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Phase I Environmental Site Assessment
360 Bobolink Ridge (Block 203 – Fernbank Village)
Ottawa, Ontario

Prepared For

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June 2, 2017

Report: PE4034-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Canadian Rental Development Services Inc. to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of 360 Bobolink Ridge (Block 203 – Fernbank Village), in the City of Ottawa, Ontario. The purpose of this Phase I – Environmental Site Assessment 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 properties.

Based on historical searches, the lot has been undeveloped since 1945 and has always been vacant or used for agriculture.

Surrounding properties historically consisted of agricultural fields and undeveloped treed lands. The historical review did not identify any potentially contaminating activities (PCAs) on the subject site, however, a former railway line was identified to the northwest. Based on its location, this PCA is not considered an environmental concern to the subject site.

Following the historical review, a site visit was conducted. The subject site is currently an undeveloped grass covered lot with one gravel entrance and a gravel road connecting Robert Grant Avenue and Livery Street. No structures were visible on the subject site. Neighbouring properties to the north, west and south were observed to be vacant. Neighbouring properties to the east were identified as residential dwellings. The site visit did not identify any PCAs or APECs.

Conclusion

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

1.0 INTRODUCTION

At the request of Canadian Rental Development Services Inc., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of 360 Bobolink Ridge (Block 203 in Fernbank Village), 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 Pierre Guindon of Canadian Rental Development Services Inc. Canadian Rental Development Services Inc offices are located at 201-320 March Road, Ottawa, Ontario. Mr. Guindon can be reached by telephone at (613) 797-1076.

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

2.0 PHASE I PROPERTY INFORMATION

Address:	360 Bobolink Ridge – Ottawa, Ontario.
Legal Description:	Part of Lot 28, Concession 10, Township of Goulbourn, now in the City of Ottawa; Block 203 – Fernbank Village.
Property Identification Number:	04450-2006
Location:	The subject site is located on the northeast side of Robert Grant Avenue and southwest of Livery Street, Ottawa.
Latitude and Longitude:	45° 16' 24.25" N, 75° 53' 35.35" W;

Site Description:

Configuration:	Rectangular.
Site Area:	1.501 hectares.
Zoning:	AM [2152], arterial mainstreet zone.
Current Use:	The subject site is currently undeveloped.
Services:	The subject site is situated by municipally serviced area.

3.0 SCOPE OF INVESTIGATION

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

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

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

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

First Developed Use Determination

According to the city directories and aerial photos the lot has never been developed.

Fire Insurance Plans

Fire insurance plans (FIPs) are not available for the area of the subject site.

City of Ottawa Street Directories

Suburban Ottawa city directories from 2000 to 2011 at the National Archives were reviewed in approximate 10 year intervals for the subject site and properties located within the Phase I ESA study area. Directories prior to these dates are not available. From 2000 to 2011, the subject site was not listed in the directories. It is possible that the property was formerly listed under a different address. Adjacent properties were not listed in the city directories.

Property Ownership

Paterson contacted Lépine Corporation, the purchaser, in order to determine the historical property owners. Lépine Corporation deferred to EQ Homes of The Regional Group for ownership information. According to information provided by an EQ Homes representative, Abbott-Fernbank Holdings Inc, has owned the property since 2008. Prior to 2008, Brookfield Homes owned the property. Historically, the property was used for agriculture and had several owners.

Plan of Survey

A survey plan dated July 30, 2013, and prepared by Annis, O'Sullivan, Vollebakk Ltd., was provided to Paterson for review. A copy, which identifies Block 203 is provided in Appendix 1.

4.2 Environmental Source Information

Environment and Climate Change Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on May 15, 2017. The subject site was 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 were identified in the Phase I study area.

Ontario Ministry of Environment (MOECC) Instruments

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOECC issued instruments for the site. The MOECC search results did not find any records related to the subject site. A copy of the response has been included in Appendix 2.

MOECC Coal Gasification Plant Inventory

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

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. The MOECC search results did not find any records related to the subject site. A copy of the response has been included in Appendix 2.

MOECC Waste Management Records

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. The MOECC search results did not find any records related to the subject site. A copy of the response has been included in Appendix 2..

MOECC Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions have been submitted to the MOECC. The MOECC search results did not find any records related to the subject site. A copy of the response has been included in Appendix 2.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. One Record of Site Condition (RSC) was filed for a neighbouring property, located southeast of the subject site at 5786 Fernbank Road. Based on the distance from the subject site, this property is not considered to pose an environmental risk.

MOECC Waste Disposal Site Inventory

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

Areas of Natural Significance Interest (ANSI)

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on May 15, 2017. The search did not reveal any natural features or areas of natural significance within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on May 15, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. At the time of issuance of this report, the TSSA search results had not been received. A copy of the response will be forwarded to the client if it contains any pertinent information.

City of Ottawa Landfill Document

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

Former Industrial Sites

The report entitled “Mapping and Assessment of Former Industrial Sites, City of Ottawa” was also reviewed. The subject site was not listed in the database of former industrial sites. No former industrial site was identified in the study area.

Previous Environmental Reports

A review of environmental projects in the area of the subject land completed by Paterson Group not identify and issues considered to pose a risk to the subject land.

4.3 Physical Setting Sources

Aerial Photographs

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

- | | |
|------|---|
| 1945 | The subject property and surrounding lands appear undeveloped and used for agriculture. To the northwest of the property a rail line is visible along the alignment of the current TransCanada Trail. Farmsteads are visible along Fernbank Road, to the south. |
| 1955 | No significant changes have been made to the subject or to neighbouring properties |
| 1975 | No significant changes have been made to the subject site or adjacent properties. |
| 1985 | No significant changes appear to have been made to the subject property, which still appears to be undeveloped and used for agriculture. Further northwest, past the railway line, residential dwellings are visible. |

-
- | | |
|------|---|
| 1996 | No significant changes have been made to the subject site. Neighbouring properties to the southwest have been developed for residential purposes. |
| 2002 | No significant changes have been made to the subject. Neighbouring properties to the west have been developed for residential and commercial purposes. |
| 2014 | (City of Ottawa Website) Grass and trees have been removed on the subject site. No significant changes have been made to the subject site. Neighbouring properties to west have been developed for residential and commercial purposes. Properties to the east and south have been developed or are being developed for residential use. Roads have been developed to the south and east. No other significant changes have been made to the subject site or adjacent properties. |

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

Topographic Maps

Topographic maps were obtained from Natural Resources Canada - The Atlas of Canada website. The topographic maps indicate that the regional topography in the area of the subject site is generally flat. No environmental concerns were identified on the topographic mapping. An illustration of the referenced topographic map is present on Figure 2 - Topographic Map following the body of this report.

Physiographic Maps

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

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on the information from NRCAN, bedrock in the area of the site consists primarily of interbedded

limestone and dolomite of the Gull River formation. Based on the maps, the thickness of overburden ranges from 3 to 10 m and consists of glacial till deposits.

Water Well Records

A search of the MOECC's web site for all drilled well records within 250 m of the subject site was conducted on May 15, 2017. The search returned 5 well records within the Phase I study area. No water well records were found on the subject site. The search also found groundwater monitoring wells located to the southwest and north of the subject property. Some of the water well records within the search radius have been included as an appendix.

Water Bodies and Areas of Natural Significance

There are no areas of natural and scientific interest or water bodies on the subject property or within the study area.

5.0 INTERVIEWS

Property Owner Representative

Mr. Pierre Guidon, a representative of Lépine Corporation, was contacted to inquire about the subject property.

Mr. Guidon indicated that he is not aware of any environmental issues related to the subject property.

Developer

Mr. Josh Kardish, a representative of EQ Homes, was also contacted to inquire about the subject property.

Mr. Kardish indicated that fill on the property was brought by builders for backfill purposes.

Engineer

Mr. Mark Bissett, an engineer with Novatech, was also contacted to inquire about the subject property.

Mr. Bissett informed Paterson that the fill on the subject site is suitable for backfill and was locally sourced. Mr. Bissett also confirmed that it was brought to the site by builders.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on May 9, 2017. Weather conditions were overcast, with a temperature of approximately 7 °C. Mr. Marek Moroz from the Environmental Department of Paterson Group conducted the site visit. 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 assessment.

6.2 Specific Observations at the Phase I Property

Buildings and Structures

The site was undeveloped at the time of the site visit.

Below Ground Structures

No below ground structures were found at the time of the site visit.

Portable Water Source

The subject property is currently not serviced, however, municipal services are present in the local area.

Underground Utilities

No underground utilities were noted during the site visit on the subject site.

Ground Surface

The ground surface across the majority of the property consisted of fill material and grass, with minor other small vegetation with one gravel entrance and a gravel road on the northwestern side. The fill material consisted of a mix of rock fragments, sand and soil. Paterson was informed that the fill material was locally sourced.

No areas of stained soil were observed on the property. No visibly stressed vegetation was observed. The standing water on the site appeared clear, with no visible sheen on its surface.

Railway Lines

No railway lines were observed on the subject site or within the Phase I ESA study area.

Historically, a railway line ran southwest-northeast and was located in the current location of the TransCanada Trail, 105 m to the northwest of the subject site. This former railway line is considered to represent a potentially contaminating activity. However, based on its location, it does not represent an area of potential environmental concern (APEC).

Polychlorinated Biphenyls (PCBs)

A pad mounted transformer was observed to the west of the subject site along Robert Grant Avenue. At the time of assessment no leaks, staining/discolouration or dead grass beneath the pole was observed. The transformer is not considered to be an environmental concern.

Site Features

The subject site is currently an empty soil and grass covered lot with one gravel entrance and a gravel road along the northwestern portion of the property connecting Livery Street and Robert Grant Avenue. Adjacent properties to the subject site are approximately at grade with respect to the subject site. Robert Grant Avenue is slightly elevated with respect to the subject site. Site drainage consists of natural runoff towards the northwest and Livery Street or infiltration in grass, gravel and soil covered areas.

No drinking water wells were identified on the subject site by the MOECC well record website or during the site visit. No private sewage systems were observed on the subject property, nor are any expected to be present, as the site has never been developed. No evidence of current or former railway or spur lines on the subject property was observed at the time of the site inspection. There were no unidentified substances observed on the subject site.

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 - Vacant lot followed by the TransCanada Trail;
- South - Robert Grant Avenue followed by undeveloped land;
- East - Livery Street followed by residential dwellings;
- West - Robert Grant Avenue followed by undeveloped land.

No concerns were noted with the current use of the surrounding properties. Property use within the Phase I study area is shown on Drawing PE4034-2 - Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

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

Table 1 - Land Use History – 360 Bobolink Ridge			
Time Period	Land Use	Potentially Contaminating Activities	Areas of Potential Environmental Concern
1945 to 1975	Agriculture	None	None
1975 to Present	Vacant	None	None

Potentially Contaminating Activities (PCAs)

No potentially contaminating activities (PCAs) have been identified on the subject site.

A PCA was noted during a search of historical sources in proximity to the subject property. A former railway line located 105 m northwest from the subject property was identified. Based on aerial photographs, this former railway line was decommissioned in the 1990s and was subsequently converted into a walking trail, referred to as the TransCanada Trail. Based its distance from the subject site, this former railway line is not considered to be an APEC.

No other PCAs were noted in the Phase I study area.

Areas of Potential Environmental Concern (APEC)

As detailed above, the one (1) identified PCA does not present an APEC on the subject property.

Contaminants of Potential Concern (CPC)

No contaminants of potential concern were identified, since no APECs were identified on the subject site.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, bedrock beneath the site area consists of interbedded sandstone and dolomite of the Gull River Formation. It was reported that surficial soils consist of Quaternary sediments, specifically glacial till deposits, with a drift thickness of 3-10 m. Hydrogeological conditions are considered to mimic the topographic setting; as a result, groundwater is expected to flow east towards Mahoney Creek.

Contaminants of Potential Concern

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

Existing Buildings and Structures

There are no buildings or structures on the subject site.

Water Bodies

No water bodies are located on the subject site. The nearest body of water is Mahoney Creek, situated to the east of the subject site.

Areas of Natural Significance

No areas of natural significance were identified on the site or in the Phase I study area.

Drinking Water Wells

Based on the results of the well record search, no water wells were identified on the subject site. Six (6) monitoring water wells were identified in the Phase I study area.

Neighbouring Land Use

Neighbouring land use in the Phase I study area consists of residential and institutional. Land use is shown on Drawing PE4034-2 Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, no PCAs were identified on the subject property.

A former railway line located within the Phase I study area, northwest of the subject site, was identified and represents a PCA. However, based on the distance from the subject site, this PCA is not an area of potential concern on the subject site.

Assessment of Uncertainty and/or Absence of Information

The PCAs within the Phase I study area were confirmed by a variety of independent sources. 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 Canadian Rental Development Services Inc. to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of 360 Bobolink Ridge (Block 203 – Fernbank Village), in the City of Ottawa, Ontario. The purpose of this Phase I – Environmental Site Assessment 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 properties.

Based on historical searches, the lot has been undeveloped since 1945 and has always been vacant or used for agriculture.

Surrounding properties historically consisted of agricultural fields and undeveloped treed lands. The historical review did not identify any potentially contaminating activities (PCAs) on the subject site, however, a former railway line was identified to the northwest. Based on its location, this PCA is not considered an environmental concern to the subject site.

Following the historical review, a site visit was conducted. The subject site is currently an undeveloped grass covered lot with one gravel entrance and a gravel road connecting Robert Grant Avenue and Livery Street. No structures were visible on the subject site. Neighbouring properties to the north, west and south were observed to be vacant. Neighbouring properties to the east were identified as residential dwellings. The site visit did not identify any PCAs or APECs.

Conclusion

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

9.0 STATEMENT OF LIMITATIONS

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

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

This report was prepared for the sole use of Canadian Rental Development Services Inc. Permission and notification from the above noted party and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Marek Moroz, G.I.T.



Mark S. D'Arcy, P.Eng.



Report Distribution:

- Canadian Rental Development Services Inc. (3 copies)
- Paterson Group (1 copy)

10.0 REFERENCES

Federal Records

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

Provincial Records

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

Municipal Records

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

Local Information Sources

Plan of Survey - Annis, O’Sullivan, Vollebekk Ltd., 2013.
‘Phase I - Environmental Site Assessment, 5786 Fernbank Road, Ottawa, Ontario’, prepared by Houle Chevrier Engineering, March 31, 2015
Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4034-1 – SITE PLAN

DRAWING PE4034-2 – SURROUNDING LAND USE PLAN

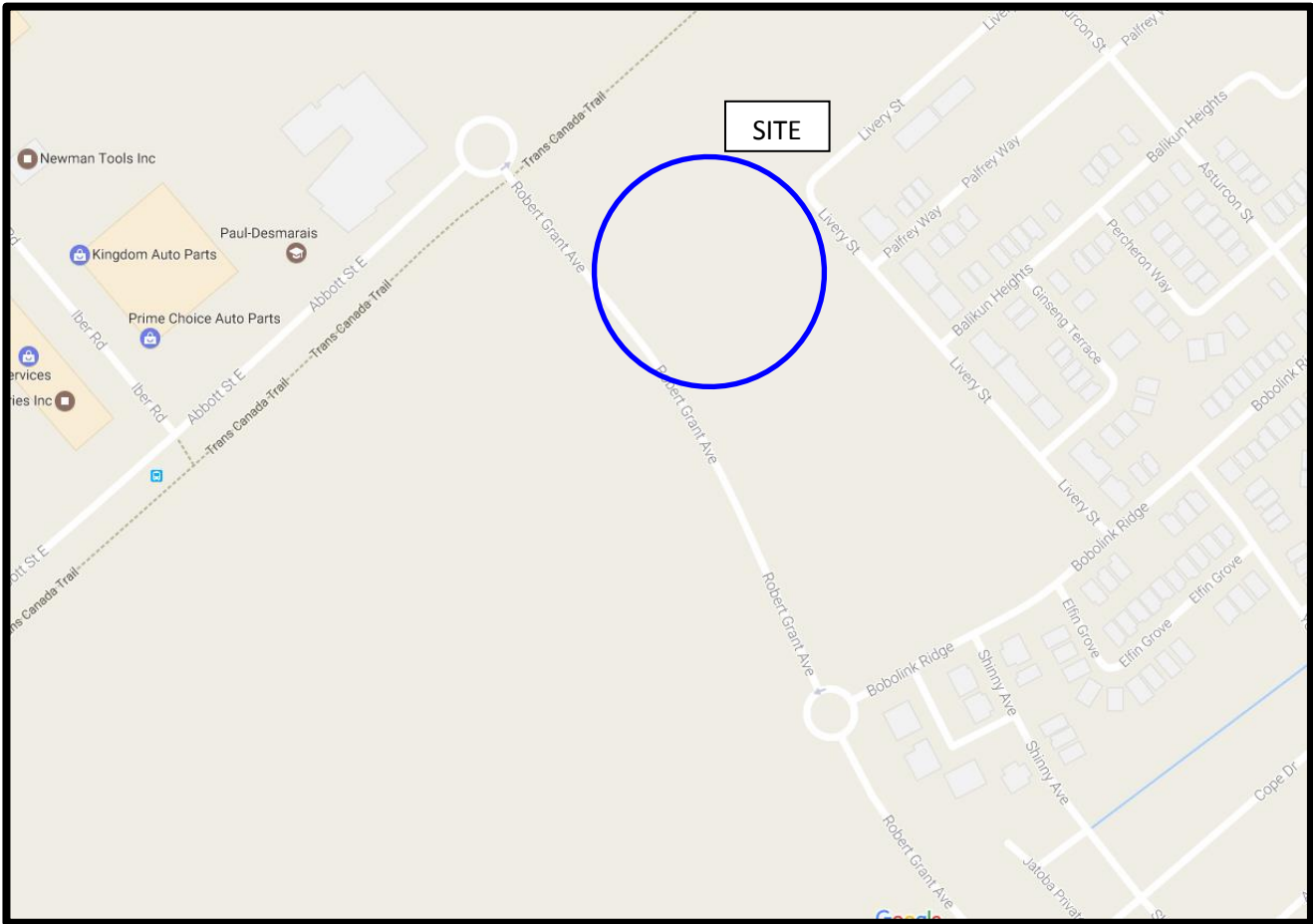


FIGURE 1
KEY PLAN

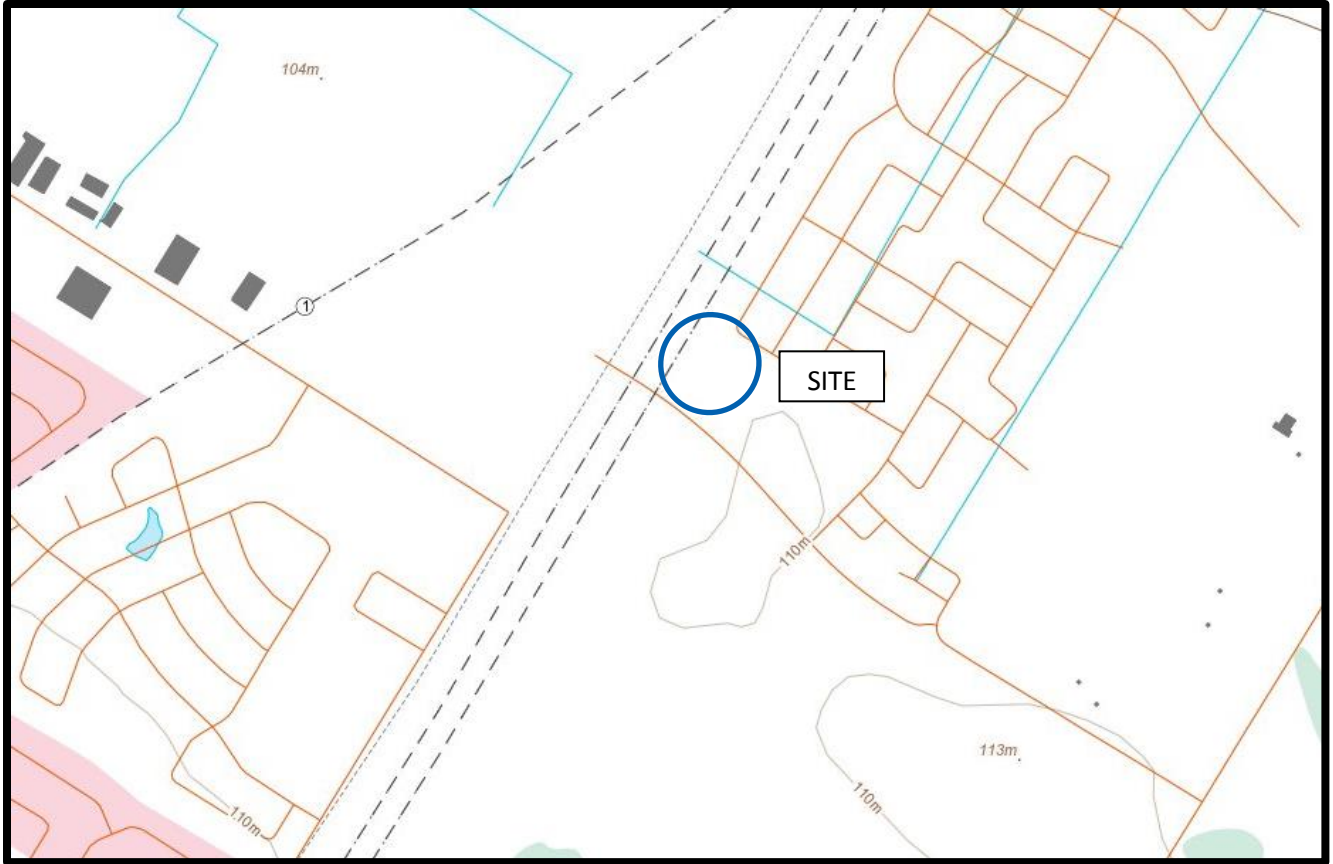
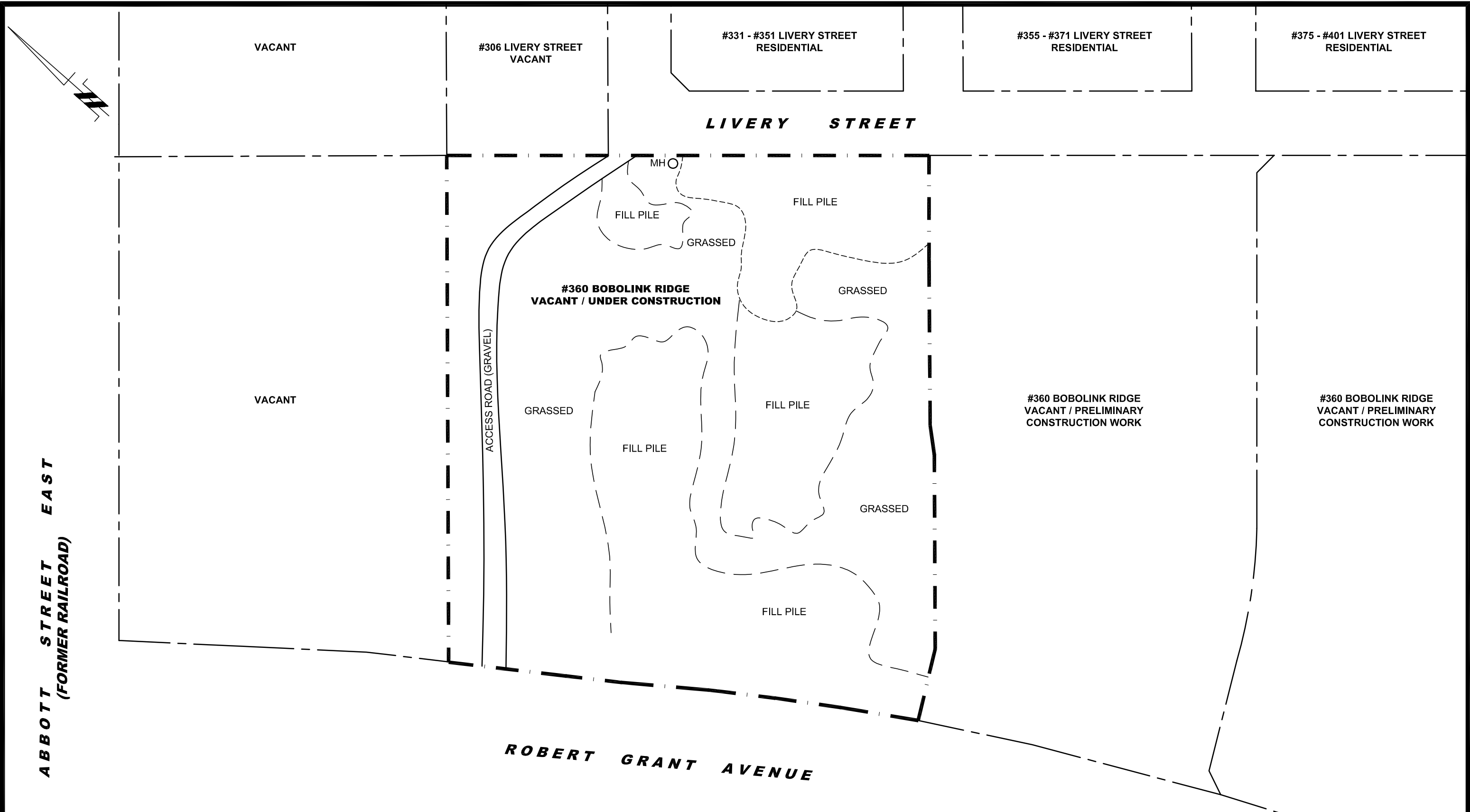


FIGURE 2
TOPOGRAPHIC MAP



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consulting engineers

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

NO.	REVISIONS	DATE	INITIAL
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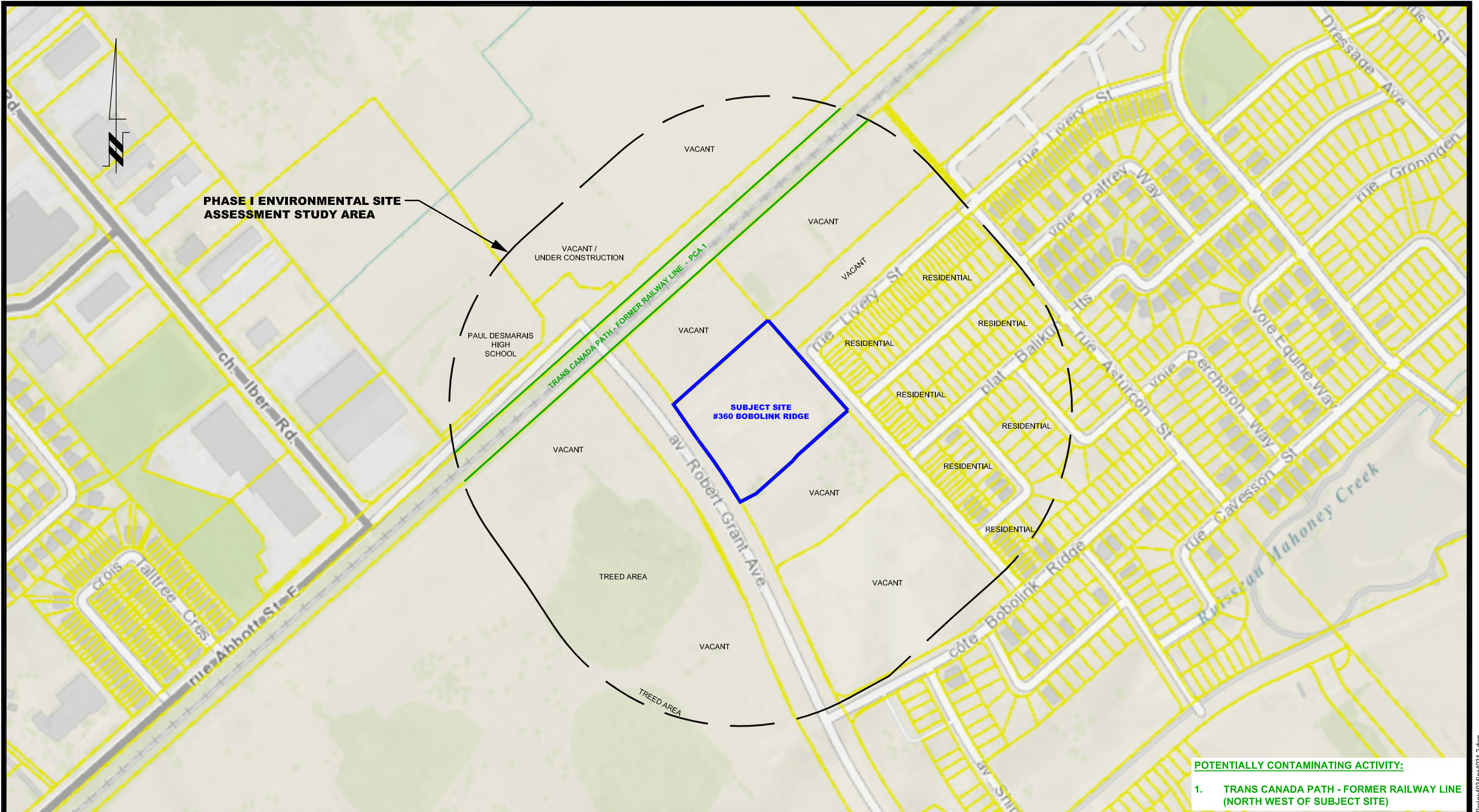
CANADIAN RENTAL DEVELOPMENT SERVICES INC.
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
360 BOBOLINK RIDGE - BLOCK 203 FERNBANK VILLAGE

OTTAWA, ONTARIO

Title: **SITE PLAN**

Scale:	1:1000	Date:	05/2017
Drawn by:	RCG	Report No.:	PE4034-1
Checked by:	MM	Dwg. No.:	PE4034-1
Approved by:	MSD	Revision No.:	0

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PHASE I ENVIRONMENTAL SITE ASSESSMENT STUDY AREA

**SUBJECT SITE
#360 BOBOLINK RIDGE**

- POTENTIALLY CONTAMINATING ACTIVITY:**
1. TRANS CANADA PATH - FORMER RAILWAY LINE (NORTH WEST OF SUBJECT SITE)

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Ottawa, Ontario K2E 7J5
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NO.	REVISIONS	DATE	INITIAL
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CANADIAN RENTAL DEVELOPMENT SERVICES INC.
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
360 BOBOLINK RIDGE - BLOCK 203 FERNBANK VILLAGE

OTTAWA, ONTARIO

Title: **SURROUNDING LAND USE PLAN**

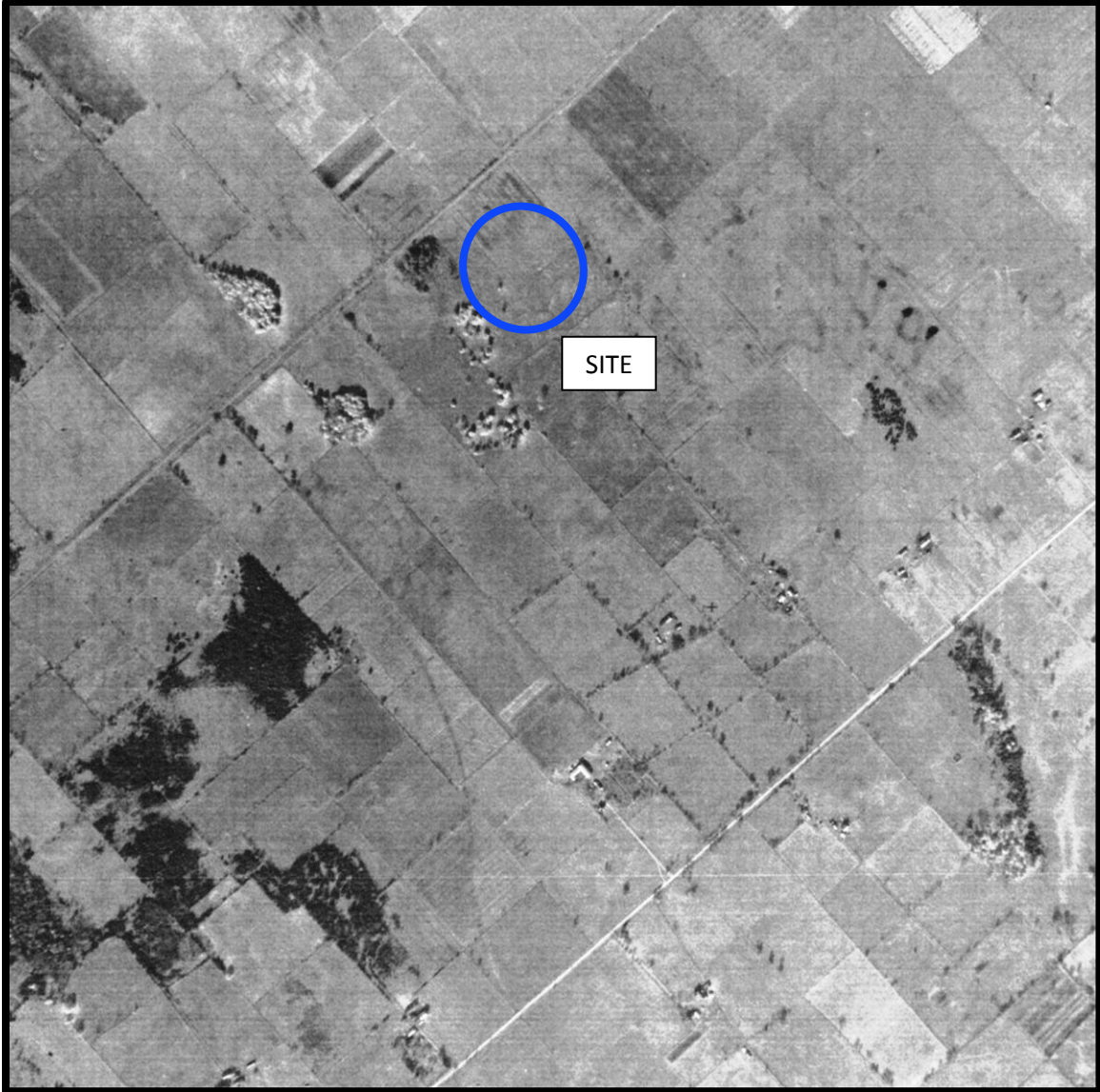
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Drawn by:	RCG	Report No.:	PE4034-1
Checked by:	MM	Dwg. No.:	PE4034-2
Approved by:	MSD	Revision No.:	0

APPENDIX 1

SURVEY PLAN

AERIAL PHOTOGRAPHS

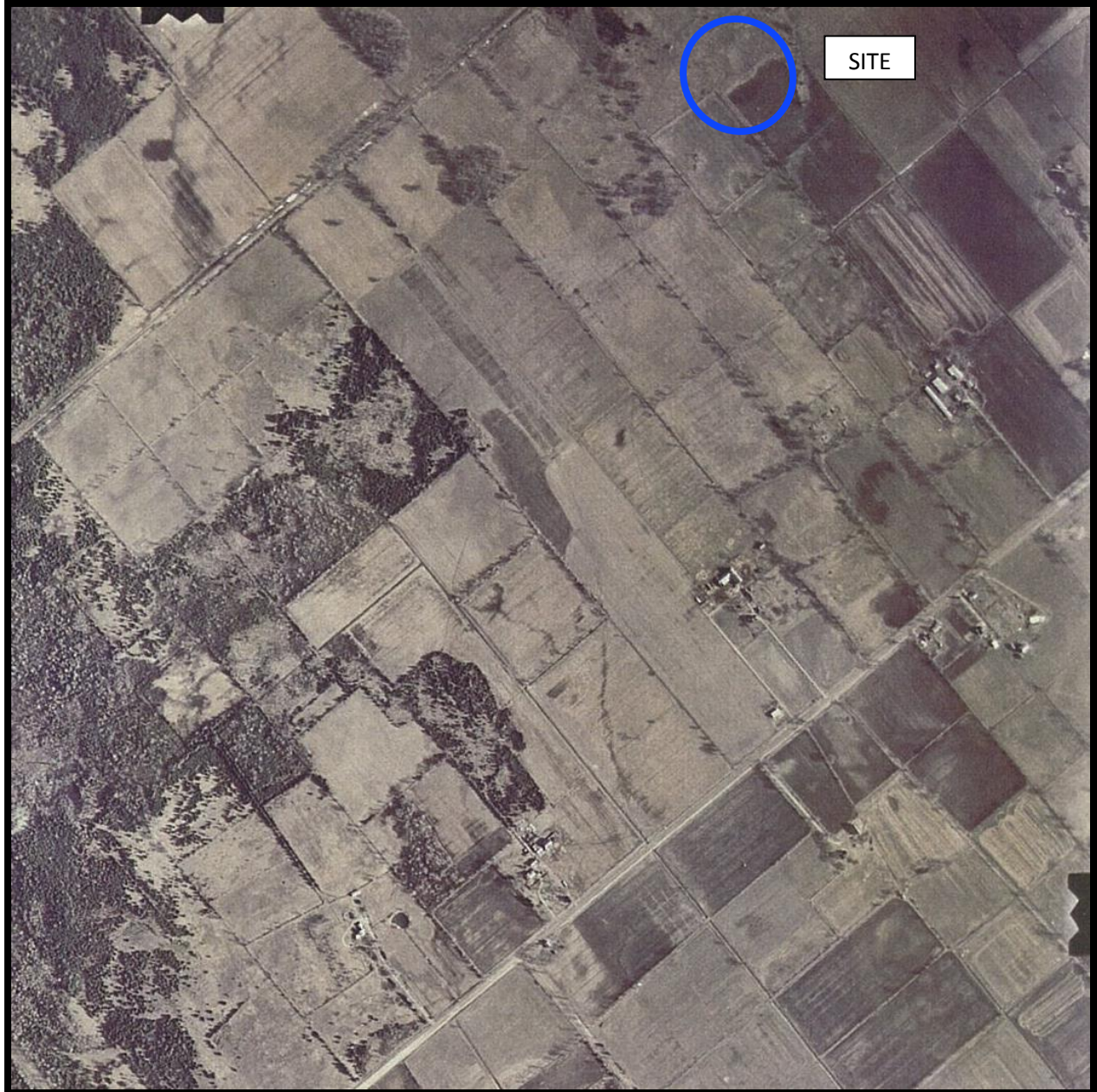
SITE PHOTOGRAPHS



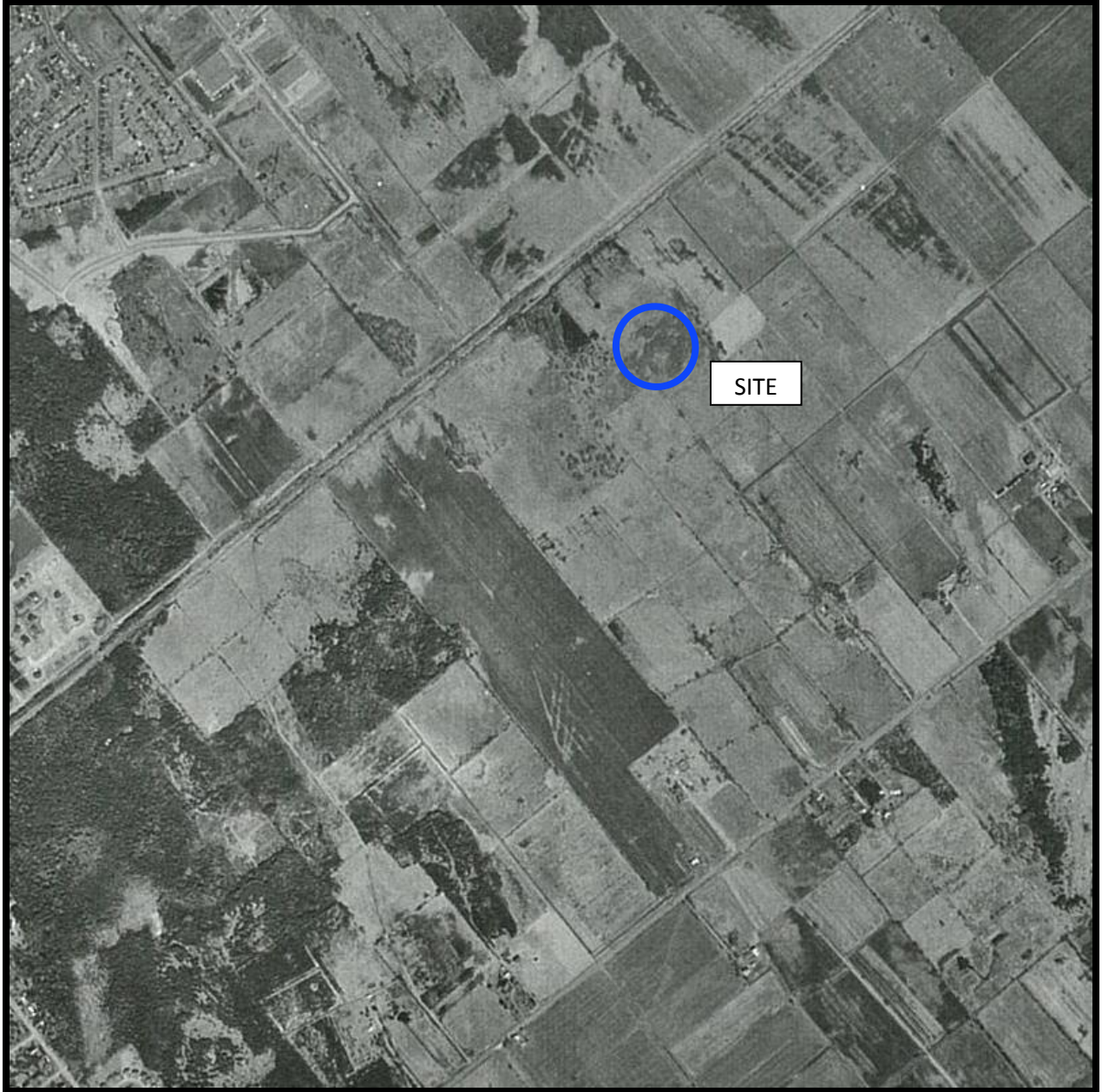
AERIAL PHOTOGRAPH
1945



AERIAL PHOTOGRAPH
1955



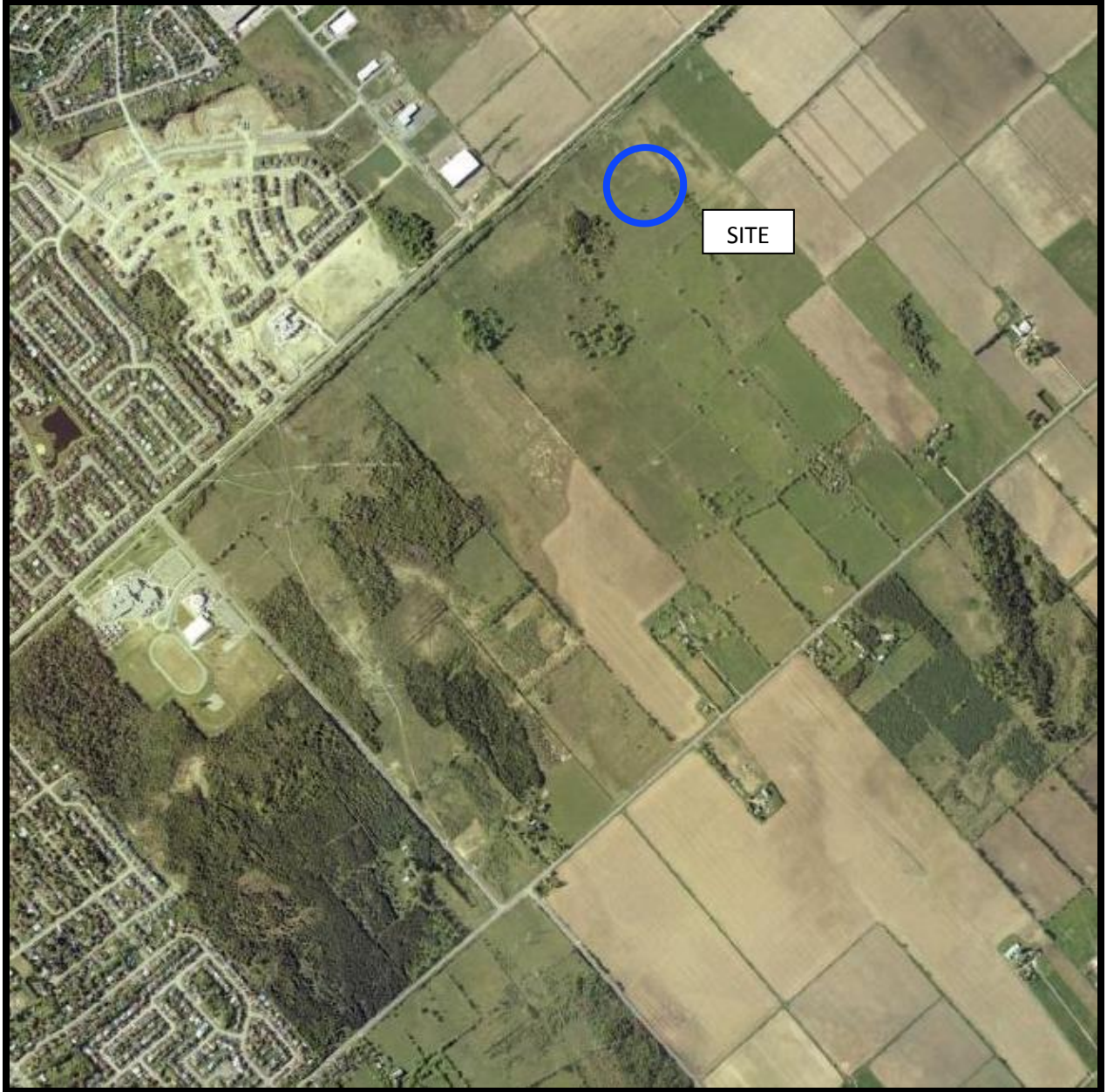
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1975



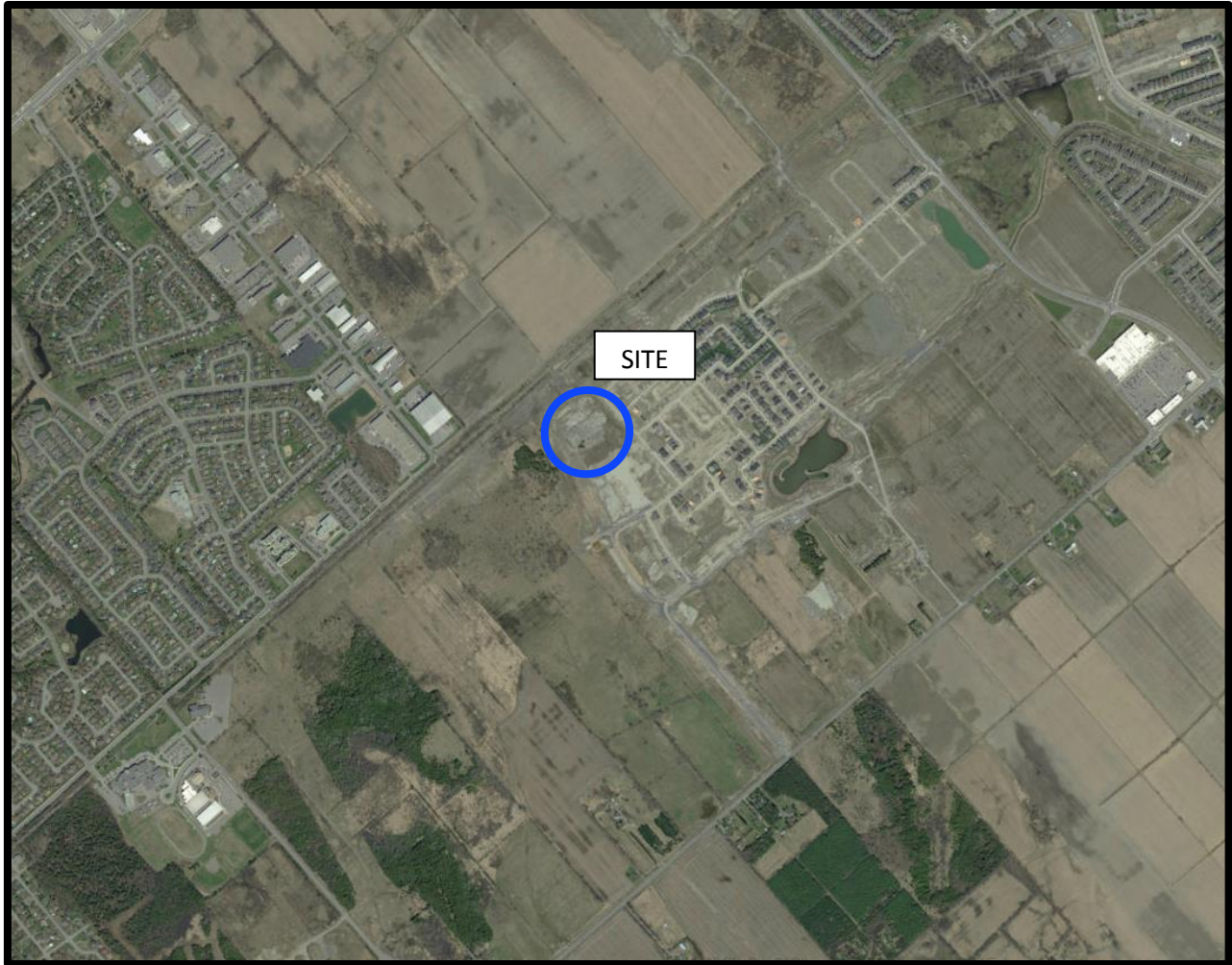
AERIAL PHOTOGRAPH
1985



AERIAL PHOTOGRAPH
1996



AERIAL PHOTOGRAPH
2002



AERIAL PHOTOGRAPH
2014

Site Photographs

PE4034

360 Bobolink Ridge, Block 203 Fernbank Village, Ottawa, ON

May 9, 2017



Photograph 1: View of the northwest side of the site, facing east. Photograph illustrates the entrance to the subject site on the left and the main land cover.



Photograph 2: View of the western side of the site, facing southwest. Photograph illustrates a gravel road on the property.

Site Photographs

PE4034

360 Bobolink Ridge, Block 203 Fernbank Village, Ottawa, ON

May 9, 2017



Photograph 3: View of the main land cover of the site on the southwestern perimeter of the site. Photograph taken facing southeast.



Photograph 4: View of the middle of the vacant subject lot. Photograph taken facing northeast.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

WATER WELL RECORDS

TSSA CORRESPONDENCE

Ministry of the Environment
and Climate Change

Freedom of Information and
Protection of Privacy Office

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

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

Bureau de l'accès à l'information et
de la protection de la vie privée

12^e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél. : (416) 314-4075
Télééc.: (416) 314-4285



May 24, 2017

Marek Moroz
Paterson Group Inc
154 Colonnade Rd
Ottawa, ON K2E 7J5

Dear Marek Moroz:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2017-03287, Your Reference PE4034

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 360 Bobolink Ridge, Ottawa (Twp of Goulbourn).

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

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

If you have any questions regarding this matter, please contact Kaitlynn Low at kaitlynn.low@ontario.ca.

Yours truly,


Janet Dadufalza
FOI Manager



Ministry of the Environment

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

All measurements recorded in: [X] Metric [] Imperial

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

A130143 Well # on Drawing of Deepest Well: 12-8

Page 1 of 1

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

Well Cluster Location Information: Address of Well Location (Street Number(s)/Name(s), RR, if available) FERNBANK Rd, City, Town, Village or Hamlet Ottawa, Province Ontario, GPS Unit Make GARMIN, Model ETREX, Unit Mode of Operation [] Undifferentiated [X] Averaged

Mandatory Attachments/Additional Information: [X] Land Owner Consent Form must be attached. [X] Detailed Drawing of All Well Locations must be attached. I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed. Signature of Technician/Contractor [Signature], Date (yyyy/mm/dd) 12/11/09

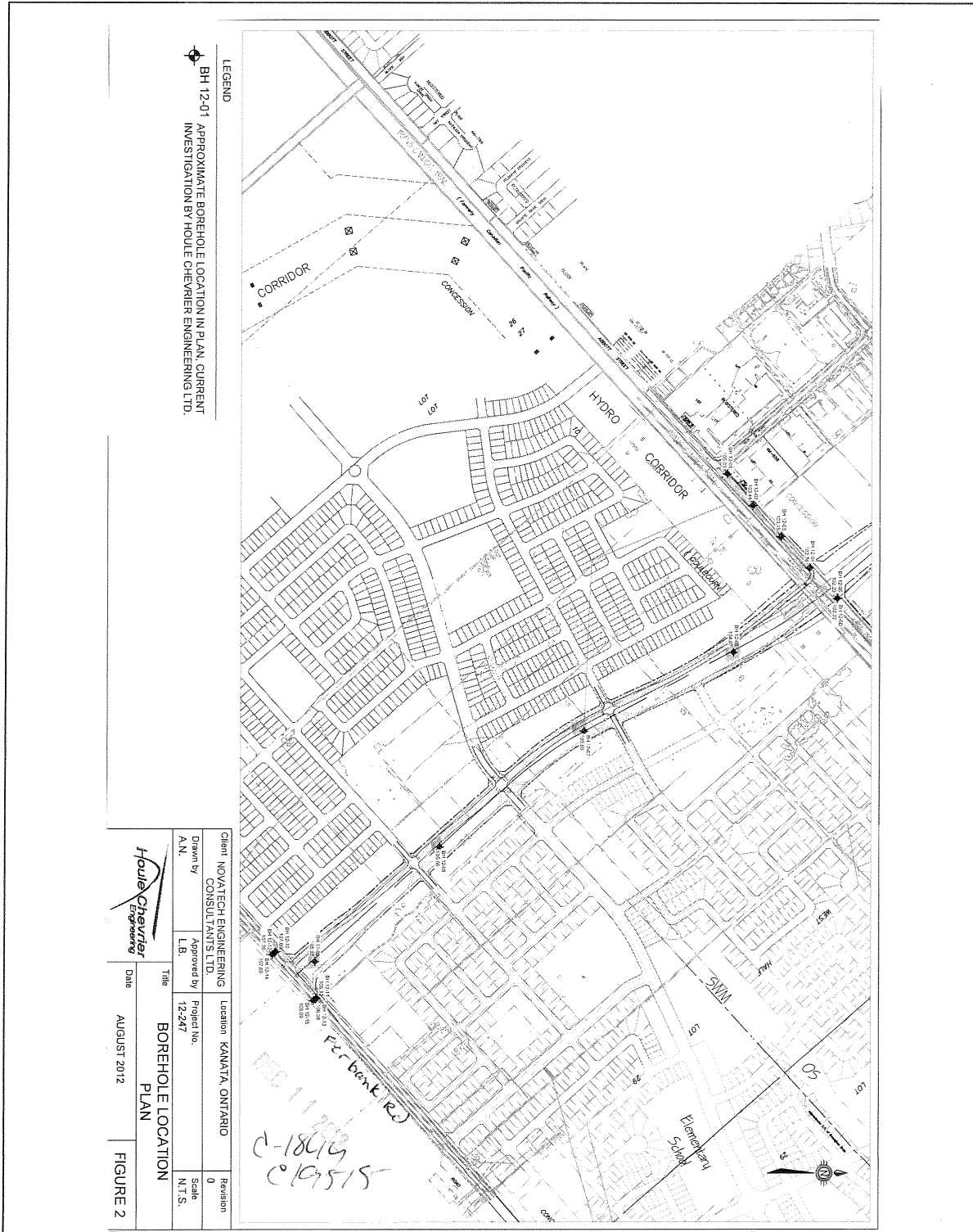
Well Details table with columns: Well # on Drawing, UTM Coordinates (Zone, Easting, Northing), Hole Depth (m/ft), Hole Diameter (cm/in), Method of Construction, Casing Material; Diameter (cm/in), Casing (m/ft) (From, To), Screen Interval (m/ft) (From, To), Annular Space Material (m/ft) (From, To, Material), Overburden/Bedrock or Abandonment Filing Material Intervals (m/ft), Static Water Level (m/ft), Date of Completion (yyyy/mm/dd). Rows include well numbers 12-6 through 12-9 with detailed construction and material data.

Well Contractor and Well Technician Information: Business Name of Well Contractor George Downing Estate Drilling LTD, Business Address 410 Rue Principale, Grenville-sur-la-Rouge QC, Date First Well in Cluster Constructed or Abandoned 12/07/13, Date Last Well in Cluster Completed 12/07/15, Audit No. C 19515, Name of Well Technician Stephen Downing, Well Technician's Licence No. 3326, Signature of Well Technician [Signature], Date Submitted 12/11/09

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

Well Tag Number: # A130143

"Well Record for Well Cluster" Form Audit Number: # C19515





Ministry of the Environment

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

All measurements recorded in: Metric Imperial

Well Tag No. of Deepest Well: (Print Well Tag No.)
A13042
Well # on Drawing of Deepest Well: **12-4**

Page 1 of 1

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

Well Cluster Location Information													Mandatory Attachments/Additional Information					
Address of Well Location (Street Number(s)/Name(s), RR, if available) TRANS CANADIAN TRAIL ABBOTT STREET / IBER RD						Lot(s)		Concession(s)		Geographic Township		County/District/Upper Tier Municipality			<input checked="" type="checkbox"/> Land Owner Consent Form must be attached. <input checked="" type="checkbox"/> Detailed Drawing of All Well Locations must be attached.			
City, Town, Village or Hamlet OTTAWA						Province Ontario		GPS Unit Make GARMIN		Model ETREX		Unit Mode of Operation <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify: _____			I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed. 			
Well Details													Signature of Technician/Contractor			Date (yyyy/mm/dd)		
Well # on Drawing	UTM Coordinates				Hole Depth (m/ft)	Hole Diameter (cm/in)	Method of Construction	Casing Material; Diameter (cm/in)	Casing (m/ft)		Screen Interval (m/ft)		Annular Space Material (m/ft)			Overburden/Bedrock or Abandonment Filing Material Intervals (m/ft)	Static Water Level (m/ft)	Date of Completion (yyyy/mm/dd)
	Zone	Eastng	Northing						From	To	From	To	From	To	Material:			
12-4	09	35	2185	5015075	9.1	20	HSA/Diamond	5"0	0	7.5	7.5	9.1	6.2	6.8	bentonite	fill, clayey silt to silt, silt with gravel, & gravel fill	2.5	12/07/14
12-5	09	35	2249	50151133	8.9	20	HSA/Diamond	5"0	0	7.7	7.7	8.9	5.8	7.0	bentonite	fill, silty clay brown, silty clay grey, & gravel fill	1.9	12/07/15
12-5B	09	35	2250	50151134	4.6	20	HSA/Diamond	5"0	0	2.9	2.9	4.4	1.7	2.4	bentonite	Soil conditions not logged	3.6	12/07/15

Well Contractor and Well Technician Information					Date First Well in Cluster Constructed or Abandoned (yyyy/mm/dd)		Date Last Well in Cluster Completed (yyyy/mm/dd)		Ministry Use Only		
Business Name of Well Contractor George Downing Estate Drilling LTD		Business Address (Street Number/Name, RR) 410 Rue Principale Grenville-sur-la-Rouge Qc		Municipality Qc	Province Qc	12/07/13		12/07/15		Date Received (yyyy/mm/dd) DEC 18 2012	Audit No. C 20566
Postal Code J0V1B0	Bus. Telephone No. 819-242-6469	Well Contractor's Licence No. 1844	Business E-mail Address downing@hawk.igs.net		Well Abandonment		Comments: Person Abandoning the Wells: Name WATER ENGINEERING CONSULTANTS (Print or Type) - See instruction 11 on the back of this form				
Name of Well Technician (First Name, Last Name) Stephen Downing		Well Technician's Licence No. 3326	Signature of Well Technician 		Date Submitted (yyyy/mm/dd)						



This form is to be completed by the person who constructs or abandons test holes or dewatering wells that form all or part of a well cluster. If this form is being used to report any well abandonment, these wells must have been previously reported as part of a single well cluster.

Note: For well cluster records, only the owners of the land on which the wells are situated are to give written consent. If the well purchaser (e.g. a consultant who hires the driller) is not the owner of the land, then the well purchaser cannot sign the consent form.

By signing this form, land owners are providing consent to use one well record to report a well cluster of test holes or dewatering wells in accordance with section 16.4 of Regulation 903 made under the *Ontario Water Resources Act*.

This completed **Well Record for Well Cluster Part 2 - Land Owner Consent** must be attached to Parts 1 and 3.

* Please PRINT if completing by hand.

Well Tag Number: # A13042

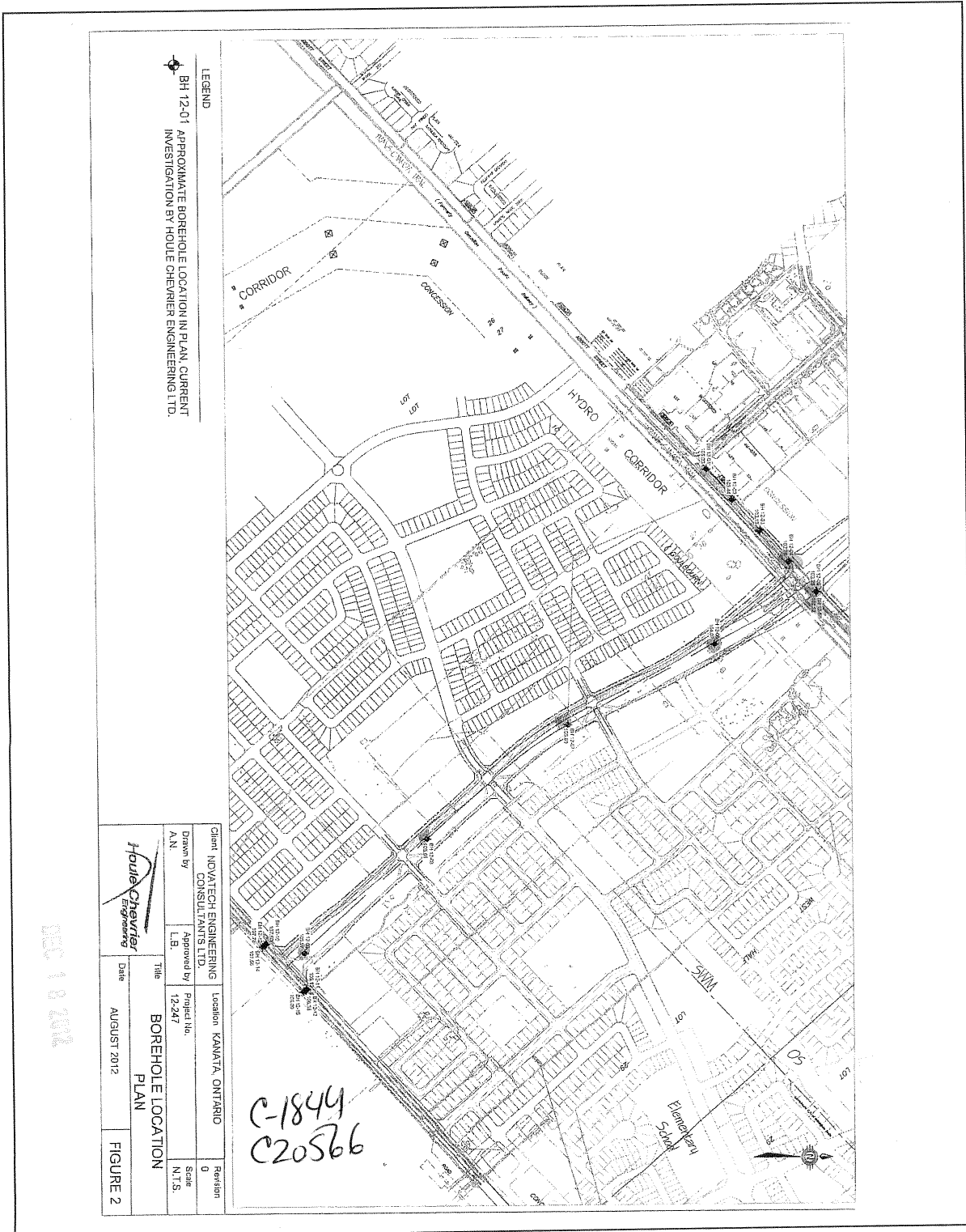
"Well Record for Well Cluster" Audit Number: # C 20566

Well # on Detailed Drawing	Property Location Description	Land Owner's Name	Signature of Land Owner	Date Signed (yyyy/mm/dd)
12-4	ABBOTT STREET	[REDACTED]	[REDACTED]	2012/11/28
12-5		[REDACTED]	[REDACTED]	2012/11/28
12-5B		[REDACTED]	[REDACTED]	2012/11/28
		CITY OF OTTAWA 110 LAVINER AVE, 4 TH FLOOR OTTAWA ON K1P 1J1	[REDACTED]	
		[REDACTED]		
		C-1844 C20566		

DEC 18 2012

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

Well Tag Number: # A13042
 "Well Record for Well Cluster" Form Audit Number: # C20566





Ministry of the Environment and Climate Change

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

All measurements recorded in: Metric Imperial

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

Well Tag No. of Deepest Well: (Print Well Tag No.)
A173548
Well # on Drawing of Deepest Well: **BH4**

Well Cluster Location Information						Mandatory Attachments/Additional Information	
Address of Well Location (Street Number(s)/Name(s), RR, if available)		Lot(s)	Concession(s)	Geographic Township	County/District/Upper Tier Municipality		<input checked="" type="checkbox"/> Land Owner Consent Form must be attached. <input checked="" type="checkbox"/> Detailed Drawing of All Well Locations must be attached. I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed.
306 LIVERY STREET							
City, Town, Village or Hamlet		Province	GPS Unit Make	Model	Unit Mode of Operation <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify: _____		Signature of Technician/Contractor <i>Bruce Downing</i> Date (yyyy/mm/dd) 2015/07/10
OTTAWA		Ontario	GARMIN	ETREX			

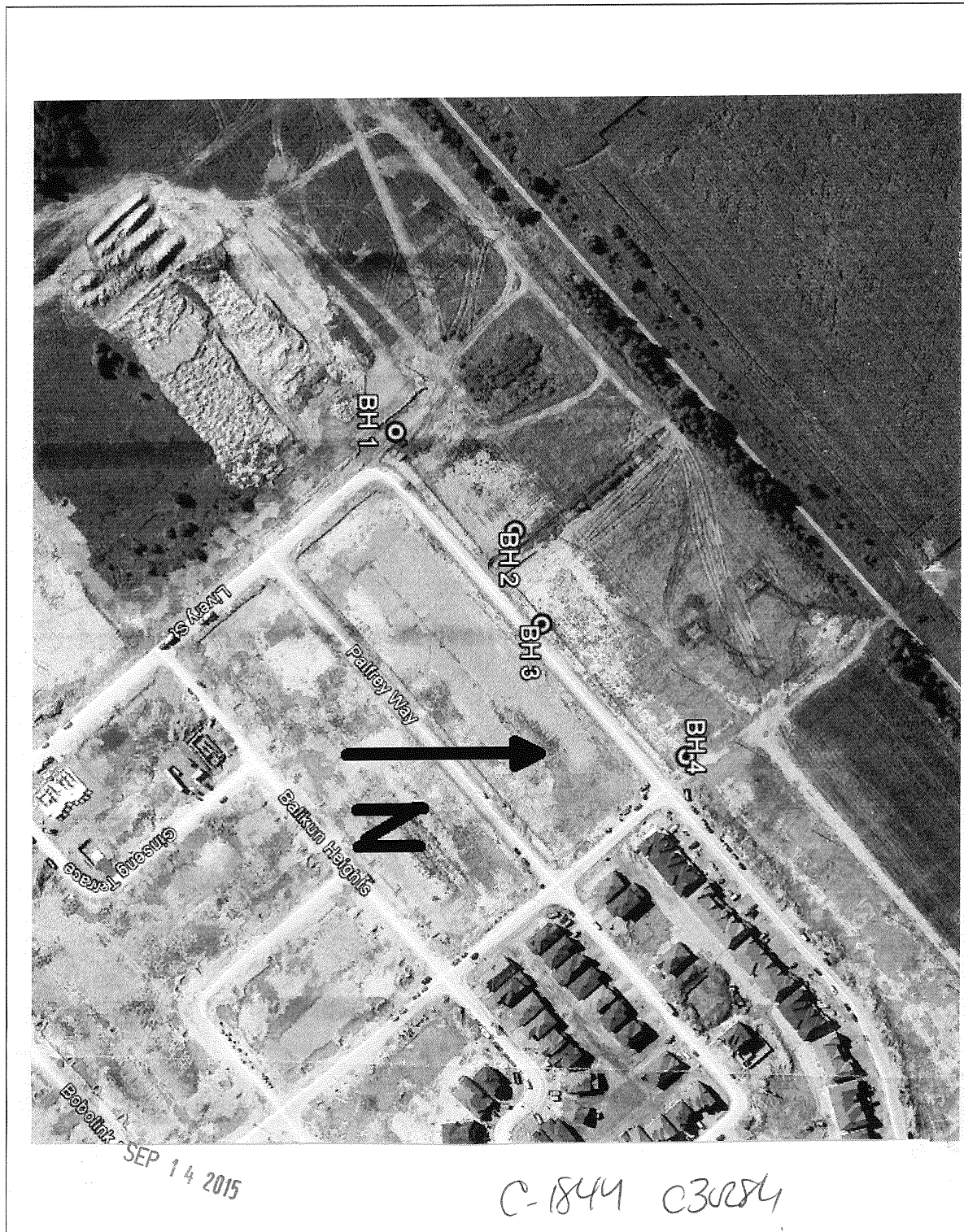
Well Details																
Well # on Drawing	UTM Coordinates		Hole Depth (m/ft)	Hole Diameter (cm/in)	Method of Construction	Casing Material; Diameter (cm/in)	Casing (m/ft)		Screen Interval (m/ft)		Annular Space Material (m/ft)		Overburden/Bedrock or Abandonment Filling Material Intervals (m/ft)	Static Water Level (m/ft)	Date of Completion (yyyy/mm/dd)	
	Zone	Easting					Northing	From	To	From	To	From				To
BH2	18	43010355013857	7.32	20.3	HSA	5.08	0	3.05	3.05	4.57	0	2.74	BENTONITE	CLAY, SILT WITH BOULDERS	n/a	2015/06/23
BH4	18	43011635013953	9.14	20.3	HSA	5.08	0	3.65	3.65	5.18	0	4.88	BENTONITE	CLAY	1.83	2015/06/23

Well Contractor and Well Technician Information				Date First Well in Cluster Constructed or Abandoned (yyyy/mm/dd)	Date Last Well in Cluster Completed (yyyy/mm/dd)	Ministry Use Only	
Business Name of Well Contractor	Business Address (Street Number/Name, RR)	Municipality	Province	2015/06/23	2015/06/23	Date Received (yyyy/mm/dd)	Audit No.
GEORGE DOWNING ESTATE DRILLING	410 RUE PRINCIPALE	GRENVILLE-SUR-LA-ROUGE	QC			SEP 14 2015	C 30284
Postal Code	Bus. Telephone No.	Well Contractor's Licence No.	Business E-mail Address	Well Abandonment		Comments:	
J1Q 1B0	(819) 242-6469	1844	downing@hawk.igs.net	Person Abandoning the Wells:			
Name of Well Technician (First Name, Last Name)		Well Technician's Licence No.	Signature of Well Technician	Date Submitted (yyyy/mm/dd)			
BRUCE DOWNING		2173	<i>Bruce Downing</i>	2015/07/10			
				Name			
				n/a			
				(Print or Type) - See instruction 11 on the back of this form			

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

Well Tag Number: # A173548

"Well Record for Well Cluster" Form Audit Number: # C30284



N/A

Measurements recorded in: Metric Imperial

Page _____ of _____

Well Owner's Information

First Name: Thomas Last Name / Organization: CAVANASH CONSTRUCTION E-mail Address: _____ Well Constructed by Well Owner

Mailing Address (Street Number/Name): 9094 Cavanagh Road Municipality: Ashton Ont Province: K8A1B0 Postal Code: _____ Telephone No. (inc. area code): _____

Well Location

Address of Well Location (Street Number/Name): #5555 FERNBANK ROAD Township: GOULBOURN Lot: 28 Concession: 10

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

UTM Coordinates: Zone: 18 Easting: 429780 Northing: 5013846 Municipal Plan and Sublot Number: RP5R13184

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
			2" Monitoring Well Abandonment	0' 18'

BH 12-5B
(Dec 2013 - Plan 4M-1503 - Founder Avenue)

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From To		
18' 2'	3/8 Hole Plug	1 Bag
2' 0'	Backfill	

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)	Status of Well
			From To	
				<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify _____ <input type="checkbox"/> Other, specify _____

Construction Record - Screen

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

Water Details

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

Well Contractor and Well Technician Information

Business Name of Well Contractor: AIR ROCK DRILLING LTD Well Contractor's Licence No.: 11119

Business Address (Street Number/Name): RR#1 RICHMOND Municipality: _____

Province: ONT Postal Code: K8A2Z0 Business E-mail Address: _____

Bus. Telephone No. (inc. area code): 613 833 2170 Name of Well Technician (Last Name, First Name): Desalmeirs Ken

Well Technician's Licence No.: IT 4 Signature of Technician and/or Contractor: _____ Date Submitted: 20140930

Results of Well Yield Testing

After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping hrs + min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
Recommended pump depth (m/ft)	15		15	
Recommended pump rate (l/min / GPM)	20		20	
Well production (l/min / GPM)	25		25	
Disinfected? <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.

BH 12-5B

5555 Fernbank Road

Comments:

Well owner's information package delivered: Yes No

Date Package Delivered: Y Y M M D D 2014 08 19

Date Work Completed: 2014 08 19

Ministry Use Only

Audit No.: Z 167021

2014 08 19

N/A

Measurements recorded in: Metric Imperial

Page ___ of ___

Well Owner's Information

First Name: THOMAS Last Name / Organization: CUNANAGH CONSTRUCTION E-mail Address: _____ Well Constructed by Well Owner

Mailing Address (Street Number/Name): 9094 CUNANAGH ROAD Municipality: ASHDEN Province: ONT Postal Code: K0A1B0 Telephone No. (inc. area code): _____

Well Location

Address of Well Location (Street Number/Name): #5555 FERNBANK ROAD Township: GOULBOURN Lot: 28 Concession: 10

County/District/Municipality: OTTAWA-CARLETON City/Town/Village: STITTSVILLE Province: ONTARIO Postal Code: _____

UTM Coordinates: Zone: 18 Easting: 829777 Northing: 5013845 Municipal Plan and Sublot Number: RPSR13184

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
			<u>2" monitoring well abandonment</u>	<u>0'</u>	<u>30'</u>

BH12-4
July 4, 2012
(Dec. 2013-11on4M-1503-FOUNDER AVENUE)

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
From	To	
<u>30'</u>	<u>3/8 Hole Plug</u>	<u>2 Bags.</u>
<u>2'</u>	<u>Backfill</u>	

Method of Construction

Cable Tool Diamond Public Commercial Not used

Rotary (Conventional) Jetting Domestic Municipal Dewatering

Rotary (Reverse) Driving Livestock Test Hole Monitoring

Boring Digging Irrigation Cooling & Air Conditioning

Air percussion Industrial

Other, specify _____ 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)	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, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify _____
				<input type="checkbox"/> Other, specify _____

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
			<u>New Construction</u>	
			<u>New Subdivision</u>	

Water Details

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

Well Contractor and Well Technician Information

Business Name of Well Contractor: AIR ROCK DRILLING CO LTD Well Contractor's Licence No.: 1119

Business Address (Street Number/Name): RR#1 Municipality: RICHMOND

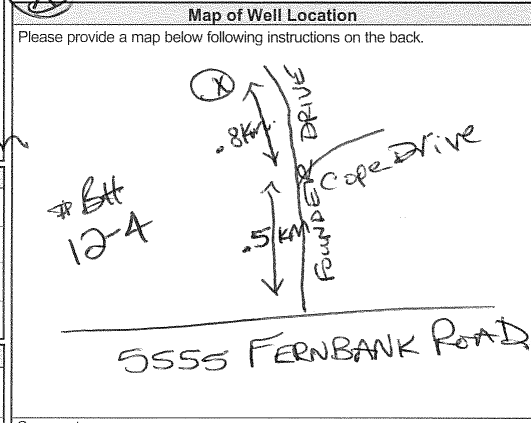
Province: ONT Postal Code: K0A2Z0 Business E-mail Address: _____

Bus. Telephone No. (inc. area code): 6138382170 Name of Well Technician (Last Name, First Name): Desaulniers Ken

Well Technician's Licence No.: TT4 Signature of Technician and/or Contractor: [Signature] Date Submitted: 20140930

Results of Well Yield Testing

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



Comments: _____

Well owner's information package delivered: Yes No

Date Package Delivered: 2014-08-19

Date Work Completed: _____

Ministry Use Only

Audit No.: 2167030

Recd: OCT 29 2014

Marek Moroz

From: Marek Moroz
Sent: May-15-17 2:33 PM
To: 'Public Information Services'
Subject: TSSA Records Search, PE4034 - 360 Bobolink Ridge, Stittsville (Ottawa), ON
Attachments: 360 Bobolink Ridge, Block 203.pdf

Good afternoon,

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

360 Bobolink Ridge (Part of lot 28, Concession 10);

5786 Fernbank Road;

5315 Abbott Street East;

5618 Hazeldean Road;

1000 Terry Fox Drive;

306, 329, 331, 375 Livery Street;

200 Janka Private

I have attached a map for clarification

Thank you very much,

Marek Moroz, G.I.T.

patersongroup
solution oriented engineering
60 years serving our clients

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Cell: (613) 229-9822
Tel: (613) 226-7381 Ext. 248
Fax: (613) 226-6344
Email: MMoroz@patersongroup.ca

This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Mark S. D'Arcy, P.Eng., QP_{ESA} Senior Environmental/Geotechnical Engineer

After receiving his Bachelors of Applied Science from Queen's University in 1991 in Geological Engineering, Mark joined Paterson Group Inc. During the first 10 years of Mark's career, he was heavily involved in all aspects of field work, including drilling boreholes, excavating test pits, conducting phase I site inspections, environmental sampling and analysis and inspection of environmental remediations. During Mark's field experience, he gained invaluable field and office experience, which would prepare Mark to become the Environmental Division Manager. Mark's field experience ranges from Phase I Environmental Site Assessments (ESAs) to on-site soil and groundwater remediations, as well as, environmental/geotechnical borehole investigations. Mark's field experience has provided extensive knowledge of subsurface conditions, contractor relations and project management. These skills would provide Mark with the ability to understand a variety of situations, which has lead Paterson to an extremely successful Environmental Department. Mark became the Environmental Manager in 2006, which consisted of two engineers and two field technicians. Mark has been an integral part in growing the Environmental Division, which now consists of nine engineers and three field technicians. Mark is the Senior Project Manager for a wide variety of environmental projects within the Eastern Ontario area including Phase I ESAs, Phase II ESAs, remediations for filing Records of Site Condition in the Ontario Ministry of the Environment and Climate Change (MOECC) Environmental Site Registry, Brownfield Applications and Landfill Monitoring Programs. As the Senior Project Manager, Mark is responsible for directing project personnel, final report review and overall project success. Mark has proven leadership and ability to manage small to large scale projects within the allotted time and budget.

EDUCATION

B.A.Sc. 1991, Geological Engineering, Queen's University, Kingston, ON

LICENCE/ PROFESSIONAL AFFILIATIONS

Professional Engineers of Ontario
ESA Qualified Person with MOECC
Ottawa Geotechnical Group
Consulting Engineers of Ontario

YEARS OF EXPERIENCE

With Paterson: 26

OFFICE LOCATION

154 Colonnade Road South,
Nepean, Ontario, K2E 7J5

SELECT LIST OF PROJECTS

- 222 Beechwood Avenue, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- 409 MacKay Street, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- Art's Court Redevelopment, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- Visitor Welcome Centre, Phase II and Phase III, Parliament Hill, Ottawa, Ontario (Senior Project Manager for Environmental Remediation)
- Mattawa Landfill, Mattawa, Ontario (Senior Project Manager, Annual Water Quality Monitoring report)
- Multi-Phase Redevelopment of the Ottawa Train Yards, Ottawa, Ontario (Senior Project Manager)
- Rideau Centre Expansion, Ottawa, Ontario(Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- 26 Stanley Avenue, Ottawa, Ontario, Phase I ESA, Phase II ESA (Senior Project Manager)
- Riverview Development – Kingston, Ontario, Phase I ESA, Phase II ESA, and filing of an RSC in the MOECC Environmental Site Registry (Senior Project Manager)
- Monitoring Landfills for River Valley, Kipling and Lavagine (Senior Project Manager)

PROFESSIONAL EXPERIENCE

May 2001 to present, **Manager of Environmental Division, Paterson Group Inc.,**
Ottawa, Ontario

- Manage all aspects of the environmental division (management of personnel, budgeting, invoicing, scheduling, business development, reporting, marketing, and fieldwork).
- Review day to day operations within the environmental division.
- Design, perform, and lead Phase I, II and Phase III ESAs, Remediation's, Brownfield Applications and Record of Site conditions, fieldwork surveys, excavation, monitoring, laboratory analysis, and interpretation.
- Write, present, and publish reports with methodology and laboratory analysis results, along with recommendations for environmental findings.
- Responsible for ensuring projects meet Ministry of Environment and Climate Change Standards and Guidelines.
- Building and fostering relationships with clients, stakeholders, and Ministry officials.
- Supervise and continuous training of staff in environmental methods (environmental sampling techniques, technical expertise and guidance).
- Applied due diligence in ensuring the health and safety of staff and the public in field locations.

1991 to 2001, **Geotechnical and Environmental Engineer, Paterson Group Inc.,** Ottawa, Ontario

- Provide on-site geotechnical and environmental expertise to various clients.
- Oversee geotechnical and environmental investigations for drilling and test pitting on numerous proposed utility installations, residential and commercial developments.
- Problem solving to help advance or maintain project schedules.
- Complete environmental reports with recommendations to meet environmental standards set by MOE and CCME standards.
- Conduct site inspections, bearing medium evaluations, bearing surface inspections, concrete testing and field density testing.
- Liaising with contractors, consultants and government officials.
- Provide cost estimates for geotechnical and environmental field programs and construction costs.
- Review RFI's, submittals, monthly progress reports and other various construction related work.

Marek Moroz, B.Sc., G.I.T. Geoscientist / Environmental Consultant

Prior to joining Paterson Group in 2017, Marek held various positions within the public and private sectors as a physical scientist and exploration geologist. In his 4 years at in the mining and exploration industry, Marek undertook a wide variety of geological projects on sites across Canada, Chile, Nicaragua and Poland, including field mapping, supervising drilling programs, interpreting geochemical data, geological compilations and training staff. Marek received his Honours Bachelors of Science specializing in geology with a minor in Spanish from the University of Ottawa in 2012. While at uOttawa, Marek undertook three separate field school courses, several positions as teaching assistant, volunteered for the Science Student Association, and worked at the Geological Survey of Canada as a research assistant, adding practical experience to his academic knowledge. In 2017, Marek completed a graduate certificate in Environmental Management and Assessment from Algonquin College, with a focus on sample and field courses, laboratory analysis, interpretation of policy and communication. At Algonquin College, Marek also volunteered as the student body representative, aiming to improve the program and student experience. Marek's ability to adapt to various environments, manage field projects, his geoscientific experiences across various technical settings, and his ability to train junior staff, show his ability to work on and lead environmental projects.

EDUCATION

Graduate Certificate, 2017,
Environmental Management –
Algonquin College, Ottawa,
Ontario

B.Sc. (Hons) 2012, Specialization
in Geology and Minor in Spanish –
University of Ottawa, Ottawa, ON.

LICENCE/ PROFESSIONAL AFFILIATIONS

Geoscientist in Training –
Association of Professional
Geoscientists (APGO)

Society for Economic Geologists

Ottawa Geotechnical Group

YEARS OF EXPERIENCE

With Paterson: <1
With Other Firms: 5

OFFICE LOCATION

154 Colonnade Road South,
Ottawa, Ontario, K2E 7J5

SELECT LIST OF PROJECTS

- Natural Resources Canada Groundwater Program, Ottawa, Ontario (Physical Scientist for sample preparation, data collection and analysis)
- Levack Mine Exploration Program, Sudbury, Ontario (Mine Geologist)
- Rudna Mine - Modernization of 3D Modelling Software and Mining Techniques, Lubin, Poland (Advising Geologist and Interpreter)
- Sierra Gorda Copper Gold Project – Geological Compilation and 3D modelling, Atacama Desert, Chile (Exploration Geologist)
- Franke Mine – Mineral Exploration and Resource Modelling, Atacama Desert, Chile (Exploration Geologist)
- Franke Mine – Developing 3D Modelling Software Tutorials and Training, Antofagasta, Chile (Software Instructor)
- Ajax Copper-Gold Project – Geological Compilation, Resource Modelling and Geochemical Assessment, Kamloops, British Columbia (Exploration Geologist)
- Rosita Exploration - Field Mapping and Resource Investigation, Rosita, Nicaragua (Project Geologist)

PROFESSIONAL EXPERIENCE

April 2017 to present, **Environmental Consultant, Paterson Group Inc.**, Ottawa, Ontario

- Sampled groundwater and soil in the field to determine environmental impacts on project sites.
- Observed and logged boreholes and test pits, describing soil and rock composition and texture.
- Produced Phase I - Environmental Site Assessment reports, including historical information, methodology, conclusions and recommendations.
- Surveyed boreholes and terrains in order to understand settlement movement over time.
- Collaborated with contractors, such as surveyors, drillers and excavators, ensuring safe work, continuous project advancement and completion.

September 2016 to March 2017, **Physical Scientist, Geological Survey of Canada**, Ottawa, Ontario

- Prepared samples for geochemical analysis, by crushing and sieving rock, till and soil samples.
- Captured geochemical data using a portable X-RAY fluorescence unit (p-XRF) in a laboratory setting.
- Used numerical software such as MS Excel to perform QA/QC, organize and analyze data.
- Created lithological and geochemical borehole profiles using R and Adobe Illustrator.
- Shared and presented sensitive and technical information to policy makers and senior managers.
- Mentored and trained co-op and summer students, allowing them to work independently and safely.

2014 to 2015, **Mine Geologist, KGHM International**, Sudbury, Ontario

- Logged over 750 ft (225m) drill core per day and entered data using DH Logger.
- Mapped underground structures, narrow vein mineralization, alterations and lithologies.
- Planned drill targets using Datamine and Leapfrog software in order to expand mineral reserves.
- Discovered new ore zones by interpreting geological and geochemical data.
- Updated mine plans and stopes using 3D modeling software and geological data.
- Inspected work sites for hazards and faulty equipment, ensuring the safety of contractors and staff.

2012 to 2014, **Exploration Geologist, KGHM International**, Sudbury, Ontario

- Designed, executed and supervised drill programs, exploring new and existing mineral deposits, focusing on base metal, gold and silver deposits in Poland, Chile and Canada.
- Gathered geological and geochemical data by efficiently logging and assaying drill core.
- Performed QA/QC and validation of drillholes and data, guaranteeing accuracy and precision.
- Supervised field assistants, contractors and geo-technicians, ensuring efficiency and productivity.
- Interpreted geological, geochemical and geophysical data on paper sections and created 3D models using Datamine and Leapfrog.
- Developed Datamine software tutorials and executed training sessions for colleagues.
- Mentored and trained co-op and summer students, allowing them to work independently and safely.
- Travelled to projects around the world, working with new colleagues and contractors, quickly building trust and a strong team environment.
- Led regularly scheduled safety and environmental inspections of work sites, both on surface and underground

May 2012 to September 2012, **Exploration Geoscientist, Alder Resources**, Rosita, Nicaragua

- Supervised and executed drill programs, inspecting drills, planning targets and quick logging, exploring for copper and gold deposits in Nicaragua.
- Led and executed a geochemical soil sampling program in order to generate exploration targets.
- Cooperated with aboriginal communities, building trust and respecting rights.
- Led and trained a group of 15+ field assistants, ensuring proper data collection and field work.