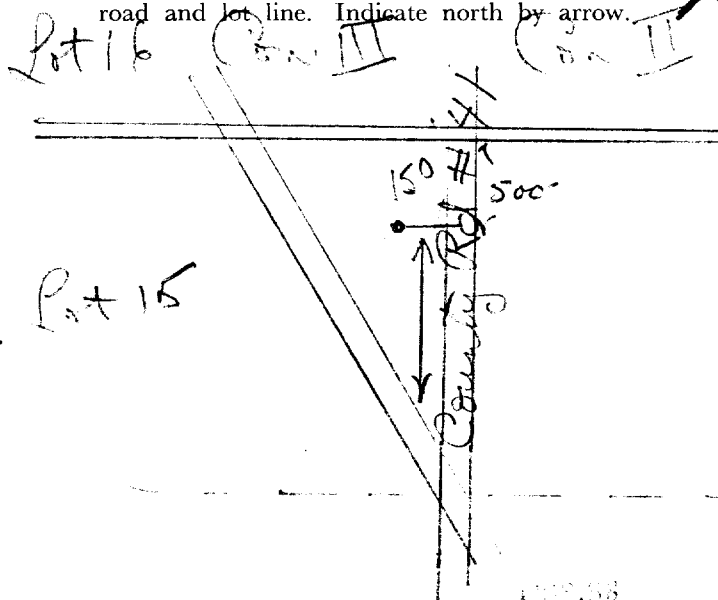
Date

July 31, 1967

(Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



UTM 118 2 44115160 E



31G56

15

No

6045

S R 50126810 N

The Ontario Water Resources Commission Act

Elev. 4 R 03210

WATER WELL RECORD

Basin 25 4 Carleton

Township, Village, Town or City Nepean

Con. 3 R F Lot 15

Date completed 11 Sept 1967

Address

Jockvale Ont.

Casing and Screen Record

Inside diameter of casing 5"

Total length of casing 35'

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 5"

Pumping Test

Static level 18'

Test-pumping rate 10 G.P.M.

Pumping level 60

Duration of test pumping 48 hrs

Water clear or cloudy at end of test clear

Recommended pumping rate 5 G.P.M.

with pump setting of 75' feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record

From ft.

To ft.

Depth(s) at which water(s) found

Kind of water (fresh, salty, sulphur)

clay

clay with small boulders

limestone

0

8

8

32

32

108

106

FRESH

For what purpose(s) is the water to be used?

new house

Is well on upland, in valley or on hillside?

Drilling or Boring Firm

Capital Water Supply Ltd

Address 14 Ashford Dr Ottawa 6 Ont

Licence Number 2381

Name of Driller or Borer A Mainis

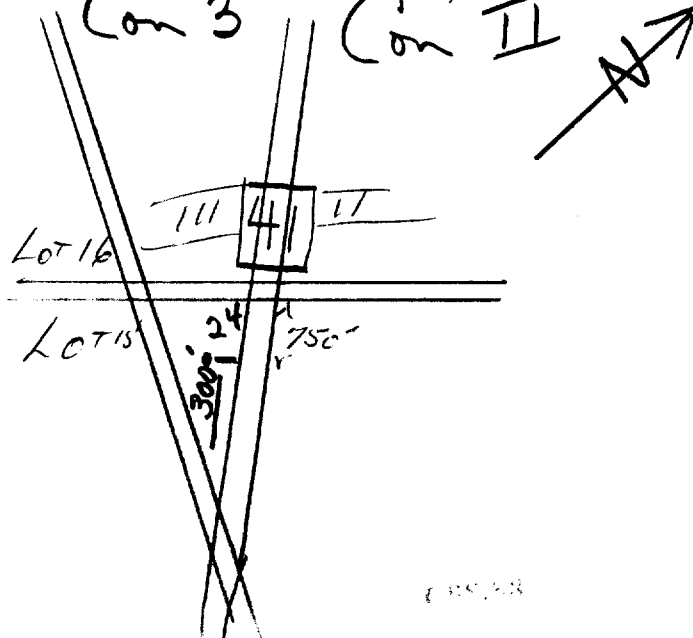
Address

Date Sept 11 1967

(Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



CON. II
 R.F.
 2413
 1509677
 SEP 17 1968
 The Ontario Water Resources Commission Act
 ONTARIO WATER RESOURCES COMMISSION
 WATER WELL RECORD
 118-441200
 4-150112450
 4-0318
 201
 Carleton
 County or District
 TLRP
 Lot #14
 Township, Village, Town or City
 Nepean
 Date completed
 22 July 1968
 9 Majestic Dr.
 Apt 18 Ottawa

Casing and Screen Record

Inside diameter of casing 5"
 Total length of casing 40'
 Type of screen
 Length of screen
 Depth to top of screen
 Diameter of finished hole 5"

Pumping Test

Static level 10'
 Test-pumping rate 5 G.P.M.
 Pumping level 60'
 Duration of test pumping 1 hr
 Water clear or cloudy at end of test cloudy
 Recommended pumping rate 5 G.P.M.
 with pump setting of 75' feet below ground surface

Well Log

Overburden and Bedrock Record

clay & boulders
 hardpan
 limestone

From ft.

To ft.

Depth(s) at which water(s) found

Kind of water (fresh, salty, sulphur)

0'

34'

95'

fresh

34'

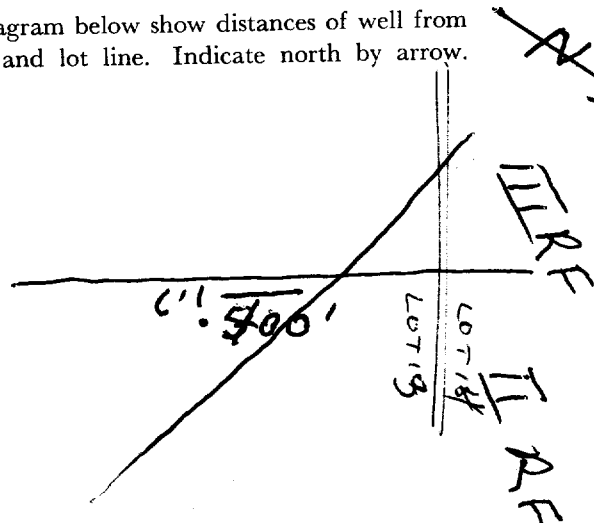
37'

37'

97'

Location of Well

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



For what purpose(s) is the water to be used?

new house

Is well on upland, in valley or on hillside?

Drilling or Boring Firm Capital Water Supply Ltd.

Address 14 Ashford Dr
Ottawa 6

Licence Number 2857

Name of Driller or Borer H. Mains

Address

Date July 22 1968

Walter Xavanagh
(Signature of Licensed Drilling or Boring Contractor)

The Ontario Water Resources Commission Act

WATER WELL RECORD

316/56

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
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11

1510966

MUNICIP
15008

CON.
RF

0.02

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

10	14	1
CON., BLOCK, TRACT, SURVEY, ETC.		

	22	23
LOT	25-27	

Carleton

Nepean

2 R.F.

014

Elm Street Ottawa

DATE COMPLETED

48-53

DAY 21 MO. 10 YR. 70

G 10 100

Re

ELEVATION
103

RC.

BASIN CODE
24

1

11

IV

10

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31	002120513	003921113	0090215						
32	10 14 15	21	32	43	54	65	76	87	98

WATER RECORD

WATER FOUND AT - FEET		KIND OF WATER	
10-13	1 <input checked="" type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	14
	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
15-18	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	19
	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
20-23	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	24
	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
25-28	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	29
	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	
30-33	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	34
	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL	

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
AD-11 57 05	<input checked="" type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input checked="" type="checkbox"/> 4 OPEN HOLE	1.88	0	43 90
17-18	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input checked="" type="checkbox"/> 4 OPEN HOLE	19		20-23 0090
24-25	<input type="checkbox"/> 1 STEEL <input type="checkbox"/> 2 GALVANIZED <input type="checkbox"/> 3 CONCRETE <input checked="" type="checkbox"/> 4 OPEN HOLE	26		27-30

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
			INCHES		FEET	
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN	41-44	80	
				FEET		

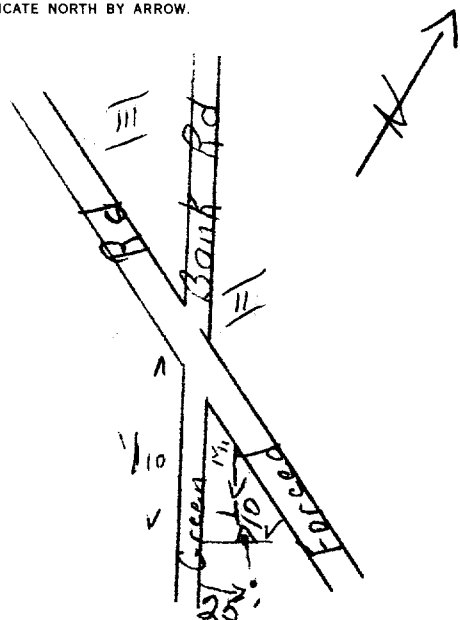
61 PLUGGING & SEALING RECORD

DEPTH SET AT -- FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

PUMPING TEST	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 <input type="checkbox"/> PUMP 2 <input checked="" type="checkbox"/> BAILER			0012		GPM.	01	15-16 HOURS 00 7-18 MINS.
	STATIC LEVEL		25	WATER LEVELS DURING				1 <input checked="" type="checkbox"/> PUMPING 2 <input type="checkbox"/> RECOVERY
	19-21	22-24	15 MINUTES 26-28	30 MINUTES 29-31	45 MINUTES 32-34	60 MINUTES 35-37		
	012 FEET	050 FEET	050 FEET	050 FEET	050 FEET	050 FEET		
IF FLOWING, GIVE RATE			38-41	PUMP INTAKE SET AT		WATER AT END OF TEST		
			GPM.	FEET		1 <input type="checkbox"/> CLEAR 2 <input checked="" type="checkbox"/> CLOUDY		
RECOMMENDED PUMP TYPE			43-45	RECOMMENDED PUMP SETTING		RECOMMENDED PUMPING RATE		46-49
<input type="checkbox"/> SHALLOW <input type="checkbox"/> DEEP							GPM.	
50-53			000.3 GPM./FT. SPECIFIC CAPACITY					

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

<p>FINAL STATUS OF WELL</p>	<p>54</p> <p>1 <input checked="" type="checkbox"/> WATER SUPPLY 2 <input type="checkbox"/> OBSERVATION WELL 3 <input type="checkbox"/> TEST HOLE 4 <input type="checkbox"/> RECHARGE WELL</p>	<p>5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY 6 <input type="checkbox"/> ABANDONED, POOR QUALITY 7 <input type="checkbox"/> UNFINISHED</p>
<p>WATER USE</p>	<p>55-56</p> <p>1 <input checked="" type="checkbox"/> DOMESTIC 2 <input type="checkbox"/> STOCK 3 <input type="checkbox"/> IRRIGATION 4 <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER</p>	<p>5 <input type="checkbox"/> COMMERCIAL 6 <input type="checkbox"/> MUNICIPAL 7 <input type="checkbox"/> PUBLIC SUPPLY 8 <input type="checkbox"/> COOLING OR AIR CONDITIONING 9 <input type="checkbox"/> NOT USED</p>
<p>METHOD OF DRILLING</p>	<p>57</p> <p>1 <input checked="" type="checkbox"/> CABLE TOOL 2 <input type="checkbox"/> ROTARY (CONVENTIONAL) 3 <input type="checkbox"/> ROTARY (REVERSE) 4 <input type="checkbox"/> ROTARY (AIR) 5 <input type="checkbox"/> AIR PERCUSSION</p>	<p>6 <input type="checkbox"/> BORING 7 <input type="checkbox"/> DIAMOND 8 <input type="checkbox"/> JETTING 9 <input type="checkbox"/> DRIVING</p>

CONTRACTOR	NAME OF WELL CONTRACTOR	LICENCE NUMBER
	Capital Water Supply	1558
	ADDRESS	
	14 Ashford Dr Ottawa	
	NAME OF DRILLER OR BORER	LICENCE NUMBER
	Apr Burrows	
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE
	Maureen Lunn	DAY _____ MO _____ YR _____

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	69
	1		1558		0 2 12 70		
	DATE OF INSPECTION		INSPECTOR				
REMARKS:		<div>P. [Signature]</div> <div>W. [Signature]</div>					

OWRC COPY



The Ontario Water Resources Commission Act

WATER WELL RECORD

316/56

Water management in Ontario

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2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

(11)

1512013

MUNICIPALITY 151008

CONTRACTOR RF

C 03

COUNTY OR DISTRICT Carleton Place	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE Appleton	CDN., BLOCK, TRACT, SURVEY, ETC. 3 RF	LOT 015
OWNER (SURNAME FIRST) Heinz Home Improvement	ADDRESS Box 295 Stittsville Ont.	DATE COMPLETED DAY 21 MO 08 YR 72	
UTM ZONE 18	EASTING 441208	NORTHING 5012845	ELEVATION 0315
RC 4	BASIN CODE 26		

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
brown	clay	boulders	packed	0	6
grey	hardpan	gravel sand + boulders	packed	6	47
grey	gravel	sand	loose	47	51
This is a gravel well					

31	990860513	99472141128	005121128
32			

WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER
10-13	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
30-33	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

CASING & OPEN HOLE RECORD			
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
6 1/4	STEEL	188	0
06	GALVANIZED		51
	CONCRETE		
	OPEN HOLE		
17-18	STEEL		20-23
	GALVANIZED		
	CONCRETE		
	OPEN HOLE		
24-25	STEEL		27-30
	GALVANIZED		
	CONCRETE		
	OPEN HOLE		

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH

PLUGGING & SEALING RECORD		
DEPTH SET AT - FEET	MATERIAL AND TYPE	(CEMENT GROUT, LEAD PACKER, ETC.)
FROM TO		
10-13 14-17		
18-21 22-25		
26-29 30-33		

PUMPING TEST METHOD		PUMPING RATE	DURATION OF PUMPING
1 <input checked="" type="checkbox"/> PUMP 2 <input type="checkbox"/> BAILER		0015 GPM	01 15-16 HOURS 00 17-18 MINS
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	1 <input checked="" type="checkbox"/> PUMPING 2 <input type="checkbox"/> RECOVERY
19-21	22-24	15 MINUTES 26-28 30 MINUTES 29-31 45 MINUTES 32-34 60 MINUTES 35-37	
005 FEET	025 FEET	025 FEET 025 FEET 025 FEET 025 FEET	
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	
	GPM	FEET	1 <input checked="" type="checkbox"/> CLEAR 2 <input type="checkbox"/> CLOUDY
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE	
1 <input checked="" type="checkbox"/> SHALLOW 2 <input type="checkbox"/> DEEP	025 FEET	0005 GPM	
50-53	000.8 GPM/FT. SPECIFIC CAPACITY		

FINAL STATUS OF WELL	
1 <input checked="" type="checkbox"/> WATER SUPPLY 2 <input type="checkbox"/> OBSERVATION WELL 3 <input type="checkbox"/> TEST HOLE 4 <input type="checkbox"/> RECHARGE WELL	5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY 6 <input type="checkbox"/> ABANDONED, POOR QUALITY 7 <input type="checkbox"/> UNFINISHED
WATER USE	
1 <input checked="" type="checkbox"/> DOMESTIC 2 <input type="checkbox"/> STOCK 3 <input type="checkbox"/> IRRIGATION 4 <input type="checkbox"/> INDUSTRIAL 5 <input type="checkbox"/> OTHER	5 <input type="checkbox"/> COMMERCIAL 6 <input type="checkbox"/> MUNICIPAL 7 <input type="checkbox"/> PUBLIC SUPPLY 8 <input type="checkbox"/> COOLING OR AIR CONDITIONING 9 <input type="checkbox"/> NOT USED
METHOD OF DRILLING	
1 <input type="checkbox"/> CABLE TOOL 2 <input type="checkbox"/> ROTARY (CONVENTIONAL) 3 <input type="checkbox"/> ROTARY (REVERSE) 4 <input type="checkbox"/> ROTARY (AIR) 5 <input checked="" type="checkbox"/> AIR PERCUSSION	6 <input type="checkbox"/> BORING 7 <input type="checkbox"/> DIAMOND 8 <input type="checkbox"/> JETTING 9 <input type="checkbox"/> DRIVING

LOCATION OF WELL	
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.	
DRILLERS REMARKS:	

NAME OF WELL CONTRACTOR Capital Water Supply Ltd.	LICENCE NUMBER 1558
ADDRESS Box 490 Stittsville Ont.	
NAME OF DRILLER OR FORER Shalter Karanagh	LICENCE NUMBER
SIGNATURE OF CONTRACTOR Shalter Karanagh	SUBMISSION DATE DAY 23 MO 8 YR 72

DATA SOURCE 1	CONTRACTOR 1558	DATE RECEIVED 041072
DATE OF INSPECTION	INSPECTOR X	
REMARKS:		P K
		WI

OWRC COPY



The Ontario Water Resources Act

31 G5b

WATER WELL RECORD

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

1517943

MUNICIP.
15008

CON.
RF

03

CON. BLOCK TRACT SURVEY ETC

Conc. 3

R.F. III	LOG 014 ²⁵⁻²⁷
----------	--------------------------

DATE COMPLETED

48-53

445 Paul Anka Dr., Ottawa, Ontario

DAY 18 MO 03 YR 82

NG
D/ 2599

RC
4

ELEVATION
0320

RC. 4 BASIN CO. 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

OFFICE USE ONLY	DATA SOURCE	58 1	CONTRACTOR	59-62 1558	DATE RECEIVED	63-68 05 10 82	69 80
	DATE OF INSPECTION		INSPECTOR				
	REMARKS:						



Ontario

WATER WELL RECORD

1519006

MUNICIP

COM

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11

COUNTY OR DISTRICT

TOWNSHIP BOROUGH CITY TOWN VILLAGE

CON. BLOCK, TRACT, SURVEY ETC

LOT	15-11
-----	-------

OWNER (SURNAME FIRST)

ADDRESS _____

NAME	RC	ELEVATION	RC	BASIN CODE
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100				

姓名	性别	年龄	职业	住址	联系电话	备注
张明	男	45	教师	XX市XX区XX路XX号	138XXXXXX	
李华	女	32	医生	XX市XX区XX路XX号	139XXXXXX	
王强	男	28	工程师	XX市XX区XX路XX号	137XXXXXX	
赵敏	女	25	护士	XX市XX区XX路XX号	136XXXXXX	
陈伟	男	38	公务员	XX市XX区XX路XX号	135XXXXXX	
周丽	女	22	学生	XX市XX区XX路XX号	134XXXXXX	
吴刚	男	50	农民	XX市XX区XX路XX号	133XXXXXX	
徐娜	女	30	记者	XX市XX区XX路XX号	132XXXXXX	
孙伟	男	42	律师	XX市XX区XX路XX号	131XXXXXX	
郑芳	女	27	会计	XX市XX区XX路XX号	130XXXXXX	
马杰	男	35	程序员	XX市XX区XX路XX号	129XXXXXX	
朱琳	女	29	设计师	XX市XX区XX路XX号	128XXXXXX	
刘涛	男	40	销售经理	XX市XX区XX路XX号	127XXXXXX	
陈静	女	33	心理咨询师	XX市XX区XX路XX号	126XXXXXX	
吴昊	男	26	自由职业者	XX市XX区XX路XX号	125XXXXXX	
徐悦	女	24	模特	XX市XX区XX路XX号	124XXXXXX	
孙磊	男	37	厨师	XX市XX区XX路XX号	123XXXXXX	
郑晓	女	31	翻译	XX市XX区XX路XX号	122XXXXXX	
马飞	男	48	企业家	XX市XX区XX路XX号	121XXXXXX	
朱娜	女	23	歌手	XX市XX区XX路XX号	120XXXXXX	
刘伟	男	39	科学家	XX市XX区XX路XX号	119XXXXXX	
陈芳	女	28	作家	XX市XX区XX路XX号	118XXXXXX	
吴刚	男	41	画家	XX市XX区XX路XX号	117XXXXXX	
徐娜	女	25	舞蹈家	XX市XX区XX路XX号	116XXXXXX	
孙伟	男	36	音乐家	XX市XX区XX路XX号	115XXXXXX	
郑芳	女	27	演员	XX市XX区XX路XX号	114XXXXXX	
马杰	男	43	导演	XX市XX区XX路XX号	113XXXXXX	
朱琳	女	30	制片人	XX市XX区XX路XX号	112XXXXXX	
刘涛	男	44	编剧	XX市XX区XX路XX号	111XXXXXX	
陈静	女	32	制片人	XX市XX区XX路XX号	110XXXXXX	
吴昊	男	29	制片人	XX市XX区XX路XX号	109XXXXXX	
徐悦	女	26	制片人	XX市XX区XX路XX号	108XXXXXX	
孙磊	男	38	制片人	XX市XX区XX路XX号	107XXXXXX	
郑晓	女	34	制片人	XX市XX区XX路XX号	106XXXXXX	
马飞	男	46	制片人	XX市XX区XX路XX号	105XXXXXX	
朱娜	女	24	制片人	XX市XX区XX路XX号	104XXXXXX	
刘伟	男	40	制片人	XX市XX区XX路XX号	103XXXXXX	
陈芳	女	28	制片人	XX市XX区XX路XX号	102XXXXXX	
吴刚	男	42	制片人	XX市XX区XX路XX号	101XXXXXX	
徐娜	女	25	制片人	XX市XX区XX路XX号	100XXXXXX	
孙伟	男	37	制片人	XX市XX区XX路XX号	099XXXXXX	
郑芳	女	27	制片人	XX市XX区XX路XX号	098XXXXXX	
马杰	男	43	制片人	XX市XX区XX路XX号	097XXXXXX	
朱琳	女	30	制片人	XX市XX区XX路XX号	096XXXXXX	
刘涛	男	44	制片人	XX市XX区XX路XX号	095XXXXXX	
陈静	女	32	制片人	XX市XX区XX路XX号	094XXXXXX	
吴昊	男	29	制片人	XX市XX区XX路XX号	093XXXXXX	
徐悦	女	26	制片人	XX市XX区XX路XX号	092XXXXXX	
孙磊	男	38	制片人	XX市XX区XX路XX号	091XXXXXX	
郑晓	女	34	制片人	XX市XX区XX路XX号	090XXXXXX	
马飞	男	46	制片人	XX市XX区XX路XX号	089XXXXXX	
朱娜	女	24	制片人	XX市XX区XX路XX号	088XXXXXX	
刘伟	男	40	制片人	XX市XX区XX路XX号	087XXXXXX	
陈芳	女	28	制片人	XX市XX区XX路XX号	086XXXXXX	
吴刚	男	42	制片人	XX市XX区XX路XX号	085XXXXXX	
徐娜	女	25	制片人	XX市XX区XX路XX号	084XXXXXX	
孙伟	男	37	制片人	XX市XX区XX路XX号	083XXXXXX	
郑芳	女	27	制片人	XX市XX区XX路XX号	082XXXXXX	
马杰	男	43	制片人	XX市XX区XX路XX号	081XXXXXX	
朱琳	女	30	制片人	XX市XX区XX路XX号	080XXXXXX	

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible][illegible]

41 WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER -
10-13 76	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
30-33	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

51 CASING & OPEN HOLE RECORD				
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11	1 <input checked="" type="checkbox"/> STEEL			
	2 <input type="checkbox"/> GALVANIZED			
	3 <input type="checkbox"/> CONCRETE			
	4 <input type="checkbox"/> OPEN HOLE			
17-18	1 <input type="checkbox"/> STEEL			
	2 <input type="checkbox"/> GALVANIZED			
	3 <input type="checkbox"/> CONCRETE			
	4 <input type="checkbox"/> OPEN HOLE			
24-25	1 <input type="checkbox"/> STEEL			
	2 <input type="checkbox"/> GALVANIZED			
	3 <input type="checkbox"/> CONCRETE			
	4 <input type="checkbox"/> OPEN HOLE			

SCREEN	SIZE OF OPENING (SLOT NO.)	DIAMETER	LENGTH
		INCHES	FEET
	MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN	
			FEET

61 PLUGGING & SEALING RECORD			
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)	
FROM	TO		
10-13	14-17		
18-21	22-25		
26-29	30-33		

PUMPING TEST

PUMPING TEST	PUMPING TEST METHOD		PUMPING RATE		15-14		DURATION OF PUMPING	
	1 <input checked="" type="checkbox"/> PUMP 2 <input type="checkbox"/> BAILER		10		GPM		18-16 0 17-18 MINS	
	STATIC LEVEL		WATER LEVEL END OF PUMPING		25		1 <input type="checkbox"/> PUMPING 2 <input type="checkbox"/> RECOVERY	
	10-21		22-24		15 MINUTES		30 MINUTES	
	15 FEET		70 FEET		70 FEET		70 FEET	
	IF FLOWING, GIVE RATE		30-41		PUMP INTAKE SET AT		WATER AT END OF TEST	
	RECOMMENDED PUMP TYPE		GPM		FEET		1 <input type="checkbox"/> CLEAR 2 <input checked="" type="checkbox"/> CLOUDY	
	<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP		RECOMMENDED PUMP SETTING		43-45		RECOMMENDED PUMPING RATE	
						10 GPM		

50-53

FINAL STATUS OF WELL	54 1 <input checked="" type="checkbox"/> WATER SUPPLY 2 <input type="checkbox"/> OBSERVATION WELL 3 <input type="checkbox"/> TEST HOLE 4 <input type="checkbox"/> RECHARGE WELL	5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY 6 <input type="checkbox"/> ABANDONED, POOR QUALITY 7 <input type="checkbox"/> UNFINISHED
	55-56 WATER USE 1 <input checked="" type="checkbox"/> DOMESTIC 2 <input type="checkbox"/> STOCK 3 <input type="checkbox"/> IRRIGATION 4 <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	5 <input type="checkbox"/> COMMERCIAL 6 <input type="checkbox"/> MUNICIPAL 7 <input type="checkbox"/> PUBLIC SUPPLY 8 <input type="checkbox"/> COOLING OR AIR CONDITIONING <input type="checkbox"/> NOT USED
METHOD OF DRILLING	57 1 <input type="checkbox"/> CABLE TOOL 2 <input type="checkbox"/> ROTARY (CONVENTIONAL) 3 <input type="checkbox"/> ROTARY (REVERSE) 4 <input type="checkbox"/> ROTARY (AIR) 5 <input checked="" type="checkbox"/> AIR PERCUSSION	6 <input type="checkbox"/> BORING 7 <input type="checkbox"/> DIAMOND 8 <input type="checkbox"/> JETTING 9 <input type="checkbox"/> DRIVING

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER	
	Henry Mains Well Drilling		3644	
	ADDRESS			
	Box 326, Richmond Ont.			
CONTRACTOR	NAME OF DRILLER OR BORER		LICENCE NUMBER	
	H. Mains			
	SIGNATURE OF CONTRACTOR		SUBMISSION DATE	
			DAY 16 MO. 6 YR. 84	

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.

29.13

Greenbank Dr.

10kn

29m

DRILLERS REMARKS

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-65	66
	DATE OF INSPECTION		INSPECTOR		03 07 84		
REMARKS							

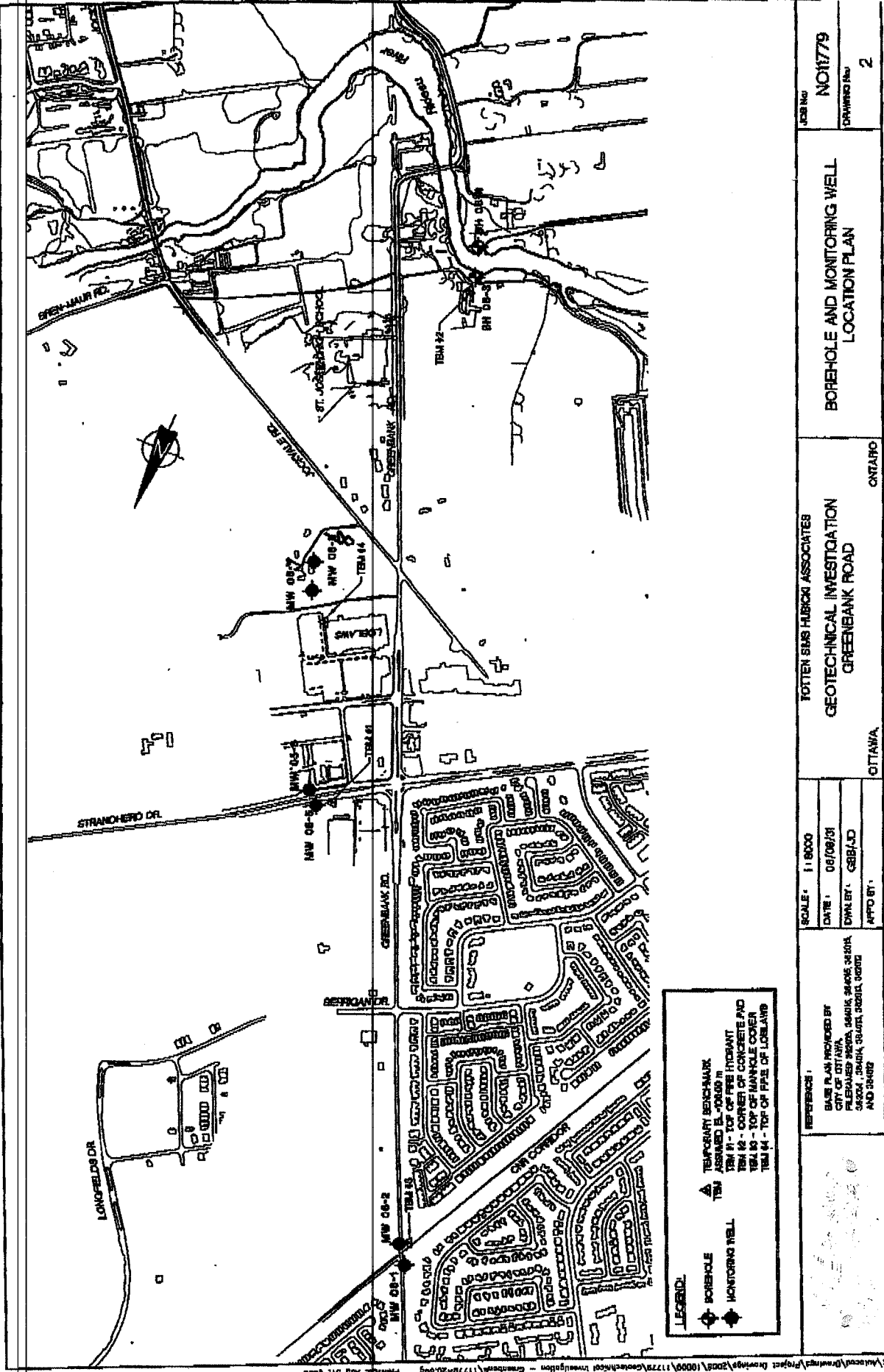
MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0508-4-77 FORM 7

1844

Z 50494

NOV 07 2006



Instructions for Completing Form

page of

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

Well Owner's Information and Location of Well Information

Ministry Use Only

[illegible]

Ottawa Region					Ottawa Region		Lot 2 2 Rideau Front	
RR#/Street Number/Name 3265 Sockvale Rd					City/Town/Village manotik		Site/Compartment/Block/Tract etc. R1A N 4R-21503	
GPS Reading		NAD	Zone	Easting	Northing	Unit Make/Model Socobank	Mode of Operation:	<input type="checkbox"/> Undifferentiated <input type="checkbox"/> Differentiated, specify <input checked="" type="checkbox"/> Averaged
		83	18	441844	5012847			

Log of Overburden and Bedrock Materials (see instructions)

[illegible]

Hole Diameter		
Depth Metres		Diameter
From	To	Centimetres
0	10.66	91.44

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
☐ Clear and sediment free
☐ Other, specify _____

Chlorinated ☒ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth	Metres
			From	To
Casing				
	<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			
Screen				
Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.		
No Casing or Screen				
	<input type="checkbox"/> Open hole			

Test of Well Yield

Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping _____hrs +_____ min	2		2	
Final water level end of pumping _____metres	3		3	
Recommended pump type. <input type="checkbox"/> Shallow <input type="checkbox"/> Deep	4		4	
Recommended pump depth. _____metres	5		5	
Recommended pump rate. (litres/min)	10 15		10 15	
If flowing give rate - (litres/min)	20 25		20 25	
If pumping discontin- ued, give reason.	30 40 50 60		30 40 50 60	

Plugging and Sealing Record

☐ Annular space ☒ Abandonment

Depth set at - Metres		Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
From	To		
0	9.8	Clean Clay	9 cm.
9.8	10.66	Hole Plug Bentonite	12 Bags

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 type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Not used	
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	

Final Status of Well

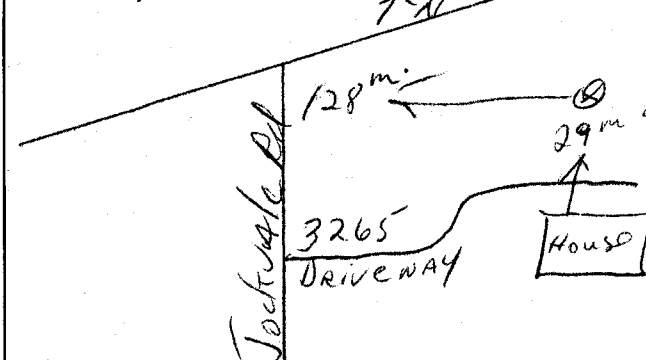
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input checked="" type="checkbox"/> Abandoned, (Other)
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	<i>Not in use</i>
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	

Well Contractor/Technician Information

Name of Well Contractor <i>RAYMOND PUMPS + WELL</i>	Well Contractor's Licence No. <i>7260</i>
Business Address (street name, number, city etc.) <i>147 MAIN ST. ST-ALBERT ONT</i>	
Name of Well Technician (last name, first name) <i>JACQUES RAYMOND</i>	Well Technician's Licence No. <i>T-0204</i>
Signature of Technician/Contractor <i>[Signature]</i>	Date Submitted <div> <div>YYYY</div> <div>MM</div> <div>DD</div> </div> <i>2007 01 09</i>

Location of Well

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



Audit No. z 52522	Date Well Completed YYYY MM DD 2007 01 03
Was the well owner's information package delivered? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Delivered YYYY MM DD 2007 01 03

Ministry Use Only

Data Source			Contractor 7260				
Date Received	YYYY	MM	DD	Date of Inspection	YYYY	MM	DD
JAN 25 2007							
Remarks			Well Record Number				

Measurements recorded in: ☐ Metric ☒ Imperial

Page _____ of _____

Well Owner's Information

First Name <i>City of Ottawa</i>	Last Name / Organization <i>OTTAWA</i>	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) <i>110 Laurier Ave. West</i>	Municipality <i>Ottawa</i>	Province <i>Ontario</i>	Postal Code <i>K1P1J1</i>
Telephone No. (inc. area code) <i>6613 5802400</i>			

Well Location

Address of Well Location (Street Number/Name) <i>Riocan Drive</i>	Township <i>Nepean</i>	Lot <i>P4 Lot 14</i>	Concession <i>Con 2</i>
County/District/Municipality <i>Ottawa Region</i>	City/Town/Village <i>Ottawa</i>	Province Ontario	Postal Code <i>K1P1J1</i>
UTM Coordinates NAD <i>83</i> <i>184420425012801</i>	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
	<i>Bentonite</i>	<i>Hole Plug 1 1/2 Bag</i>		<i>0 35 Ft</i>
	<i>Abandoned 1 1/4 inch diam Bore hole to 35 Ft depth</i>			
	<i>Serial No. BH-08-49</i>			

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

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

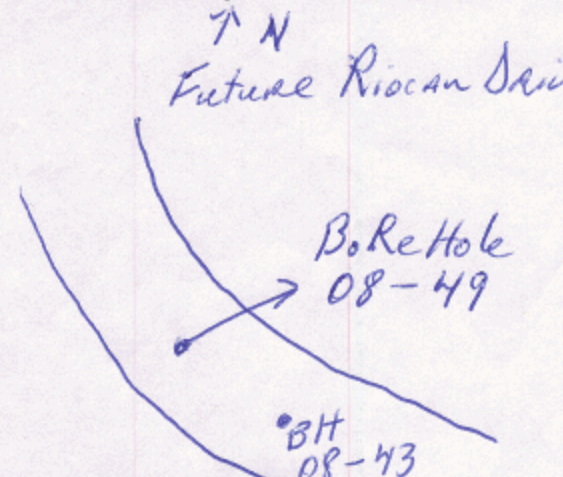
Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	
				<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input checked="" type="checkbox"/> Abandoned, other, specify <i>not use</i> <input type="checkbox"/> Other, specify _____

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

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

Well Contractor and Well Technician Information			
Business Name of Well Contractor <i>Raymond Pump & Well</i>		Well Contractor's Licence No. <i>7260</i>	
Business Address (Street Number/Name) <i>Box 18 147, main st, St-Albert</i>		Municipality <i>Nation</i>	
Province <i>Ontario</i>	Postal Code <i>K0A3L0</i>	Business E-mail Address	
Bus. Telephone No. (inc. area code) <i>613 9872399</i>		Name of Well Technician (Last Name, First Name) <i>RAYMOND PUMP</i>	
Well Technician's Licence No. <i>0264</i>		Signature of Technician and/or Contractor <i>[Signature]</i>	
		Date Submitted <i>20100105</i>	

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)
If pumping discontinued, give reason: Static Level	1		1
	2		2
Pump intake set at (m/ft)	3		3
Pumping rate (l/min / GPM)	4		4
Duration of pumping ____ hrs + ____ min	5		5
Final water level end of pumping (m/ft)	10		10
If flowing give rate (l/min / GPM)	15		15
Recommended pump depth (m/ft)	20		20
Recommended pump rate (l/min / GPM)	25		25
Well production (l/min / GPM)	30		30
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	40		40
	50		50
	60		60

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

Comments:

Ministry Use Only	
Audit No. <i>2099949</i>	Received <i>FEB 02 2010</i>
Well owner's information package delivered <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Package Delivered <i>20100105</i> Date Work Completed <i>20100105</i>

Measurements recorded in: ☐ Metric ☒ Imperial

Page of

Well Owner's Information

First Name <i>City of</i>	Last Name / Organization <i>Ottawa</i>	E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) <i>110 Laurier Ave. West</i>	Municipality <i>Ottawa</i>	Province <i>Ontario</i>	Postal Code <i>K1P5</i>	Telephone No. (inc. area code) <i>166135802400</i>

Well Location

Address of Well Location (Street Number/Name) <i>Future Chapman Mills Drive</i>			Township <i>Nepean</i>		Lot <i>P4 Lot 14</i>	Concession <i>Con 2</i>	<i>Rideau Front</i>
County/District/Municipality <i>Ottawa Region</i>			City/Town/Village <i>Ottawa</i>		Province Ontario		Postal Code <i>K1P1J1</i>
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number		Other	
NAD	83	<i>18442002</i>	<i>5012868</i>				

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
	Bentonite	Hole Plug	1 $\frac{3}{4}$ Bag $\frac{7}{8}$	0	35 Ft
	Abandoned 1 $\frac{1}{4}$ inch diam. Test hole				
	Serial No. BH-08-42B				

Annular Space

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

Method of Construction

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

Well Use

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

Construction Record - Casing

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

Status of Well

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

Construction Record - Screen

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

Water Details

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

Hole Diameter

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

Well Contractor and Well Technician Information

Business Name of Well Contractor <i>Raymond Pump & Well</i>		Well Contractor's Licence No. <i>7260</i>
Business Address (Street Number/Name) <i>Box 18, 147 Main St. St-Albert</i>		Municipality <i>NATION</i>
Province	Postal Code	Business E-mail Address

Ontario K0A3C0	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
6139872399	RAYMOND JACQUES
Well Technician's Licence No.	Signature of Technician and/or Contractor Date Submitted
0264	<i>Raymond Jacques</i> 20100105

Results of Well Yield Testing

Results of Well Field 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	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				

Map of Well Location

Please provide a map below following instructions on the back.

Future
Chapman Mills Drive

Comments:

Well owner's information package delivered	Date Package Delivered 20100105
<input type="checkbox"/> Yes	Date Work Completed
<input checked="" type="checkbox"/> No	20100105

Ministry Use Only
Audit No. **Z 099950**
FEB 02 2010
Receiver

Measurements recorded in: ☐ Metric ☒ Imperial

Page _____ of _____

Well Owner's Information

First Name <i>City of</i>	Last Name / Organization <i>OTTOWA</i>	E-mail Address	<input type="checkbox"/> Well Constructed by Well Owner
Mailing Address (Street Number/Name) <i>110 Laurier Ave. West</i>	Municipality <i>OTTOWA</i>	Province <i>Ontario</i>	Postal Code <i>K1P 1J1</i>
Telephone No. (inc. area code) <i>613 580 2400</i>			

Well Location

Address of Well Location (Street Number/Name) <i>Future Chapman Mills Drive</i>	Township <i>Nepean</i>	Lot <i>Pt of Lot 14</i>	Concession <i>Con 2 Front</i>
County/District/Municipality <i>OTTOWA Region</i>	City/Town/Village <i>OTTOWA</i>	Province <i>Ontario</i>	Postal Code <i>K1P 1J1</i>
UTM Coordinates NAD <i>83</i> <i>18442004</i> <i>5012869</i>	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
	<i>Bentonite</i>	<i>Hole Plug</i>	<i>2 Bags 3/8</i>	<i>0</i>	<i>38 Ft</i>
	<i>Abandoned 1 1/4 inch diam Test hole</i>				
	<i>Serial NO = BH-08-42A</i>				

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

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

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

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

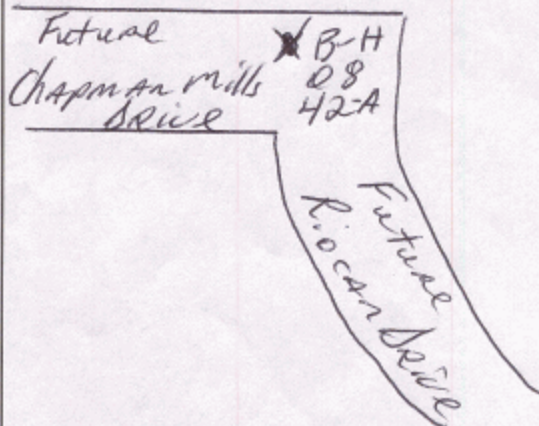
Water Details	Hole Diameter
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft) From
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	To
Water found at Depth (m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Diameter (cm/in)

Business Name of Well Contractor <i>Raymond Pump + well</i>	Well Contractor's Licence No. <i>260</i>
Business Address (Street Number/Name) <i>Box 18, 147 main st, St-Albert</i>	Municipality <i>NATION</i>
Province <i>Ontario</i>	Postal Code <i>K0A 3C0</i>
Business Telephone No. (inc. area code) <i>613 987 2399</i>	Name of Well Technician (Last Name, First Name) <i>Raymond Jacques</i>
Well Technician's Licence No. <i>0264</i>	Signature of Technician and/or Contractor <i>Raymond</i>
Date Submitted <i>20100105</i>	

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

Map of Well Location

Please provide a map below following instructions on the back.



Well owner's information package delivered <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered <i>20100105</i>	Date Work Completed <i>20100105</i>
Ministry Use Only		
Audit No. <i>2099951</i>		
Received <i>FEB 02 2010</i>		

Measurements recorded in: ☐ Metric ☒ Imperial

Page of

Well Owner's Information

First Name <i>City of</i>		Last Name / Organization <i>Ottawa</i>		E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner	
Mailing Address (Street Number/Name) <i>Ottawa</i> <i>110 LAURIER Ave West</i>		Municipality <i>Ottawa</i>	Province <i>Ontario</i>	Postal Code <i>K1P5</i>	Telephone No. (inc. area code) <i>166135802400</i>		

Well Location

Address of Well Location (Street Number/Name) <i>Future Chapman mills drive</i>			Township <i>Nepean</i>		Lot <i>Pt of Lot 14</i>	Concession <i>Con 2</i>	<i>Rideau Front</i>	
County/District/Municipality <i>Ottawa Region</i>			City/Town/Village <i>Ottawa</i>		Province Ontario		Postal Code 	
UTM Coordinates	Zone	Easting	Northing		Municipal Plan and Sublot Number			Other
NAD	8	3	18	44	19	06	5012870	

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
			Bentonite Hole Plug 2 Bag $\frac{3}{8}$	0	40Ft
			Abandoned $1\frac{1}{2}$ inch diam Test hole		
			Serial No. = BH-08-50		

Annular Space

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

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, specify _____

Well Use

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

Construction Record - Casing

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

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☒ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☒ Abandoned, other, specify
NOT in use
☐ Other, specify

Construction Record - Screen

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

Water Details

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

Hole Diameter

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

Well Contractor and Well Technician Information

Business Name of Well Contractor <i>Raymond Pump & well</i>		Well Contractor's Licence No. <i>7 2 6 0</i>	
Business Address (Street Number/Name) <i>Box 18, 147 Main St, St-Albert</i>		Municipality <i>Nation</i>	
Province <i>Ontario</i>	Postal Code <i>K0A3C0</i>	Business E-mail Address	
Bus. Telephone No. (inc. area code) <i>613 987 2399</i>	Name of Well Technician (Last Name, First Name) <i>RAYMOND JACQUES</i>		
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted

Results of Well Yield Testing

Results of Well Field 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	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				

Map of Well Location

Please provide a map below following instructions on the back.

~~X~~ Future Chapman Mills Drive
BH-08-50

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
	Date Work Completed	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	20100105 20100105	Audit No. Z 099940 FEB 02 2010 Received

Measurements recorded in: ☒ Metric ☐ Imperial

Address of Well Location (Street Number/Name)				Township		Lot		Concession	
3380 Greenbank rd									
County/District/Municipality				City/Town/Village				Province	
				Nepean				Ontario	
UTM Coordinates				Zone		Easting		Northing	
NAD 83				18		441914		5012119	
				Municipal Plan and Sublot Number				Other	

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

[illegible]

Depth Set at (m/ft)		Annular Space	Volume Placed
From	To	Type of Sealant Used (Material and Type)	(m³/ft³)
.05	1.3m	Bentonite	.25m³

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

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		<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 checked="" type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply
			From	To	
15.86	steel	.48	+ .5m	1.3m	
10.0	steel	.48	1.3m	unknown	

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

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

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

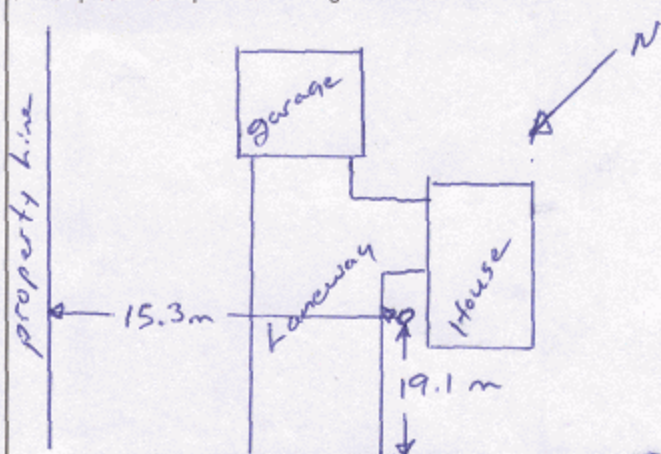
Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
H.O. Wright + Sons Ltd		6 3 5 7	
Business Address (Street Number/Name)		Municipality	
Box 129 2383 Church St North Gower			
Province	Postal Code	Business E-mail Address	
Ontario	K0A2T0		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
6 1 3 4 8 9 3 3 7 2		Wilson, Scott	
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
1 4 4 4	Scott Wilson		20110628

Results of Well Yield Testing

Results of Well Field 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	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
	10		10	
Final water level end of pumping (m/ft)	15		15	
	20		20	
If flowing give rate (l/min / GPM)	25		25	
	30		30	
Recommended pump depth (m/ft)	40		40	
	50		50	
Recommended pump rate (l/min / GPM)	60		60	
Well production (l/min / GPM)				
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				

Map of Well Location

Please provide a map below following instructions on the back.



Comments: well extension to above ground

Well owner's information package delivered	Date Package Delivered	Ministry Use Only						
	<table border="1"> <tr> <td>Y</td><td>Y</td><td>Y</td><td>Y</td><td>M</td><td>M</td><td>D</td><td>D</td> </tr> </table>		Y	Y	Y	Y	M	M
Y	Y	Y	Y	M	M	D	D	
<input type="checkbox"/> Yes <input type="checkbox"/> No	Date Work Completed	Audit No. z 131380 JUL 13 2011 Received						
	20110628							

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

POSITION

Intermediate Environmental Engineer

EDUCATION

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

MEMBERSHIPS & AWARDS

Ontario Professional Engineers Association (EIT)
NSERC Industry R&D Scholarship

EXPERIENCE

2018 – Present

Paterson Group Inc.

Consulting Engineers
Geotechnical and Environmental Division
Environmental Engineer

2014 – 2015

Thurber Engineering Limited

Oil Sand Tailings Group
Tailings Engineer

2009 – 2014

Carleton University

Department of Civil & Environmental Engineering
Research Engineer, Research Assistant & Teaching Assistant

2008 – 2009

SLR Consulting Limited

Contaminated Sites
Junior Environmental Engineer

SELECTED LIST OF PROJECTS

Phase I & II Environmental Site Assessments – NRC, Kingston
Remediation – National Capital Region, Saskatchewan
Multi-lift and dry-stacking pilot programs – Northern Alberta
Polymer amended oil sand tailings – Northern Alberta
Hydraulic cut-off wall – Allen, Saskatchewan
Cemented paste backfill systems – Northern Ontario

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Services

POSITION

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

EDUCATION

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

MEMBERSHIPS

Ottawa Geotechnical Group
Professional Engineers of Ontario

EXPERIENCE

1991 to Present

Paterson Group Inc.

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

SELECT LIST OF PROJECTS

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