Geotechnical Engineering

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Phase I - Environmental Site Assessment

910 March Road Ottawa, Ontario

Prepared For

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Wexcom Developments (March Road) Ltd. to conduct a Phase I – Environmental Site Assessment (Phase I ESA) at 910 March Road in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

According to the historical research, the Phase I Property was initially developed with a residence and farmstead circa 1890. The subject land remained as agricultural land (cattle farm) until 2014, at which time it was used for residential purposes only. No potentially contaminating activities (PCAs) were identified with the historical use of the Phase I Property.

Based on historical records, neighbouring lands were also occupied by residences and farmsteads. No PCAs were identified with the historical use of properties within the Phase I Study Area.

Following the historical research, a site visit was conducted. The subject land is occupied by multiple structures consisting of storage barns, maintenance and tool storage sheds, a single-storey cabin and a two-storey residential structure with a basement level. The current property owner was present at the time of the assessment and indicated that a former underground storage tank (UST) was situated on the south side of the residence. The former UST represents is a PCA that represents an area of potential environmental concern (APEC) on the Phase I Property.

Additionally, three (3) empty aboveground storage tanks (ASTs) were noted in the interior of the northeastern storage shed, as well as an AST along the exterior west wall of another storage shed, located between the residence and the northwestern shed. The ASTs on-site were considered PCAs that represent APECs on the Phase I Property.

Neighbouring lands in the Phase I Study Area consist of residential, vacant lands and commercial businesses located to the south. No PCAs were identified with the current use of the lands within the Phase I Study Area.

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



Recommendations

If the domestic wells currently on-site are not going to be used in the future, or will be destroyed during site redevelopment, they should be abandoned according to Ontario Regulation 903.



1.0 INTRODUCTION

At the request of Wexcom Developments (March Road) Ltd., Paterson Group (Paterson) conducted a Phase I – Environmental Site Assessment (Phase I ESA) at 910 March 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 at the request of Mr. Michael Foley of Wexcom Developments. Mr. Foley can be reached by telephone at 905-385-4514.

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, 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, as well as 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.

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2.0 PHASE I PROPERTY INFORMATION

Address: 910 March Road, Ottawa, Ontario

Legal Description: Part of Lots 11 and 12, Part 1 of Registered Pan

4R24361, March Concession 4, in the City of Ottawa.

Property Identification

Number (PIN): 04527-0840

Location: The Phase I Property is located on the east side of

March Road, approximately 86 m north of the Maxwell Bridge Road and March Road intersection, in the City of Ottawa, Ontario. For the purposes of this report, March Road is assumed to run in a north-south direction. The subject site is shown on Figure 1 – Key Plan, following the body of this report (Figures section).

Latitude and Longitude: 45° 21′ 35.47″ N, 75° 56′ 10.25″ W

Site Description:

Configuration: Irregular

Site Area: 2.72 ha (approximate)

Zoning: DR – Development Reserve Zone designated on the

southern portion of the site.

RU – Rural Zone designated on the northern portion of the site of which Shirley's Brook and its tributary transects the north-eastern and northern portions of the Phase I Property in an approximate north-south direction, while its tributary runs in an approximate east-west direction, parallel to the northern property

boundary.

Current Use: The subject site is currently an uninhabited farmstead.

Services: The Phase I Property has private services (potable

wells and septic system) and will be provided with

municipal services upon redevelopment.



3.0 SCOPE OF INVESTIGATION

e scope of work for this Phase I $-$ Environmental Site Assessment was as ows:
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. 153/04, as amended, 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 assessment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

First Developed Use Determination

Based on the historical review and personal interview with the current landowner, the Phase I Property was first developed with a farmstead circa 1890. For the purpose of this Phase I ESA, the first developed use for the Phase I Property is assumed to have been residential and agricultural in 1890.

National Archives

Fire insurance plans and city directories are not available for the Phase I Property and properties within the 250m Phase I Study Area.

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 and other historical records.

Plan of Subdivision

A survey plan prepared by Stantec Geomatics Limited and dated July of 2017 was reviewed as a part of this assessment. The plan depicts the Phase I Property, in its current configuration. A copy of the survey plan is provided in Appendix 1.

Previous Engineering Reports

Paterson has conducted environmental assessments for a neighbouring property to the north and the reconstruction of March Road in 2018. Based on a review of our files, no potential environmental concerns were identified within the 250m search radius with respect to the Phase I Property.

A Designated Substance Survey (DSS) was conducted at the subject site by Paterson in October 2019. Based on the report, asbestos-containing materials (ACMs) were identified in the residential structure.



It was recommend that prior to demolition all ACMs be removed according to the O.Reg 490/09 under the Occupational Health and Safety Act.

Paterson conducted a Geotechnical Investigation on the subject land, concurrently with the environmental investigation. Nine (9) boreholes were drilled on-site. The subsurface profile generally consisted of a layer topsoil underlain by a hard to stiff brown silty clay, which in turn, overlaid compact to dense glacial till and/or inferred bedrock. Practical auger refusal was encountered at all test hole locations at depths varying between 1.9 to 4.7 m below existing ground surface on inferred bedrock. No contamination or deleterious material was encountered during the subsurface investigation.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on October 2, 2019. The Phase I Property and properties within the Phase I Study Area were not listed in the NPRI database.

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.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I Study Area was conducted on the Ontario Ministry of Natural Resources and Forestry (MNRF) website on October 3, 2019. No natural features or areas of natural significance were identified on the Phase I Property or within the 250m study area.

Ontario Ministry of 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 Phase I Property. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.



MECP Submissions

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the Phase I Property. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Incident Reports

A request was submitted to the MECP FOI office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP for the Phase I Property. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Waste Management Records

A request was submitted to the MECP Freedom of Information office for information with respect to waste management records for the subject site. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

MECP Coal Gasification Plant Inventory

The Ontario Ministry of Environment, Conservation and Parks document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. The Phase I Property and properties within the 250m study area are not listed in this document.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry was conducted as part of this assessment for the subject site, neighbouring properties, and the Phase I study area. No Records of Site Condition (RSCs) were filed for the Phase I Property or for any properties within the Phase I Study Area.



MECP Waste Disposal Site Inventory

The Ontario Ministry of Environment and Climate Change 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 records were listed for the Phase I Property or for properties within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on October 2, 2019, to inquire about current and former underground storage tanks, spills and incidents for the Phase I ESA Property and neighbouring properties. Based on the TSSA response, no records are listed in the TSSA registry for the Phase I ESA Property 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. No former landfill sites were identified within the Phase I Study Area.

City of Ottawa Historical Land Use Inventory (HLUI) Database

A request for information from the City's Historical Land Use Inventory (HLUI 2005) database for the subject property was sent to the City of Ottawa in October of 2019. At the time this report was issued, a response had not been received. Any pertinent information will be forwarded to the client upon receipt. A copy of the HLUI authorization form 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, commencing with the earliest available photograph. Based on the review, the following observations have been made:

The subject site is occupied by a farmstead. Surrounding lands are occupied by agricultural land with some farmsteads/residences.

The subject site and surrounding lands remain unchanged from the previous photograph.

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1955	No significant changes are apparent on the subject site or neighbouring lands.						
1976	A residential dwelling (red roof) and barn-like structure can be seen in this photograph. No significant changes are apparent on the subject site and surrounding lands.						
1989	Several structures appear to be occupying the subject site at this time. No apparent changes have been made to neighbouring lands.						
1991	One of the barn-like structures situated on the central part of the site is no longer present. Some ground disturbance is visible at this time. New roadways can be seen to the east of Old Carp Road (Marchbrook Circle) and March Road (Klondike Road) at this time.						
2002	The subject site remains unchanged from the previous photograph. Residences are present to the west and preparation of a new development is noted to the southwest. Lands to the north and east remain unchanged.						
2011	(City of Ottawa Website) No apparent changes are apparent on the subject site. A new residential and commercial development is present to the east and south, as well as a stormwater management pond. Maxwell Bridge Drive is present at this time.						
2017	(City of Ottawa Website) No significant changes are apparent on the subject site or surrounding lands.						

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

Topographic Maps

Topographic information was obtained from Natural Resources Canada – The Atlas of Canada website. The topographic maps indicate that the Phase I Property and regional topography slopes down in a southeast/south direction towards Shirley's Brook. 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 and attached mapping, the site is situated within the Ottawa Valley Clay Plains physiographic region, described as "clay plains interrupted by ridges of rock



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 sandstone and dolomite of the March Formation. Based on the maps, the thickness of overburden ranges from 5 to 10 m and consists of offshore marine sediments consisting of erosional terraces.

Water Well Records

A search of the MECPs website for all drilled well records within 250 m of the subject site was conducted on October 3, 2019. Based on the online mapping search results, two (2) potable well records were identified on the Phase I Property. The wells were drilled in 1973 and 2006 to an approximate depth of 27.4 m below the ground surface (mbgs). The water was clear and sediment free in both wells. According to these well logs, the site stratigraphy consisted of brown clay, extending to a depth of 1.82 m, underlain by interbedded limestone and sandstone bedrock.

Eighteen (18) well records were identified for properties within the Phase I Study Area, which consisted of twelve (12) domestic wells drilled between 1961 to 1984, and six (6) well abandonments from 2006 to 2007. No concerns were noted during the review of these records. Copies of the MECP well records are provided in Appendix 2.

Water Bodies and Areas of Natural Significance

Shirley's Brook transects the northeastern portion of the Phase I Property in an approximate north-south direction, while its tributary runs in an approximate east-west direction, parallel to the northern property boundary and drains into Shirley's Brook. No other bodies of water are present on the Phase I Property or within the Phase I Study Area. No areas of natural significance are known to exist within the Phase I Study Area.

5.0 PERSONAL INTERVIEWS

Mr. Jim Maxwell, the current property owner was interviewed at the time of the site visit. Mr. Maxwell indicated that the Maxwell family has owned and operated the farm (cattle farm) for more than 100 years, which ceased operations in 2004. According to Mr. Maxwell, the residential dwelling was previously on fuel oil with an underground storage tank (UST) situated beside the exterior south wall of the



residence. The UST as well the oil-fired furnace was removed circa 1980. A wood burning stove and a propane fired furnace was used in replacement of the oil-fired furnace, which was later converted to natural gas in the early 2000s.

For the last 12 years, the site has been primarily used for residential purposes and storage of various farm equipment, tools and building materials from Mr. Maxwell's farm located in Perth, Ontario. The current residence has not been occupied since 2017 and is currently uninhabited. Mr. Maxwell has indicated that he is not aware of any potential environmental concerns on the subject land or neighbouring properties.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

A site visit was conducted by Mr. Mark St. Pierre, from the Environmental Department of Paterson Group on October 3, 2019. Weather conditions were overcast with a temperature of approximately 8°C. In addition to the Phase I Property, the uses of neighbouring properties within the Phase I Study Area was also assessed at the time of the site visit.

6.2 Specific Observations at Phase I Property

Buildings and Structures

The Phase I Property is occupied by seven (7) structures that include a residential dwelling and private shed, a small vacant cabin, and four (4) barn-like structures.

The residential dwelling is a 2-storey home with a basement level constructed with a stone and mortar foundation. The exterior is finished in stone and with a sloped red metal roof. An add-on front entrance structure was finished in vinyl siding. The residence is believed to have been built in the late 1890s. The cabin like structure is a single-storey slab-on-grade structure finished in wood siding with a sloped shingle roof. The cabin was constructed circa 1970s.

The northeastern and southern most barns are wood pier style barns, while the remaining are slab-on-grade barns finished in metal siding and metal roofs. The barns were constructed sometime between the late 1970s and 1980s.

A depiction of the subject site is presented on Drawing PE4760-1 – Site Plan, in the Figures section of this report.



Subsurface Utilities and Structures

Historical subsurface structures including the UST and line associated with the heating oil furnace were situated on the south side of the residential dwelling.

Presently, the Phase I Property is serviced by a private well and septic system with above ground electricity service from March Road. Below ground natural gas services and underground electrical services are present on-site. The approximate locations of above and below ground services are shown on Drawing PE4760-1 – Site Plan.

Site Features

The Phase I Property is situated in a designated floodplain overlying Shirley's Brook and its tributary, which transect the north-eastern and northern portions of the Phase I Property in an approximate north-south direction, while its tributary runs in an approximate east-west direction, parallel to the northern property boundary.

The site is grass-covered land with an asphaltic concrete paved driveway leading to the residential dwelling and attached garage, fronting March Road. Several semi-truck trailers, sheet metal, farm equipment and waste lumber were situated along-side the work and storage sheds.

The topography of the site is generally flat with a slight downward slope along the northern, eastern and southern property boundaries towards Shirley's Brook and its tributaries, present to the north and south. Site drainage occurs primarily through infiltration on grass-covered areas and/or surface runoff to the adjacent drainage ditches along March Road and/or into Shirley's Brook and its tributaries.

One potable water well was noted on the southwestern side of the residential dwelling, which was drilled in 2006. The domestic well drilled in 1973 was located on the west side of the small cabin.

An exterior drainage pipe was noted on the east side of the residence. The pipe drains groundwater from the interior sump pit. No signs of water, odour or stressed vegetation was noted at the time of the site visit.

An empty above ground storage tank (AST) was noted on the exterior south side of the barn, east of the residence, at the time of the site visit. No evidence of surficial staining or stressed vegetation was observed around or beneath the AST at the time of the site visit.



No hazardous materials or evidence of surficial staining were observed on the Phase I Property at the time of the site visits.

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

Interior Assessment

Floor materials consist of a combination of vinyl tiles, linoleum and poured concrete and gravel (basement).
 Wall materials consist of lathe and plaster, drywall and stone and mortar walls (basement).
 Ceiling materials consist of plaster and unfinished wood beams (basement).
 Lighting is provided by incandescent fixtures.

A designated substance survey (DSS) was recently conducted at the subject building. Reference should be made to the report for more details.

The dwelling is currently heated with natural gas-fired equipment, prior to which, fuel-oil was used. An above ground copper line that was partially parged over was observed in the basement. No evidence of surficial staining or odour was noted at the time of the visit. One sump pit was noted in the basement. No water or odour was noted at the time of the visit.

Three (3) empty ASTs were noted in the interior of the northeastern most barn at the time of the site visit. No evidence of surficial staining or unusual odour were observed around or beneath the AST sat the time of the site visit.

Motor oils were stored inside the workshop. No other chemicals were noted onsite at the time of the site visit. No potential concerns were noted with the chemical storage on the Phase I Property.

Waste is not currently generated 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 Phase I Property was as follows:

North:	Residential and agricultural land
East:	Shirley's Brook, residences and vacant land, followed by Windance Crescent
South:	MacDonalds, followed by Maxwell Bridge Road
West:	March Road, followed by private clinic and residence.

The current use of the neighbouring properties is not considered to pose an environmental concern to the subject site. There are no properties within the Phase I Study Area that are occupied by potentially contaminating activities (PCAs). Current land use in the Phase I Study Area is illustrated on Drawing PE4760-2 – Surrounding Land Use Plan in the Figures section of this report.



7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The following tables indicate 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 – 910 March Road						
Time Period	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.		
Prior to 1890	Unknown	Residential and Agricultural	Phase I Property was reportedly developed as a farmstead in the late 1800's.	First developed use based on personal interview.		
1890 to 2007	Private individuals (Maxwell Family)	Residential and Agricultural	Farmstead: residential dwelling and cattle farm	Existing farmstead can be seen in 1934 aerial (earliest aerial available for review). No significant change in land use noted in subsequent 1952, 1976, 1989 and 2007 aerials.		
2007 to 2017	Maxwell Family	Residential	Residential and storing tools and farm equipment	Based on an interview with the current property owner. Lack of activity on the Phase I Property can be seen in 2011 and 2017 aerial photos.		
2017 to present	Maxwell Family	Residential	Unoccupied or uninhabited	Based on an interview the Phase I Property is current unoccupied.		

Potentially Contaminating Activities

The following PCAs, as per Table 2, O.Reg. 153/04, as amended, were identified on the Phase I Property:

PCA 1: Item 28, "Gasoline and Associated Products Storage in Fixed Tanks"
- this PCA was identified based on the presence of a former underground
storage tank situated on the southwest side of the residential dwelling on the Phase I Property.

PCA 2: Item 28, "Gasoline and Associated Products Storage in Fixed Tanks"
 this PCA was identified based on the presence of an empty above ground



storage tank situated on the west side of the storage shed located east of the residential dwelling on the Phase I Property.

PCA 3: Item 28, "Gasoline and Associated Products Storage in Fixed Tanks"
 this PCA was identified based on the presence of three (3) empty above ground storage tanks situated inside the northeastern storage shed on the Phase I Property.

The rationale for identifying the PCAs is based on the site visit and an interview with the current owner of the Phase I Property.

The locations of PCAs within the Phase I Study Area are shown on Drawing PE4760-2 –Surrounding Land Use Plan.

Areas of Potential Environmental Concern

A summary of the PCAs that represent APECs on the Phase I Property are presented in Table 2.

Table 2: Areas of Potential Environmental Concern						
Area of Potential Environmental Concern (APEC)	Location of APEC on Phase I Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Soil and/or Groundwater)	
APEC 1: Presence of a former UST	Central west portion of the Phase I Property	Item 28: Gasoline and associated product storage in fixed tanks	On-site	BTEX, PHC (F ₁ -F ₄)	Soil and Groundwater	
APEC 2: Presence of an empty AST	Central portion of the Phase I Property	Item 28: Gasoline and associated product storage in fixed tanks	On-site	BTEX, PHC (F ₁ -F ₄)	Soil and Groundwater	
APEC 3: Presence of three (3) ASTs	Central east portion of the Phase I Property	Item 28: Gasoline and associated product storage in fixed tanks	On-site	BTEX, PHC (F ₁ -F ₄)	Soil and Groundwater	

The locations of the APECs on the Phase I Property are depicted in Drawing PE4760-1 – Site Plan.

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Contaminants of Potential Concern (CPCs)

Based on the APECs identified on the Phase I Property, the contaminants of potential concern (CPCs) in the soil and groundwater include benzene, ethylbenzene, toluene and xylenes (BTEX), and petroleum hydrocarbons (PHCs, Fractions F_1 - F_4).

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on our geotechnical investigation, the profile generally encountered on the Phase I Property consisted of a layer topsoil underlain by a hard to stiff brown silty clay, followed by a compact to dense glacial till and/or inferred bedrock at depths varying between 1.9 and 4.7 mbgs.

According to the Geological Survey of Canada website, the bedrock in the area of the site consists of interbedded sandstone and dolomite of the March Formation. Overburden soils are reported to consist of offshore marine sediments with erosional terraces or bedrock, with drift thicknesses between 5 and 10m.

The regional topography slopes down in a southeasterly direction. The local groundwater flow beneath the Phase I Property is inferred to be in a south-easterly direction towards Shirley's Brook.

Buildings and Structures

The Phase I Property is occupied by seven (7) structures that include a residential dwelling and private shed, a small vacant cabin, and four (4) barn-like structures. The residential dwelling is currently uninhabited. The workshop is used intermittently by the current landowner.

Subsurface Structures and Utilities

Presently the Phase I Property is serviced by a private well and septic system with above ground electricity service from March Road. Underground natural gas and electrical services are present on-site.

The presence of underground electrical and natural gas lines is not considered to have an affect on contaminant distribution or transport.



Water Bodies

Shirley's Brook transects the northeastern portion of the Phase I Property in an approximate north-south direction and is considered to flow in a southerly direction while its tributary runs in an approximate east-west direction, parallel to the northern property boundary and drains into Shirley's Brook. No other water bodies are present on the Phase I Property or within the Phase I Study Area.

Areas of Natural Significance

No areas of natural significance are known to exist within the Phase I Study Area.

Potable Water Wells

Based on the MECP well mapping website, two (2) well records were identified on Phase I Property for potable wells that were drilled in 1973 and 2006 to an approximate depth of 27.43 m below the ground surface (mbgs). The water was clear and sediment free.

During the site visit, two (2) domestic wells were located. One well was located on the west side of the residential dwelling (stone house), while the other was located next to the small residential unit/cabin located north of the residential dwelling. Several domestic well records were identified on properties within the Phase I Study Area. Properties to the north and west within the Phase I Study Area currently rely on potable water wells for drinking water.

Monitoring Wells

The MECP well mapping did not identify any monitoring well records for the Phase I Property or for any properties within the Phase I Study Area.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is primarily residential and agricultural. Commercial land use is present on the neighbouring properties to the south. Land use is shown on Drawing PE4760-2 - Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, presented in Table 2, the on-site PCAs include the former presence of a UST and presence of empty ASTs resulted in APECs on the Phase I Property



Contaminants of Potential Concern

As per Section 7.1 of this report, the CPCs in the soil and groundwater on the Phase I Property include the following benzene, ethylbenzene, toluene and xylenes (BTEX) and petroleum hydrocarbons (PHCs, Fractions F₁-F₄).

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 potentially contaminating activities (PCAs) on-site, which have resulted in areas of potential environmental concern (APECs) on the Phase I Property. The presence of PCAs was confirmed by a variety of independent sources, including, observations made during the site visit and a personal interview. As such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.



8.0 CONCLUSION

Assessment

Paterson Group was retained by Wexcom Developments (March Road) Ltd. to conduct a Phase I – Environmental Site Assessment (Phase I ESA) at 910 March Road in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

According to the historical research, the Phase I Property was initially developed with a residence and farmstead circa 1890. The subject land remained as agricultural land (cattle farm) until 2014, at which time it was used for residential purposes only. No potentially contaminating activities (PCAs) were identified with the historical use of the Phase I Property.

Based on historical records, neighbouring lands were also occupied by residences and farmsteads. No PCAs were identified with the historical use of properties within the Phase I Study Area.

Following the historical research, a site visit was conducted. The subject land is occupied by multiple structures consisting of storage barns, maintenance and tool storage sheds, a single-storey cabin and a two-storey residential structure with a basement level. The current property owner was present at the time of the assessment and indicated that a former underground storage tank (UST) was situated on the south side of the residence. The former UST represents is a PCA that represents an area of potential environmental concern (APEC) on the Phase I Property.

Additionally, three (3) empty aboveground storage tanks (ASTs) were noted in the interior of the northeastern storage shed, as well as an AST along the exterior west wall of another storage shed, located between the residence and the northwestern shed. The ASTs on-site were considered PCAs that represent APECs on the Phase I Property.

Neighbouring lands in the Phase I Study Area consist of residential, vacant lands and commercial businesses located to the south. No PCAs were identified with the current use of the lands within the Phase I Study Area.

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



Recommendations

If the domestic wells currently on-site are not going to be used in the future, or will be destroyed during site redevelopment, they should be abandoned according to Ontario Regulation 903.



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, 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 as well as 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 Wexcom Developments (March Road) Limited. Permission and notification from Wexcom Developments (March Road) Ltd. and Paterson Group will be required to release this report to any other party.

Paterson Group Inc.

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

Mark S. D'Arcy, P.Eng., QPESA

M.S. D'ARCY 90377839

Report Distribution:

- ☐ Wexcom Developments (March Road) Limited
- Paterson Group Inc.



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.

MECP Water Well Inventory.

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

Ministry of Natural Resources and Forestry: Areas of Natural Significance.

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 eMap website.

Local Information Sources

Previous Engineering Reports.

Plan of Survey prepared by J.D. Barnes Limited and dated February 2019.

Public Information Sources

Google Earth.

Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4760-1 - SITE PLAN

DRAWING PE4760-2 - SURROUNDING LAND USE PLAN

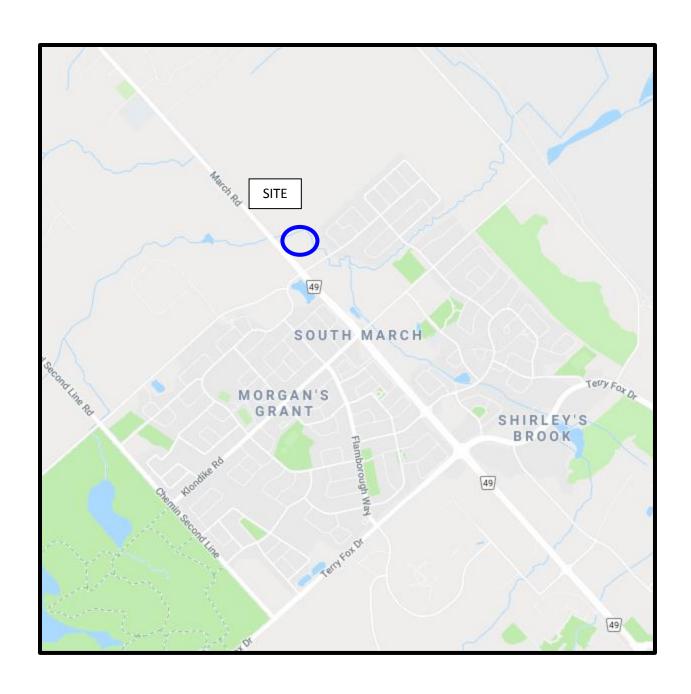


FIGURE 1 KEY PLAN

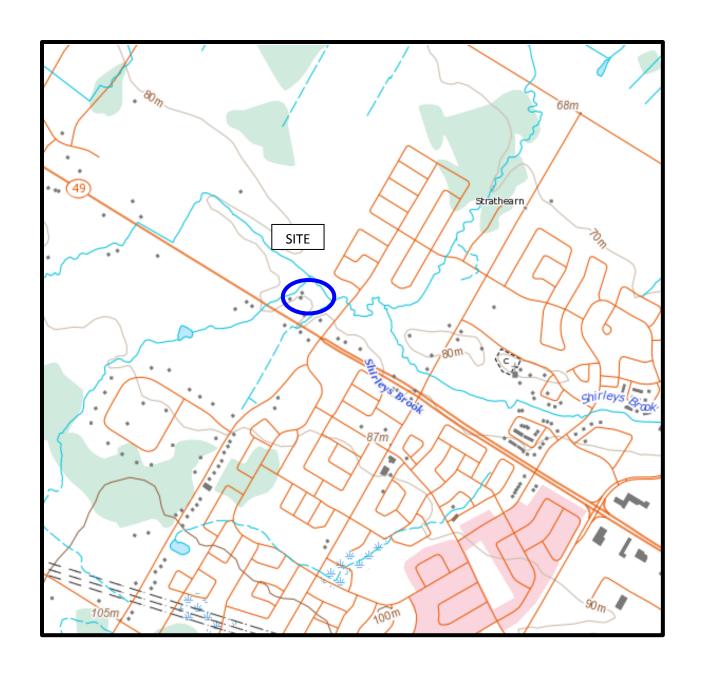
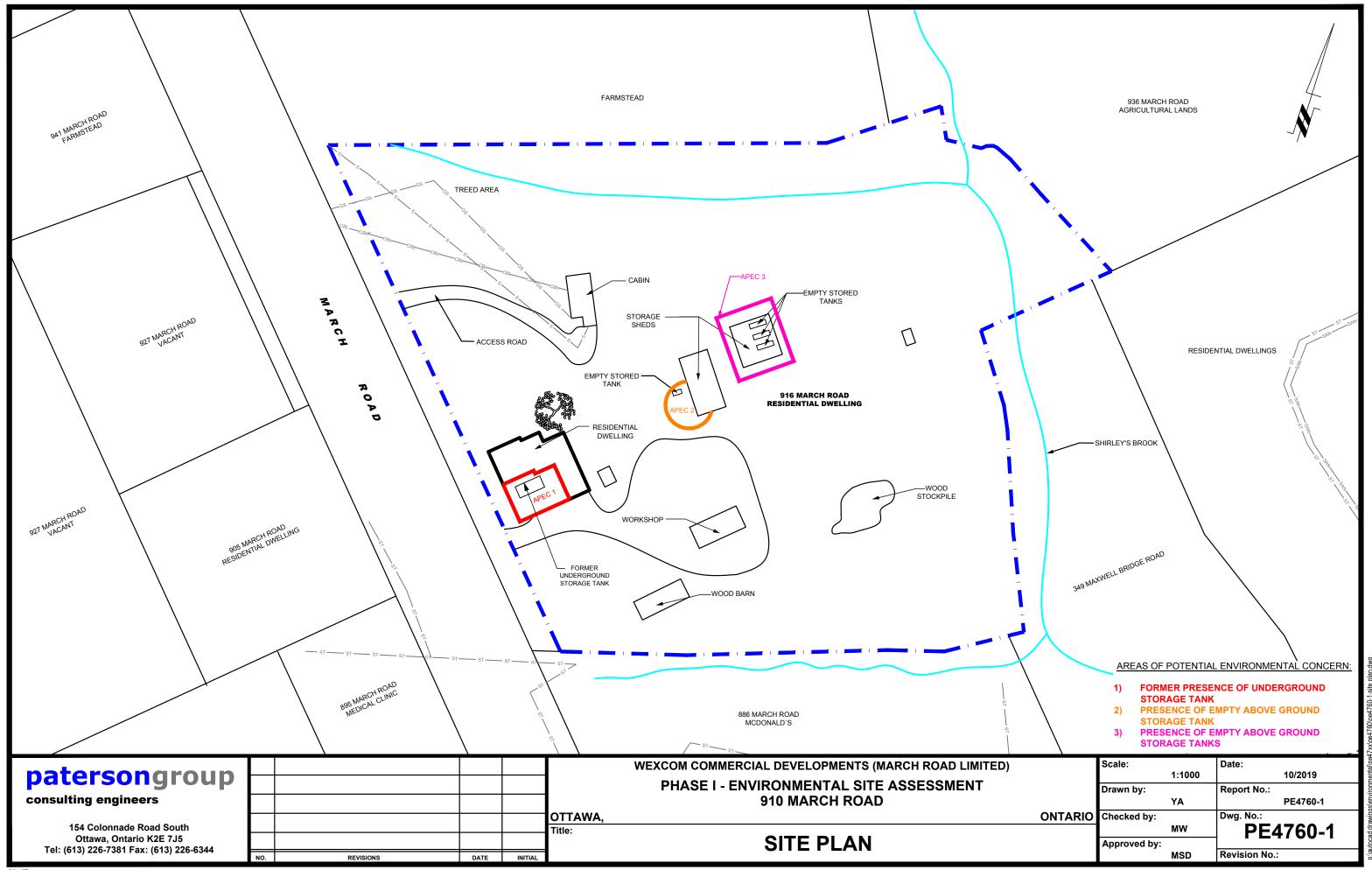
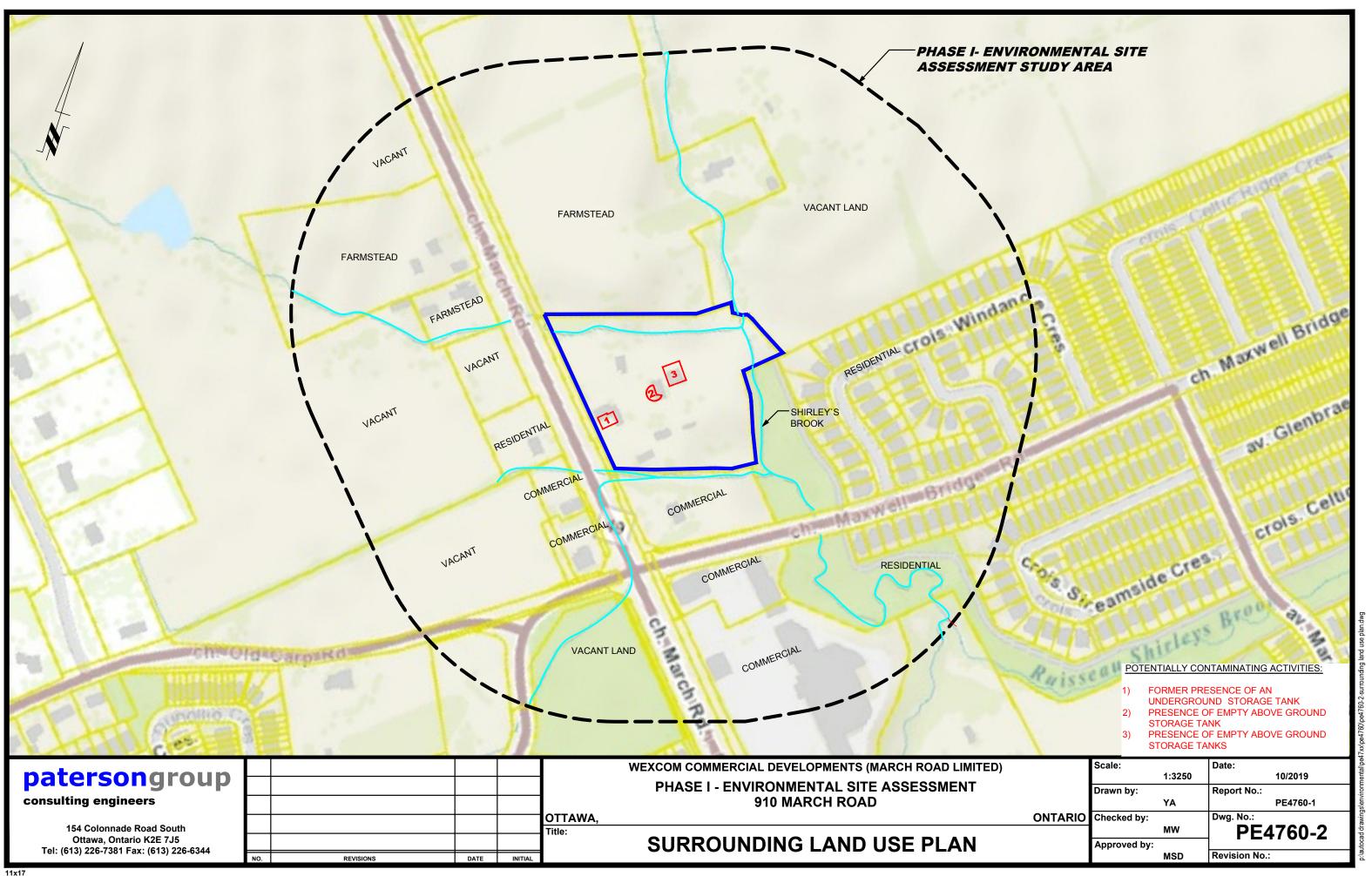


FIGURE 2 TOPOGRAPHIC MAP

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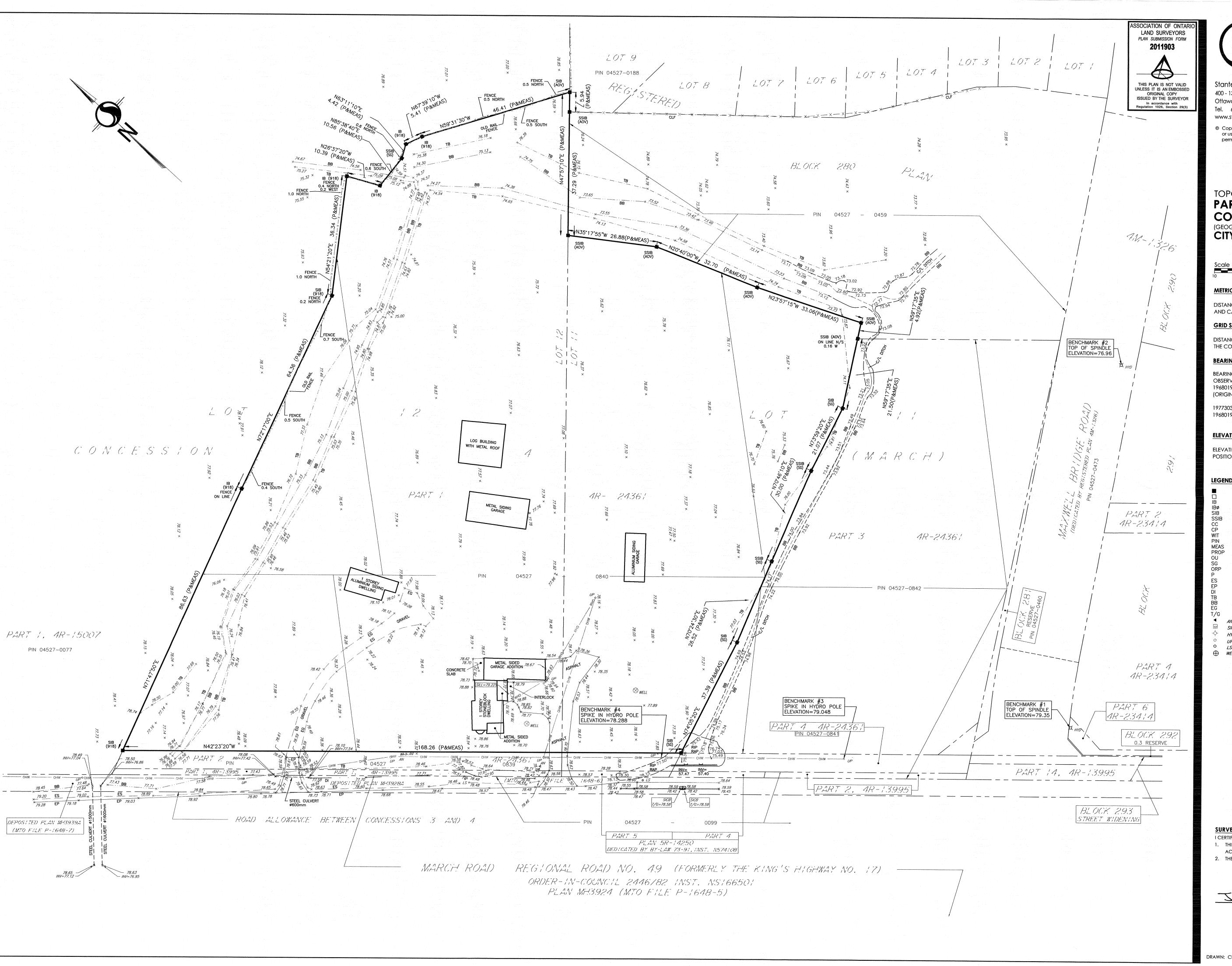




APPENDIX 1

SURVEY PLAN
AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS





Stantec Geomatics Ltd. 400 - 1331 Clyde Avenue Ottawa ON

Tel. 613.722.4420 www.stantec.com

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TOPOGRAPHIC PLAN OF SURVEY **PART OF LOTS 11 & 12 CONCESSION 4** CITY OF OTTAWA

METRIC CONVERSION

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

GRID SCALE CONVERSION

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99994.

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19773035 N:5006060.42 E:324888.04 19680191 N:5033564.26 E:388064.94

ELEVATION NOTE

ELEVATIONS ARE GEODETIC BASED ON A SURVEY BY AOV DATED JULY 10, 2015. POSITION OF SITE BENCHMARKS #1 AND #2 AS SHOWN HEREON.

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SURVEYOR'S CERTIFICATE

- 1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
- 2. THE SURVEY WAS COMPLETED ON THE 27th DAY OF JUNE, 2017 $\,$.

July 10/17



DRAWN: CEC CHECKED: * PM: BW FIELD: CA PROJECT No.: 161613685-111

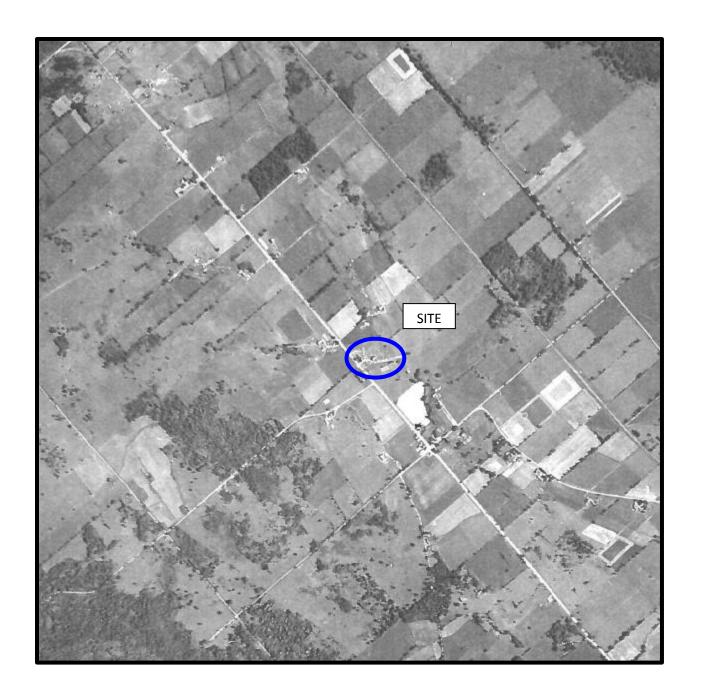


AERIAL PHOTOGRAPH 1934

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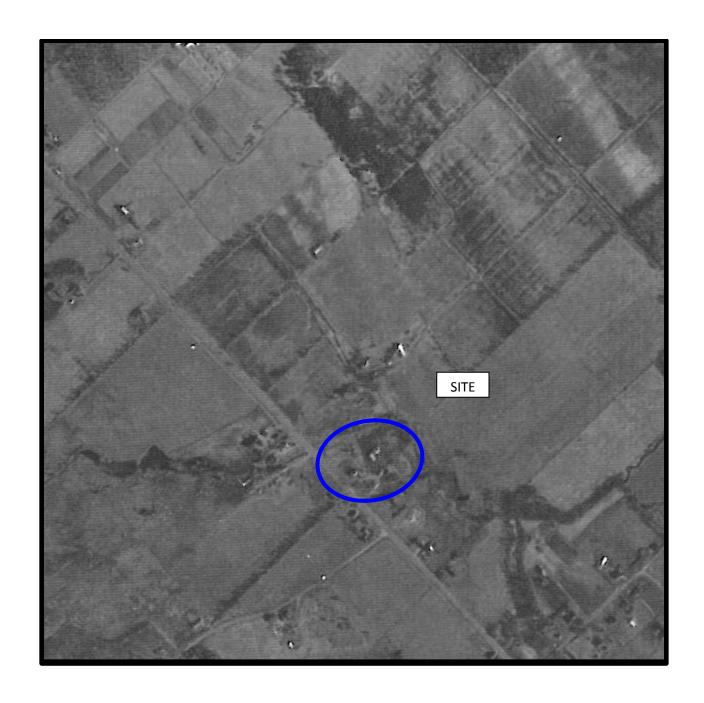


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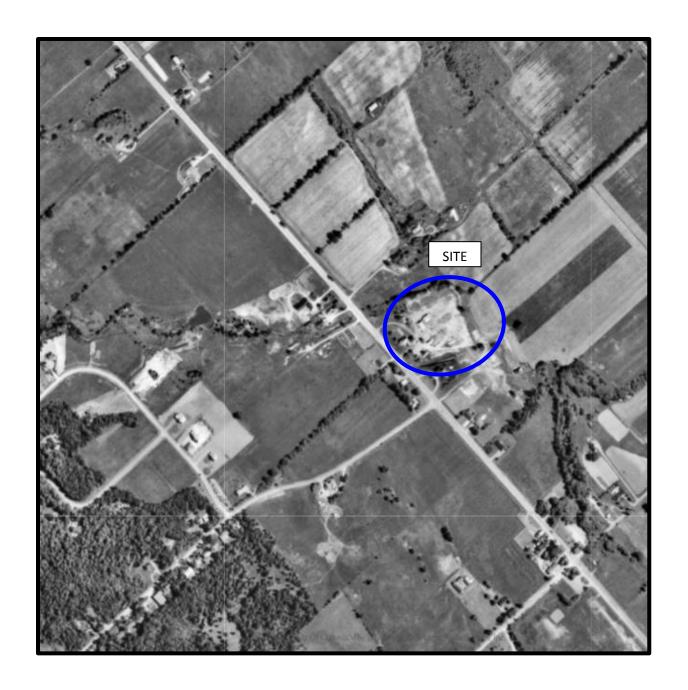


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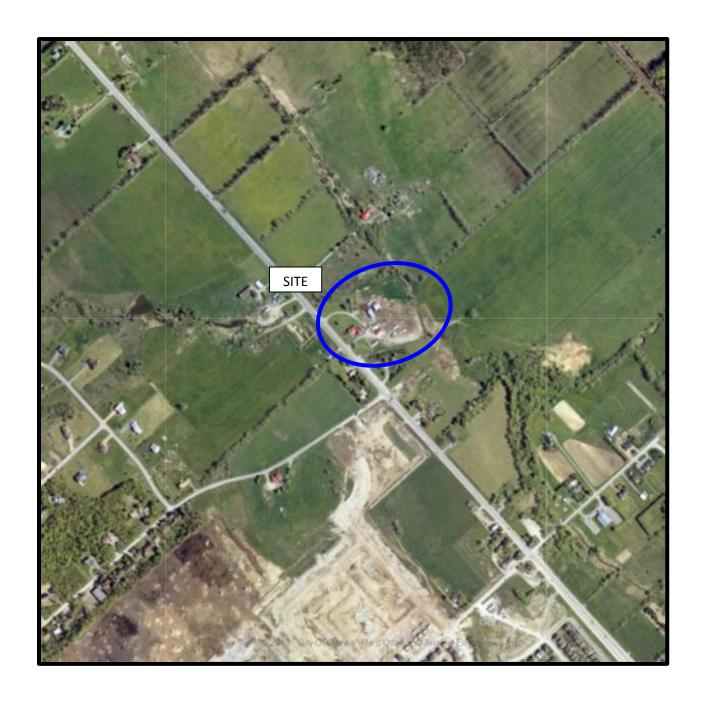
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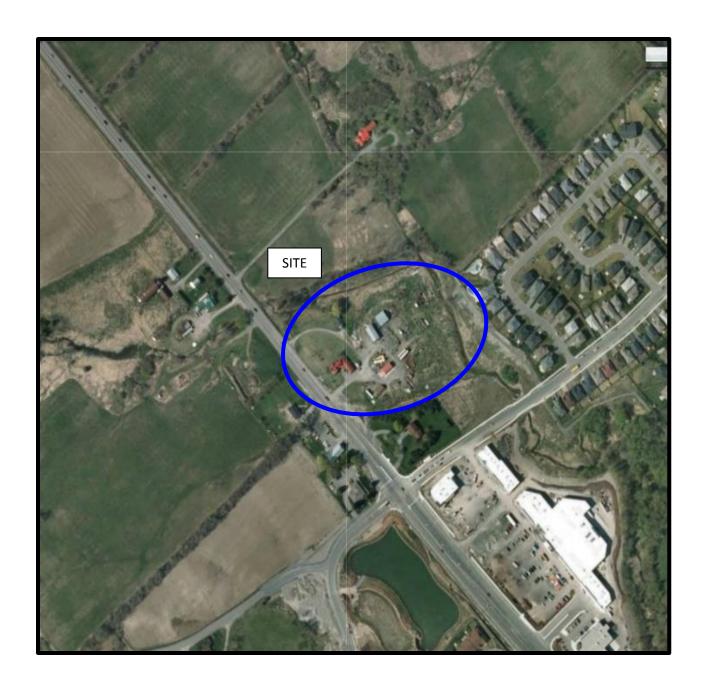
AERIAL PHOTOGRAPH 1991

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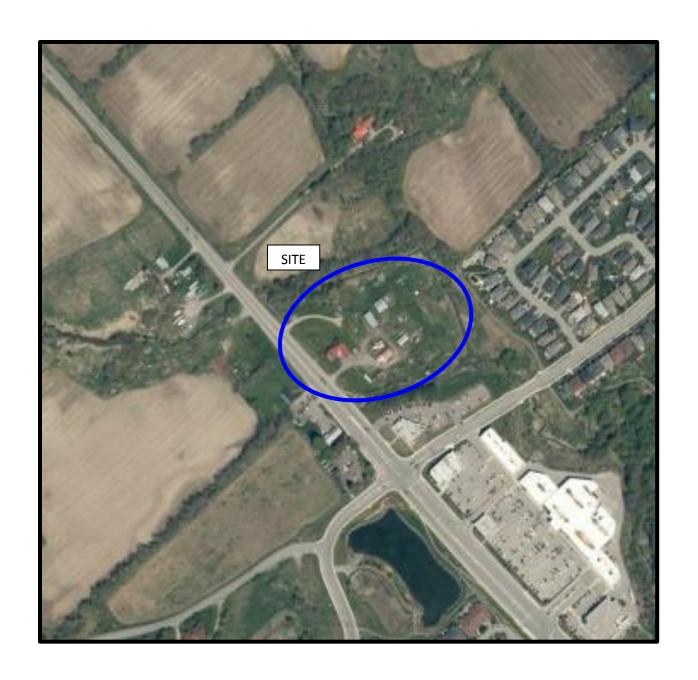
AERIAL PHOTOGRAPH 2002

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AERIAL PHOTOGRAPH 2011

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AERIAL PHOTOGRAPH 2017



Photograph 1: South west view of the subject site, looking onto March Road.



Photograph 2: Southeastern view of the subject site, taken from the west side of the property.



Photograph 3: View of the attached garage (part of the residential dwelling), looking northeast.



Photograph 4: West view of the site/garage, looking towards March Road.



Photograph 5: View of the residential dwelling, looking north.



Photograph 6: Northwestern view of the subject site.



Photograph 7: Eastern view of the subject site, taken from the north side of the residential dwelling.



Photograph 8: Northeastern view of the subject site and vacant wood cabin.



Photograph 9: Northern view of the subject site, taken from the north side of the residential dwelling.



Photograph 10: Southeastern view of the subject site, taken from the south side of the cabin.

APPENDIX 2

MECP FREEDOM OF INFORMATION SEARCH REQUEST

MECP WATER WELL RECORDS

CITY OF OTTAWA HLUI SEARCH

TSSA CORRESPONDENCE



Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on completion and use of this form. Our fax no. is (416) 314-4285.

	Requester Data		For Ministry Use Only							
Name, Company Name, Mailing Address and	Email Address of Requester		FOI Request No.	Date Request Received						
Mandy Witteman			1 Of Request No.							
Paterson Group Inc. 154 Colonnade Road			Fee Paid							
Ottawa, ON K2E 7J5				VISA/MC CASH						
Email address: mwitteman@patersongroup.ca										
Telephone/Fax Nos.	Your Project/Reference No.	Signature/Print /Name of Requester	- OND							
Tel. 613-226-7381	PE4760	Mandy Witternan	□ CNR □ ER □ NC □ SAC □ IEB □ EA							
Fax 613-226-6344		Tella		A DEWIN DOTA						
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Wexford Commercial Develo	opments Ltd.									
Previous Property Owner(s) and Date(s) of Ow	mership									
Present/Previous Tenant(s).(d applicable)	-6000		7700							
Files older than 2 years may require		rch Parameters ere is no guarantee that records responsive	to your request will be located.	Specify Year(s) Requested						
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Spills				all						
Investigations/prosecutions	➤ Owner AND tena	nt information must be provided		all						
Waste Generator number/cla	asses			all						
760	Certificates	s of Approval > Proponent inform	mation must be provided							
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Water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster) 1986-present										
sewage - sanitary, storm, treatment	nt, stormwater, leachate &	leachate trealment & sewage pump station	s	1986-present						
waste water - industrial discharge	es	- 17-17 SEP - 18-16 - 18-16		1986-present						
waste sites - disposal, landfill site	s, transfer stations, proces	ssing sites, incinerator sites		1986-present						
waste systems - PCB destruction	on, mobile waste processin	g units, haulers: sewage, non-hazardous d	& hazardous waste	1986-present						
pesticides - licenses	tion for neverto to		18	1986-present						

A \$5.00 non-refundable application fee, payable to the Minister of Finance, is mandatory. The cost of locating on-site and/or preparing any record is \$30.00/hour and 20 cents/page for photocopying and you will be contacted for approval for fees in excess of \$30.00.

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

3-16-151

FORM 7

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GREN HOLE .188 FRESH 3 SULPHUR
CONTROL
CONTRO 61 **PLUGGING & SEALING RECORD** STEEL DEPTH SET AT - FEET 1 FRESH 3 SULPHUR
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[18/2 42651610 E 5 R 15 012 219 40 The Ontario Water Resources Commission Act 14R 02610 RESOURCES COMMIS Township, Village, Town or City March Pt. of 11 Date completed 28 May year) ess South March, Ont. **Pumping Test** Casing and Screen Record Static level 71 Inside diameter of casing 15 of 5 Test-pumping rate 5 GPM G.P.M. 15 Total length of casing Pumping level 171 nil Type of screen Duration of test pumping 1 Hour nil Length of screen Water clear or cloudy at end of test clear nil Depth to top of screen Recommended pumping rate 5 GPM G.P.M. 511 Diameter of finished hole feet below ground surface with pump setting of. **Water Record** Well Log Depth(s) at Kind of water From То (fresh, salty, which water(s)Overburden and Bedrock Record sulphur) found 01 11* Clay 11* Red Granite **Location of Well** For what purpose(s) is the water to be used? In diagram below show distances of well from New Home road and lot line. Indicate north by arrow. Is well on upland, in valley, or on hillside? Upland Drilling or Boring Firm Blair Phillips Drilling Co. Ltd. Address Ottawa Licence Number 1815 Name of Driller or Borer J. Moore Address Kars, Ont. S. More 28 May 1965 (Signature of Licerson) Form 7 15M-60-4138

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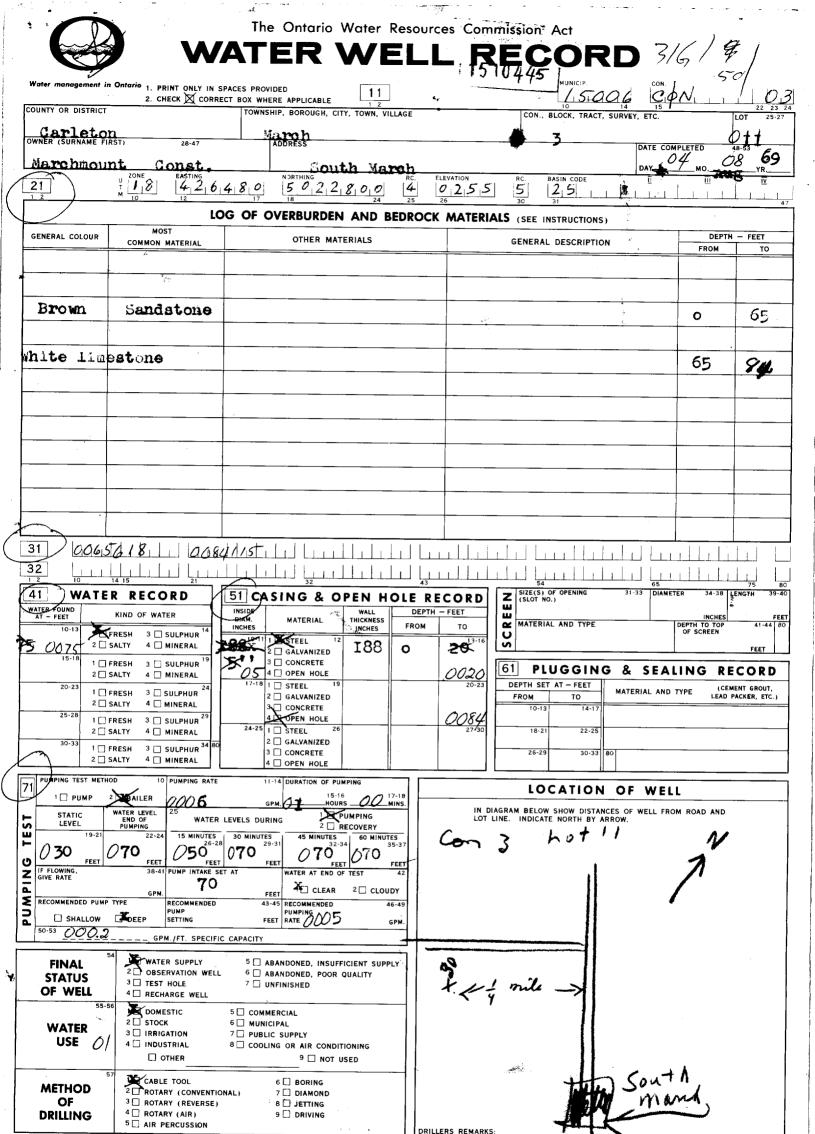
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	with pump settin	g of 40	feet below	w ground surface
Well Log				Record
Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
clay to boulders	0	9	50	Sresh
Sandsolone	9	40		
granie	70	- J		
For what purpose(s) is the water to be used?		Location	of Well	
old house	In diagran		distances of wel	from 7
Is well on upland, in valley, or on hillside?	road and	lot line. Ind	icate north by	arrow.
Drilling or Boring Firm Capital Stater				
Supply		1	300	
Address 1243 Keron Rd		1.	*****	
Ottawa			11 3	
Licence Number /223			1.1.*	
Name of Driller or Borer M X avanagh		MARCH	₹ ¥	
Address				
Dates 9/3/64				
Date 9/3/64 Valter awanciah (Signature of Licensed Drilling or Boring Contractor)			1	
Form 7 15M-60-4138		#	*	
OWRC COPY BUNGALOW- IMITATION SA	6951DING.	· ·	(S).	5N

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14R 5012121917101	ED			3	9
love 1/To 1 m of	Water Resources			4	
WATER	WELL	REC	ORD	_	0
County or District	Towns	hip, Village, To	own or City	marc	h
Con. I V Lot //	Date c		(day	month	1969
Owner In Holitzmer Le	Addres	\sim	zeldea	n Or	\mathcal{A}
Casing and Screen Record			Pumping	Test	
Inside diameter of casing 5	Committee of the property of the property of the property of	tic levei			
	RESHIPPER I				G.P.M.
Type of screen	Pu			. (1	
Length of screen	1 6				
Depth to top of screen ONTA	3 11 19.41515 1 3	•			
Diameter of finished hole CESOURCE	S COMMISSION R		_		
	wi	th pump setting	g of ろし		w ground surface
Well Log				Depth(s) at	Record Kind of water
Overburden and Bedrock Record		From ft.	To ft.	which water(s) found	(fresh, salty, sulphur)
clay		0	25	60	fresh
100000000000000000000000000000000000000		25	61		
		•			
For what purpose(s) is the water to be used?			Location	of Well	
household				distances of we	
Is well on upland, in valley or on hillside?	<u></u>	road and	lot line. Ind	icate north by	arrow.
Drilling or Boring Firm Capital Wal	ey			8	
Supply It	مل م			1 7	•
Address 14 ashford Dr			7	HT.	
altawa 6				#	, 3
Licence Number 32/6				1,3/	,,, ,
Name of Driller or Borer 3 acres			1	村	
Address			ر ب		
Date/ 1/ June 1969			~	3.7	
Walter away agh (Signature of Licensed Drilling or Bering Contrac	tor)			12	
Form 7 5M 60-20912				Į į	
OWRC COPY				CSS.	



NAME OF WELL CONTRACTOR

Saunde s ell Drilling 3480

Address

Artiori r

NAME OF DRILLER OR BORER

LICENCE NUMBER

LICENCE NUMBER

SIGNATURE OF CONTRACTOR

SUBMISSION DATE

DAYA

HO (11) C VE CO

DATE OF INSPECTION

DATE OF INSPECTION

INSPECTOR

S9-62 DATE RECEIVED

63-68 80

4724 210170

REMARKS:

The Ontario Water Resources Commission Act

WATER WELL RECORD

	Water management in Ontario 1. PRINT ONLY IN SPA 2. CHECK ☑ CORRECT	CES PROVIDED BOX WHERE APPLICABLE	1511444 1 500 CON.	14
	COUNT OR DISTRICT	TOWNSHIP BOROUGH, CITY, TOWN, VILLAGE	3 9 CON., BLOOK, TRACT, SURVEY, ETC. LOT 25-2	7
		PR# 7	Ollawa DATE COMPLETED 7 48-58 7	7
		22 8 8 0 PC 25	ELEVATION RC. BASIN CODE II III IV	لد ا_
	LOG		OCK MATERIALS (SEE INSTRUCTIONS)	47
	GENERAL COLOUR MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION DEPTH - FEET FROM TO	
	grey day		0/6	\dashv
	white sandston		16 58	-
Ì	CO. C. Lawrence		/3 30	
				4
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	31 aa/62ast aa58	4481		
7	12 10 14 15 21	51 CASING & OPEN HOLE	RECORD Z SIZE(S) OF OPENING 31-33 DIAMETER 34-38 LENGTH 39-	80 40
-[WATER FOUND KIND OF WATER	INSIDE WALL D DIAM. MATERIAL THICKNESS INCHES FRO	OM TO MATERIAL AND TYPE DEPTH TO TOP 41-44 8	EET 80
9	75-18	10-11 STEEL 12 2 GALVANIZED	0037 S	
	1 FRESH 3 SULPHUR 19 2 SALTY 4 MINERAL 20-23 24	3 CONCRETE -/88	DEPTH SET AT - FEET MATERIAL AND TYPE (CEMENT GROUT)	4
-	SALTY 4 MINERAL	2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	FROM TO WATERIAL AND TIPE LEAD PACKER, ETC.)	┥
	25-28 1 FRESH 3 SULPHUR 29 2 SALTY 4 MINERAL 30-33 1 FRESH 3 SULPHUR 34 80	24-25 1 STEEL 26 2 GALVANIZED	27-30 18-21 27-25	\dashv
Ł	, 2 SALTY 4 MINERAL	3 ☐ CONCRETE 4 ☐ OPEN HOLE	26-29 3G-33 80	
	71 PUMPING TEST METHOD 10 PUMPING RATE	11-14 DURATION OF PUMPING 15-16 17-18 HOURS MINS.	LOCATION OF WELL	$\frac{1}{2}$
	STATIC WATER LEVEL 25 WATER LE PLOY OF PUMPING 19-21 22-24 15 MINUTES	EVELS DURING TUMPING RECOVERY 30 MINUTES 45 MINUTES 60 MINUTES	IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.	
1	06 FEET 15 FEET 12 FEET	15 FEET 15 FEE		
	Z IF FLOWING, GIVE RATE 38-41 PUMP INTAKE SET			
	RECOMMENDED PUMP TYPE RECOMMENDED PUMP PUMP SETTING	O 43-45 RECOMMENDED 46-49 PUMPING O GPM.	March .	
Ĺ	50-53 <u>QQ 2, 3</u> GPM./FT. SPECIFIC	CAPACITY	Em to 1	
	FINAL STATUS 54 2 OBSERVATION WELL 3 OF TEST HOLE	5 ABANDONED, INSUFFICIENT SUPPLY 6 ABANDONED, POOR QUALITY	12 115	
\downarrow	OF WELL 4 RECHARGE WELL	7 UNFINISHED		
	WATER 2 STOCK 3 STOCK	6 MUNICIPAL 7 PUBLIC SUPPLY	(2.0)	
إ	USE // 4 INDUSTRIAL OTHER	8 COOLING OR AIR CONDITIONING 9 NOT USED		
	METHOD 1 DEBLE TOOL 2 ROTARY (CONVENTION			
	OF DRILLING 3 □ ROTARY (REVERSE) 4 □ ROTARY (AIR) 5 □ AIR PERCUSSION	8 JETTING 9 DRIVING	DRILLERS REMARKS:	
	WELL CONTRACTOR - ALIAN	D. LICENCE NUMBER	DATA 58 CONTRACTOR 59-62 DATE RECEIVED 53-69 8	 ••
1	o Address (2)	il meny sury	SOURCE 3644 081071 DATE OF INSPECTION INSPECTOR	-
	NAME OF DULLER OR BORER	LICENCE NUMBER	REMARKS:	+
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE	<u>+</u>	-
Ľ,	- Hely to vour	DAY_MO WYR /	[5] Wil	Ĭ

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario	1. PRINT ONLY IN 2. CHECK ⊠ CORF	SPACES PROVIDED		11	51626	0	MUNICIP. 15101016	(C)	<u> </u>	03
COUNTY OR DISTRICT	ton	TOWNSHIP, BOROUGH, CITY,	TOWN, VILLAG	3		con 3	., BLOCK, TRACT, SURVE	Y, ETC.	1	9/2527
					0+4			DATE COMP	PLETED 4	8-53
		NG 23.	mscse A 1.4.0	<u>ve.</u>	Ottawa,	Un tar	BASIN CODE 26	11	111	iv
1 2	** 10 12	OG OF OVERBURDEN	AND BED	ROCI	K MATERIA	LS (SEE	31		,	47
GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MAT	ERIALS			GENEF	RAL DESCRIPTION		DEPTH FROM	- FEET
brown	clay				pa	cked			0	В
brown	clay	boulders			pa	cked			9	11
grey	limestone	sandstone			ha:	rd	- Contraction of the Contraction		11	35
grey	sandstone								35	115
3) 1000	960579 001	1610513790035	215/87	3	9/152/8	لىلى				
32	14 15 21	32			<u>, , , , , , , , , , , , , , , , , , , </u>	SIZE	54 (S) OF OPENING	31-33 DIAME	TER 34-38 L	75 80 ENGTH 39-40
WATER FOUND	TER RECORD	CASING & C	WALL THICKNESS		CORD	N (SLO	NO NO		INCHES	FEET
10-13 1	FRESH 3 SULPHUR 14	DIAM MATERIAL INCHES 12	188	еком О	™ 0022°	SCB	ERIAL AND TYPE		DEPTH TO TOP OF SCREEN	41-44 80 FEET
	FRESH 3 SULPHUR 19 SALTY 4 MINERAL	2 GALVANIZED 3 CONCRETE 4 DPEN HOLE		2		61	PLUGGIN	G & SEAL	ING RECO	RD
20-23 1	FRESH 3 SULPHUR 24	17-18 1			0/15		SET AT - FEET	MATERIAL ANI		NT GROUT CKER ETC)
25-28 1	SALTY 4 MINERAL FRESH 3 SULPHUR 29	3 CONCRETE 4 OPEN HOLE			27-30	ļ	10-13 14-17			
L	SALTY 4 MINERAL FRESH 3 SULPHUR 34 6	24-25 1 STEEL 26 2 GALVANIZED 3 CONCRETE			27730		6-29 30-33 80			
	SALTY 4 MINERAL	4 OPEN HOLE	LMPING							nacional, il transportational anni dell'internacional dell'internacional dell'internacional dell'internacional
¥71‼ ⊿	2 BAILER 001		15 (A) 17				LOCATION C			N.O.
STATIC LEVEL	PUMPING	LEVELS DURING 2	PUMPING RECOVERY		LOT L		LOW SHOW DISTANCE DICATE NORTH BY A		FROM ROAD A	N U
E 020	J70 J70 26.	28 070 ²⁹⁻³¹ 070 ³²	·34 ८७ 0°			1				
FELOWING. GIVE RATE RECOMMENDED PU	38-41 PUMP INTAKE	SET AT WATER AT END		42	\mathcal{L}	(Our			
10.1	PUMP	D 43-45 RECOMMENDED	46	49	7	J	+ ()	_		
SHALLOV		ECIFIC CAPACITY	G	PM			*	//		
FINAL	1 WATER SUPPLY 2 □ OBSERVATION WE	5 ABANDONED, INSUI		~]			S. S.	#		
STATUS OF WELL	3 TEST HOLE 4 RECHARGE WELL	7 UNITINISHED					Z	30)	
1	55-56 1 X DOMESTIC 2 STOCK	5 COMMERCIAL 6 MUNICIPAL					4	3		
WATER (4 INDUSTRIAL	7 PUBLIC SUPPLY 8 COOLING OR AIR COND 9 NOT					•			
	S7 CABLE TOOL	€ □ BORING		-			_		outh C	λ
METHOD OF	2 ROTARY (CONVEN	TIONAL) 7 DIAMOND E) 8 DETTING			0-	P C	ARP RON	5	on Mr	
DRILLING	4 ROTARY (AIR) 5 AIR PERCUSSION	9 DRIVING			DRILLERS REMAR	ĸs			1,1,	
NAME OF WELL	contractor ital Water Supp		cence number	$\neg \lceil$	DATA	58	CONTRACTOR 59-62	DATE RECEIVE	1177	63-68 80
ADDRESS				-	SOURCE DATE OF INSP	ECTION ZO	195 Thispecton	<u> </u>	11/	J
NAME OF DRILL	/ /		CENCE NUMBER	+	S PEMARKS:	ne d'	BA BA) <u> </u>	P)
S WANTURE OF	contractor	SUBMISSION DATE			B. B.	, p.hor	Sen Buch		-	 V I
Much	upavan	Ceft DAY 5 MO.	10 YR.		0	<i>.</i>				7 MOE 07-091

The Ontario Water Resources Act

	The state income	
WATER	WELL	RECORD

R 85% 1516836 1. PRINT ONLY IN SPACES PROVIDED 15006 2. CHECK X CORRECT BOX WHERE APPLICABLE TOWNSHIP, BOROL Mar 9 DATE COMPLETED DA 200 LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS) GENERAL COLOUR MOST COMMON MATERIAL DEPTH - FEET GENERAL DESCRIPTION Brown Sund 0 ス 125 0002612877 | 612521817473 | 1111 10 14 15 21 21 43 **(**51) WATER RECORD **CASING & OPEN HOLE RECORD** SCREEN DEPTH KIND OF WATER то 1 FRESH 3 SULPHUR
2 SALTY 4 MINERAL 27 GALVANIZED
CONCRETE
OPEN HOLE 0022 1 | FRESH 3 | SULPHUR
2 | SALTY 4 | MINERAL 61 PLUGGING & SEALING RECORD 1 D STEEL
2 D SALVANIZED FEET 1 FRESH 3 SULPHUR
2 SALTY 4 MINERAL MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.) FROM 0055 1 | FRESH 3 | SULPHUR
2 | SALTY 4 | MINERAL FOPEN HOLE 1 GALVANIZED 22-25 1 FRESH 3 SULPHUR
2 SALTY 4 MINERAL LOCATION OF WELL PUMP 2 D BAILER 0/ 15-16 00 WATER LEVEL END OF PUMPING IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW. PUMPING RECOVERY WATER LEVELS DURING 29-31 O FEE PUMPING 1 CLEAR 2 CLOUDY RECOMMENDED PUMP SETTING 075 DEEP FEET 1 WATER SUPPLY 5 ABANDONED, INSUFFICIENT SUPPLY **FINAL** 2 D OBSERVATION WELL 6 ABANDONED, POOR QUALITY **STATUS** 3 TEST HOLE
4 RECHARGE WELL OF WELL 1 DOMESTIC 5 COMMERCIAL 2 STOCK
3 RRIGATION MUNICIPA _ PUBLIC SUPPLY WATER O COOLING OR AIR CONDITIONING
9 NOT USED USE 4 | INDUSTRIAL OTHER 1 CABLE TOOL 6 [] BORING **METHOD** Z ROTARY (CONVENTIONAL) 5 7 [] DIAMOND 3 | ROTARY (REVERSE)
4 | ROTARY (AIR)
5 | AIR PERCUSSION OF **DRILLING** 9 [] DRIVING CONTRACTOR 1538 **1**812?8 OFFICE USE ONLY

C33.33

FORM NO. 0506—4—77 FORM 7

The Ontario Water Resources Act 31 G 5 d WATER WELL RECORD

Ontario	1, PRINT ONLY IN SI 2. CHECK 🗵 CORRE	CT BOX WHERE APPLICABLE		15179		[1.500]	14 15	N	22 23 7
COUNTY OR DISTRICT	-Marlaton	Township, Borough, CITY, TOWN, VILL Kanata		RCH TWF		UONC .			11
		South Har	ch.	Ontario			DATE COMP		48-53 7 YR
		503 th Stat		5280		ASIN CODE		111	ıv I
<u> </u>	M 10 12	17 18 24	75	ZE MATERIAL	S (555	31			
<u>-</u>	MOST	G OF OVERBURDEN AND BE	DROC	K MAIERIAL		RAL DESCRIPTION		ОЕРТН	- FEET
GENERAL COLOUR	COMMON MATERIAL	OTHER MATERIALS				RAE DESCRIPTION		FROM	то
Brown	Sand	Gravel		Fi				()	3
Gray	Sandstone			rte	dium			3_	53_
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	1/12/11/11/11/11/11				. .	1 [] . [.] .	1.11.	. 11.1	
32	16/28/11/01 605	<u> </u>		<u> </u>	لللل ایار				┖┸┷┷┙ ╻┃╻┃ ╻
10	TER RECORD	(51) CASING & OPEN H	OLER	FCORD	S1Z	54 E(S) OF OPENING OT NO)	31-33 DIAME	TER 34-38	75 LENGTH 39
WATER FOUND AT - FEET	KIND OF WATER	INSIDE WALL THICKNESS	D	EPTH - FEET	H	TERIAL AND TYPE		INCHES DEPTH TO TOP	FE 41-44
10-13 1 2	FRESH ³ SULPHUR SALTY ⁴ MINERAL	INCHES INCHES	FRO	13-16	SC			OF SCREEN	FEET
15-18	FRESH 3 SULPHUR	GALVANIZED 188		0 0022	61	PLUGGI	NG & SEAI	ING RECO	ORD
	SALTY 4 MINERAL FRESH 3 SULPHUR 24	24 4 ☐ OPEN HOLE 17-18 1 ☐ STEEL 19		20-23	DEPT	H SET AT - FEET	MATERIAL AN	D TYPE (CEM	ENT GROUT ACKER, EYC)
2 0	SALTY 4 MINERAL	3 0 5 3 □ GALVANIZED 3 □ CONCRETE 1 U 4 STOPEN HOLE	2	2 053		10-13 14-17			
\$ 0	FRESH 3 SULPHUR 29	24-25 1 STEEL 26 2 GALVANIZED	<u> </u>	27-30		18-25 22-25			
30-33	FRESH 3 SULPHUR 34 BO SALTY 4 MINERAL	CONCRETE OPEN HOLE				26-29 30-33 8			
UMPING TEST MET	HOD 10 PUMPING RATE					LOCATION	OF WEL	L	
	BAILER DE	015 GPM 01 15-16 60 HOURS 60	17-18 _ MINS	IN DIA		ELOW SHOW DISTAN		FROM ROAD	AN D
STATIC LEVEL O2019-21	END OF WATER L	EVELS DURING 2 RECOVERY 30 MINUTES 45 MINUTES 60 MIN	UTES	LOT LI	NE I	NDICATE NORTH BY	ARROW.		
 - 49			35-37 FEET					4	•
IF FLOWING.	38-41 PUMP INTAKE	SET AT WATER AT END OF TEST	42		1			1	
IF FLOWING. GIVE RATE RECOMMENDED PU	GPM RECOMMENDED PUMP	FEET 1 CLEAR 2 CL A3-45 RECOMMENDED PUMPING	46-49					1	
SHALLOW		040 FEET RATE 0005	GPM	4	1	•	#	1	
	■ M WATER SUPPLY	S (ABANDONED, INSUFFICIENT SU	BBI V	#	i)	ļ	
FINAL STATUS	2 DBSERVATION WEL		""		1	6'3" 26	2'	1	
OF WELL	4 RECHARGE WELL			77		• • •		1	
WATER	DOMESTIC STOCK INTERIGRATION	5 COMMERCIAL 6 MUNICIPAL 7 PUBLIC SUPPLY							,
USE 0		COOLING OR AIR CONDITIONING The state of th			(01d 00	taux		
	57 CABLE TOOL	6 ☐ BORING							
METHOD OF	2 ROTARY (CONVENT	TIONAL) 7 🔲 DIAMOND							
DRILLING	A COTARY (AIR) S M AIR PERCUSSION	• □ DRIVING		DRILLERS REMARK	s.				
NAME OF WELL	CONTRACTOR	LICENCE NUMBE	R	DATA	54	CONTRACTOR 59-	62 DATÉ RECEIVE	*4 A C	3.4
Capit	al Water Sup	ply Ltd. 1558		SOURCE DATE OF INSPE	CTION	1538	U 5	108	2
Box 4	90: Stittsvi	lle, Ont. KOA 3GO		SE					
NAME OF DRILL	er or Borer ller/ W. Kav	LICENCE NUMBE	R	□ REMARKS					
SIGNATURE OF	CONTRACTOR	SUBMISSION DATE	Ç/	OFFICE					
1 1 1 1 1 1 1	Prain Da	Cell DAY QL MO. 0%	(R. 00						

For use in the Province of Orbarico only. This document is a permanent legal document. Please retain for future reference. All Sections must be completed in this sool delays in processing. Further instructions and organizers are newlated on the back of this for Guestian instructions and expensive and the fact of this for Guestian instructions and expensive and the fact of this for Guestian instructions and expensive and the fact of this for Guestian instructions and expensive and the fact of this for Guestian instructions and expensive and the fact of metric processing. The fact of the f		ntari	O t	Ministry o he Enviro		ell Tag Number (Pi		int number below)		Regulation 90	3 Ontario	Water Res	
### Construction Record Construction Record Period	For use in All Section	n the Pro ons must os regardi	vince on the control of the control	of Ontarion of Ont	full to avoid of is application	elays in processi can be directed t	ng. Further o the Water	instructions ar	ıd exhl:	anations are ava	ailahla oi	ence.	
Straw Carleton Representation Re	Please p	rint clearl	ly in blu	e or black	k ink only.				ON	Ministry Us	e Only	LOT	
State Compatement Block Track et al.		3 1110										Conocosio	
Linestone	RR#/Street Nur	mber/Nam	ie .									Block/Tract e	
Correct Color Control Color Colo	927 March GPS Reading								e of Op	peration: Und	ifferentiate	d Ave	raged
Property	Log of Overl	8 3 burden a	18 and Be	42 drock M	63 ⊧76 ∣ aterials (see	50 233 79 instructions)	Garmin			Diffe	rentiated,	specify	
Linestone Bard 1.98 12, 19 22, 17, 19 12, 19	General Colour	Most o	common	material	Oth	er Materials		Gener	al Desc	ription			Metres _To
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Second S				1.0			From	То			min N		
13.88		1				Casing	I		(meti	res)10_81	Level 3,		<u> </u>
Water Record Galvanized G	7.13 44.	,27 1.	ردود	15.86	Steel Fibro	eglass .48	+ .45	9.75	(litres	s/min) 54.6	1 3,	73 1	4.90
Plastic Concrete Cable Tool Sulphur Sulphur Cable Tool Sulphur			Vater		Galvanized				11 1		2 3,	.81 2	4.85
Galvanized Gal	14.02	Fresh 🔲 S	Sulphur						Final	water level end	3 3 ,	.81 3	4.82
Supply General Gener		saity	viinerais			eglass			Reco	mmended pump		85 4	4.78
Screen Sulphur Screen Sulphur Screen Sulphur Screen Screen Sulphur Screen Screen Sulphur Screen Scree	19,81				Plastic Con				Redo	mmended pump		87 5	4.75
Cable Tool Method of Construction Cable Tool Method of Construction Cable Tool Method of Construction Rotary (reverse) Borring Water Use Demonstric Slurry Demonstric Slock Demonstric Slock Demonstric Slock Demonstric Slock Demonstric Developing Demonstric Material supply Replacement well Method of Construction Cable Tool Method of Construction Rotary (reverse) Borring Demonstric Material supply Demonstric Developing Demonstric Material supply Demonstric Developing Developing Demonstric Developing Developi		Fresh S	Sulphur		Galvanized	Screen			Reco	mmended pump			
After test of well yield, water was \$\frac{\text{clarar and sadiment free}}{\text{choirasted Not casing or Screen}} \rightarrow{\text{No Casing or Screen}} \rightarro	Gas 🗆 S	Salty 🔲 N	Minerals	L .	Steel Fibre	eglass Slot No.			rate.	(litres/min)	15 💪	13 15	4.52
Other, specify			r was			crete				(litres/min)	25 4	30 25	4.37
Plugging and Sealing Record Annular space Abandonment Depth set at - Melres Material and type (bentonite stury, neat cement stury) etc. (volume Placed (ublic metres) Q,75 9 Grouted - Bentonite Slurry .254m3 Method of Construction Diagonal Diagonal Diagonal Rotary (conventional) Air percussion Dirving Dimonal Rotary (reverse) Boring Diving Dornestic Industrial Public Supply Other Stock Commercial Industrial Public Supply Other Stock Commercial Municipal Cooling & air conditioning Timigation Municipal Dewatering Dewatering Test Hole Abandoned, poor quality Replacement well Well Contractor/Technician Information Name of Well Contractor String Name of Well Technician (last name, first name) Well Technician's Licence No. T0097 Too 7 Too 9 Too 9 Date of Inspection Too 9 Too 1 Too 9 Date of Inspection Too 9 Too 9 Da						No Casing or Scr	een		ued	give reason.			4.31
Plugging and Sealing Record Annular space Abandonment Depth set at - Metres Meterial and type (bentonite stury, neat cement stury) etc. 9,75	Chlorinated 🕱	Yes 🗌 N	No ;	15.55	Open hole		9.75	22.24				***	4.15
To			and Se		and the second second						of Well	X 200 - 200	
Method of Construction Digging Rotary (conventional) Air percussion Jetting Other Public Supply Other Stock Commercial Not used Stock Commercial Not used Municipal Cooling & air conditioning Tripation Municipal Dewatering Dewatering Test Hole Abandoned, poor quality Replacement well Well Contractor/Technician information Well Contractor/Suprise Ministry Use Only Data Source Well Record Number Well Record Number Stephen Well Technician (last name, first name) Well Technician's Licence No. Toographic	From To	o Iviaterii				(cubi	c metres)			distances of well fr	om road,	lot line, and b	uilding.
Method of Construction	9.75	Gro	uted ·	- Bento	onite Siu	ry .254	38.3				1		•
Method of Construction									a	<u> </u>			
Cable Tool Rotary (air) Diamond Digging Other Rotary (conventional) Air percussion Jetting Other Rotary (reverse) Boring Driving Public Supply Other Stock Commercial Not used Irrigation Municipal Cooling & air conditioning Public Supply Recharge well Abandoned, insufficient supply Dewatering Test Hole Abandoned, insufficient supply Replacement well Abandoned, insufficient supply Replacement well Well Contractor/Technician Information Name of Well Contractor/Technician Information Name of Well Contractor Well Contractor/Technician Information Stittsville, Ontario K2S 1A6 Name of Well Technician (last name, first name) Well Technician's Licence No. 10097 Signation of the percentage					<u> </u>			; }	Ales	5			
Rotary (conventional) Air percussion Jetting Other Rotary (reverse) Boring Oriving Rotary (reverse) Boring Oriving Other										13600			
Domestic	Rotary (conver	ntional) 🗵	Air perc	ussion	☐ Jettin ☐ Drivin	g : [1	4				
Final Status of Well Water Supply Recharge well Unfinished Abandoned, (Other) Observation well Abandoned, insufficient supply Replacement well Well Contractor/Technician Information Name of Well Contractor Capital Water Supply Ltd. Business Address (street name, number, city etc.) Box 490 Stittsville Ontario K2S 1A6 Name of Well Technician (last name, first name) Well Technician's Licence No. Miller: Stephen Signs Mell Technician (Contractor Date Submitted YYYY MM DD Audit No. Z 46 998 Date Well Completed YYYY MM Date Delivered YYYY MM Date Date Delivered YYYY MM				al	Public		Other		14				
Water Supply Recharge well Unfinished Abandoned, (Other) Abandoned, insufficient supply Dewatering Abandoned, poor quality Replacement well Well Contractor/Technician Information Name of Well Contractor Capital Water Supply Ltd. Business Address (street name, number, city etc.) Box 490 Stittsville Ontario K2S 1A6 Name of Well Technician (last name, first name) Well Technician's Licence No. Miller: Stephen Date Delivered YYYY MM pdf package delivered? Was the well owner's information package delivered? Was the well owner's information package delivered? Was the well owner's information package delivered? Date Source Contractor Date Source Date Sephen Well Technician's Licence No. TOO97 Date Submitted YYYY MM pdf Date Submitted YYYY MM pdf	 			al	Cooli			Audit No. 7	46	998 Dat	e Well Co		
Test Hole Abandoned, poor quality Replacement well Well Contractor/Technician Information Name of Well Contractor Capital Water Supply Ltd. Business Address (street name, number, city etc.) Box 490 Stittsville Ontario K2S 1A6 Name of Well Technician (last name, first name) Well Technician's Licence No. Miller: Stephen Date Submitted YYYY MM DD Well Record Number Well Record Number				ell .	Unfin		oned, (Other)	Was the well or	vner's in	nformation Dat	e Delivere	d YYYY	
Name of Well Contractor Capital Water Supply Ltd. Business Address (street name, number, city etc.) Box 490 Stittsville, Ontario K2S 1A6 Name of Well Technician (last name, first name) Well Technician's Licence No. T0097 Signal Major Technician (Contractor) Well Contractor's Licence No. 1558 Data Source Contractor Date of Inspection YYYY MM DD Well Record Number Well Record Number	_	Aba	andoned,	poor quality	Repla	cement well		package delivere	su!		Only	2006	16 * 128
Business Address (street name, number, city etc.) Box 490 Stittsville Ontario K2S 1A6 Name of Well Technician (last name, first name) Well Technician's Licence No. T1097 Signalurator Date Received YYYY MM DD Date of Inspection YYYY MM DD Well Record Number Well Record Number	. 14.11.0 0. 110.1 00.	ntractor			umician Infor	Well Contractor's	Licence No.	Data Source	\dashv		· · · · · · · · · · · · · · · · · · ·	155	8
Name of Well Technician (last name, first name) Well Technician's Licence No. Well Technician's Licence No. T0097 Signs May of Technician (Contractor Date Submitted TYYY MM DD	Business Address	s (street nan	ne, numb	er, city etc.)					YYYY		e of Inspe		
Signal Help Technician/Contractor Date Submitted TYYYY MM DD				Onta irst name)	rio K2S 1	4 25 4 44	Licence No.		1 1		ll Record	Number	
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All SectionQuestion	in the F ons m uns rega	Province oust be controlled in the controlled in	of Ontarion pleted in pleting this	full to avoid	delays can b	s in processi se directed to	ng. Further o the Water	instructions an	L Please retain for future and explanations are average The coordinator at	ailable	rence. on the ba	age _ nck of	of this form.
Please p	orint cle	arly in blu	e or black	ink only.		a.			Ministry Us	e Only			
Well Owner	r's Info	ormation	and Loca	tion of We	ll Info	rmation	MUN		CON			LOT	
Ottawa	Carle	eton					Kanata		1	1		<i>\</i>	
RR#/Street Nu 941 Mar	ımber/N	ame					City/Town/V	-	Site/Compa		/Block/Tra	act etc) .
GPS Reading	8	3 18	426	390		23443	Unit Make/M Garmin	lodel Mod		lifferentia erentiate	ited 🗶	Avera	iged
Log of Over General Colour	1	n and Best common			e inst her Ma			Gener	al Description		Dep	th	Metres
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Hole	Diamete	er			Cons	truction Rec	ord		Tes	t of W	ell Yield		
Depth M	Metres To	Diameter Centimetres	Inside diam	Material		Wall thickness	Depth	Metres	Pumping test method		w Down Vater Level		ecovery Water Leve
110111			centimetres			centimetres	From	То	Pump intake set at -	min Static	Metres	min	Metres
				Steel Fib	roglass	Casing			(metres) Pumping rate -	Level 1		1	
				Plastic Co					(litres/min) Duration of pumping				
Water found at Metres	r Recor Kind	of Water		Galvanized Steel Fib	reglass				hrs + mir	2		2	
m	Fresh Salty	Sulphur Minerals		Plastic Co	74.33				Final water level end of pumping metres	3		3	
Other:				Galvanized Steel Fib	reglass	-		:	Recommended pump type.	4		4	
☐ Gas ☐	Fresh Salty	Sulphur Minerals		Plastic Co	ncrete				Recommended pump	5		5	
Other:	Fresh	Sulphur		Galvanized	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Screen	14.7		Recommended pump	10		10	
Gas Other:	Salty	Minerals	Outside diam	Steel Fib	. 74	Slot No.			(litres/min) If flowing give rate -	15 20		15 20	
After test of wel	•			Plastic Co Galvanized	ncrete		-		(litres/min) If pumping discontin-	25		25	
Other, speci					No C	asing or Sci	reen		ued, give reason.	30 40		30 40	
Chlorinated	Yes	☐ No		Open hole						50 60		50 60	
	Pluggi	ing and Se	aling Reco	ord 🔲	Annula		bandonment		Location	of Wel			
Depth set at - M	Metres Ma	aterial and typ	e (bentonite s	lurry, neat ceme	nt slurry		me Placed ic metres)	In diagram belo	ow show distances of well f by arrow.	om road	d, lot line, a	and bu	ilding.
6.09	0	Groute	d Bento	nite Slu	rry	2inc	h hole	100		ı			
	-										1		
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Cable Tool	ventional)	Rotary		☐ Diar			Digging Other						
Rotary (rever	,	Boring		Driv	•				March F	14			
Domestic		Industri	al		lic Supr	oly [Other						
Stock Irrigation		Comme Municip			used oling & a	ir conditioning		Audit No.	47023 De	te Well	Completed	~	MM DD
☐ Water Suppl	ly 🗆	Recharge w		tus of Well	inished	X Aband	doned, (Other)	Was the well of	owner's information Da	ite Delive	20	06 ***	7 20 MM DD
Observation Test Hole	well	Abandoned, Abandoned,	insufficient s poor quality		vatering blaceme		American and	package deliver	• • • • • • • • • • • • • • • • • • •		ang di kacamatan di		
Name of Well C	Contractor		tractor/Ted	hnician Info		on 'ell Contractor's	Licence No.	Data Source	Ministry Us	e Only ontractor			<u> </u>
and the second s	l Wat	er Supp	oly Ltd. per, city etc.)			1558		Date Received	YYYY MM DD Da	ite of Ins	pection Y		58 MM DD
	O Sti	ttsvil]	e Onta	rio K2S		'ell Technician's	Licence No.	AUG Remarks	2 5 2006		rd Number		
Miller S	Steph	en	o. namej	<u> </u>		T0097 te Submitted			l AA	J., 1 1000	Tallipol		
x NOW	nnician/					2006	7 20			Fo. pro 1	004 -11	mil-1-	on from '
0506E (09/03)	*	, 1 5	Con	tractor's Copy	M	linistry's Copy	Well Ow	ner's Copy	Cette	ornule	esi aispo	ı IIDI C	en françai

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(A) (Onta	ario	Ministry of the Enviro	nment	AC	41907	J. J. Barrer	Well Re Regulation 903 Ontario Water Resour					
Instructi	ons for	Completin	ng Form			4 0415	907				p	age _	of
All SeQues	ections. r stions reg	nust be cor garding com	npleted in pleting thi	full to avoids application	d delays on can b	in processi e directed t	ing. Further o the Water	instructions an	lease retain for futur d explanations are ava ment Coordinator at	ailable	on the ba	ack of	this form.
		asurement learly in blu			to 1/10 ^t	of a metre	∍. ┌──		Ministry Use	e Onl	v		
		formation		4	lell Info	rmation	MUN	С	ON			LOT	
Ottawa	Carl	eton,		, ,,			Kanata			11		4	
RR#/Stree	t Number	/Name			100	L	City/Town/V	illage	Site/Compa				C.
941 N GPS Read	larch	Rd . NAD Zor	ne Eastin	ng	North	nina	Kanata Unit Make/M		e of Operation: Und			¬	
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		den and Be	·									.,	
General Co	lour N	Most common	material		Other Ma	terials		Genera	al Description		Dep Fro		Metres To
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grey&	vhite	sandst	cone					***************************************			11.58	3	22,24
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Н	ole Diam	eter 🔏	-		Cons	truction Rec	ord		Tes	t of V	Vell Yield		
Depth	Metres	Diameter	Inside	Matar	ial	Wall	Depth	Metres	Pumping test method		aw Down		lecovery
From	То	Centimetres	diam centimetres	Mater	iai	thickness centimetres	From	То	Submersible	min	Water Level Metres	l I Ime min	Water Leve Metres
0	6.40	22.75				Casing			Pump intake set at - (metres) 18,28	Static Level	1		
6.40	22.24	15.23		Steel	Fibreglass	Ousing			Pumping rate -		5.83	1	5.46
			15 06	Plastic		40	J. 15	6 40	(litres/min) 50.05				
W Water found	ater Rec	ord nd of Water	15.86	Galvanized		.48	+.45	6.40	Duration of pumping hrs + min	2 1	6.08	2	5.41
at Metre	es / '''			Steel	_				Final water level end	3 (5.21	3	5.39
20,72 Gas	Salty	Minerals		Plastic Galvanized					of pumping 7 .01 metres	,	6 20	<u> </u>	E 26
P	b+TU			Steel	Fibreglass				Recommended pump type. Shallow **Deep	4	6.30	4	5.36
Gas	Fresh Salty	Sulphur Minerals		Plastic	Concrete				Recommended pump	5	6.35	5	5.34
Other:				Galvanized	t .				depth15.23 _{metres}		6 50		F 00
m ☐ Gas	Fresh	Sulphur Minerals	Outside	<u> </u>		Screen		<u> </u>	Recommended pump rate. 45, 5 (litres/min)	10 15	6.50		5.23 5.16
Other:	Gaity	Willierars	diam		Fibreglass	Slot No.			If flowing give rate -	20	6.69		5.14
After test of				Plastic Galvanized	5 11	-			(litres/min)	25	6.76	25	5.12
Clear an		nt tree				asing or Sc	reen		If pumping discontin- ued, give reason.	30 40	6.79 6.88	_	5.10 5.07
				No hala	· · · · · · · · · · · · · · · · · · ·	asing or oc		·	1	50	6.94		5.04
Chlorinated	Yes	∐ No	15,23	Open hole		····	6.40	22.24		60	7.01		5,02
		ging and Se	ealing Reco	ord [Annula		Abandonment		Location				
Depth set a From	t - Metres To	Material and ty	pe (bentonite :	slurry, neat cei	ment slurry		me Placed pic metres)	In diagram belo Indicate north b	w show distances of well fi y arrow.	om ro	ad, lot line,	and bu	uilding.
6.40	0	Groute	ed Bento	onite S	lurry	2	1m3	4/7	1	¥ 94	1	1	
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Cable To	201	Rotary		Constructi	on iamond	Γ	Digging				8	1	
1=	convention				etting		Other		1		byle.	551	
☐ Rotary (r	reverse)	Boring	187 -		riving								
Domesti	С	∏Industr		er Use	ublic Supp	olv F	Other		March Rd				
Stock		Comm	ercial	N	lot used	_				A. 147	L Ocean 1 1 1		
☐ Irrigation)	Municip		tus of Well		ir conditioning		Audit No. Z	47021 Pa	te Wel	Completed	ا م0	MM 188
Water S	upply	Recharge w			Infinished	Aban	doned, (Other)		wner's information Da	te Deli	vered y	YYY	MM . DD
Observa	tion well	Abandoned	, insufficient s , poor quality		ewatering leplaceme			package deliver	ed? Yes No		20	do	17/18
Test Ho	и с			chnician Ir					Ministry Us				
Name of W		tor .				ell Contractor's	Licence No.	Data Source	Co	ontracto		K 1	58
Capi Business A	tal Wa ddress (str	ter Suppet name, num	DIY Ltd ber, city etc.)	<u> </u>	*	1558		Date Received	2 YEY 20ME DD Da	ite of Ir	nspection	//YY	MM DD
Box	490 S	tittsví	lle Ont		S 1A6	loll Tackers	Licens N-		2 3 2000				
Name of Well Technician (last name, first name) Well Technician's Licence No.								Remarks	W	эн Кес	ord Number		

Date Submitted YYYY MM DD 2006 7 18

Contractor's Copy Ministry's Copy Well Owner's Copy

Cette formule est disponible en français

Ontario Ministry of the Environment	Well Tag No. (Place Sticker an	nd/or Print Below)	W	ell Record
Untario the Environment	1 61 1	Regulat	tion 903 Ontario Wa	
	NT		Page_	of
Well Owner's Information First Name Last Name	E-ma(il A).ddre	ięs ?		Well Constructed
Mailing Address (Street Number/Name, RR)	ents yotas	terson 60	$\sim \rho$	by Well Owner
28 on Cowse Select Number/Name, RR	Municipality Mean Mean	Province Postal Co	de (Telephone	No. (inc. area code)
Part A Construction and/or Major Alteration of a				
Address of Well Location (Street Number/Name, RR)	Township	Lot 11	Concession	1
County/District/Municipality	City/Town/Village	Ch	Province	Postal Code
UTM Coordinates Zone , Easting , Northing	GPS Unit Make Mode) Made of Ossertion	Ontario	
NAD 8 3 1 R 4 B 6 4 4 5 5 D D F	SIRA Was Co	Mode of Operation: Differentiated, speci	☐ Undifferentiated fy	Averaged
Overburden and Bedrock Materials (see instructions on t				
General Colour Most Common Material	Other Materials	General Description		Depth (Metres) From To
6" 511	Ed Well C	pendanman		0 040

Annula Canadahan Inggar				
Annular Space/Abandonment Sea Depth Set at (<i>Metres</i>) Type of Sealant Used	Volume Placed	Check box if after test of well yield,	Well Yield Testing Draw Down	Recovery
From To (Material and Type)	(Cubic Metres)	water was: Clear and sand free	Time Water Leve	
da 0,15 tholering	ing the control of	Cannot develop to sand-free state	Static	Static
0,15 0 Seil '		If pumping discontinued, give reaso	n: Level 1	Leyel 1
		Pumping test method	2	2
			3	3
Method of Construction	Water Use	Pump intake set at (Metres)		4
☐ Cable Tool ☐ Diamond ☐ Public ☐ Rotary (Conventional) ☐ Jetting ☐ Domestic	☐ Commercial ☐ Not used ☐ Municipal ☐ Dewatering	Pumping rate (Litres/min)	5	5
☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☐ Rotary (Air) ☐ Digging ☐ Irrigation	☐ Test Hole ☐ Monitoring ☐ Cooling & Air Conditioning	Duration of pumping		
☐ Air percussion ☐ Boring ☐ Industrial ☐ Other, specify ☐ Other, specify		hrs + min	10	10
Status of Well		Final water level end of pumping (Metres)	_ 15	15
☐ Water Supply ☐ Dewatering Well	Observation and/or Monitoring Hole	Recommended pump/ype	20	20
☐ Replacement Well ☐ Abandoned, Insufficient Supply ☐ Test Hole ☐ Abandoned, Poor Water Quality	☐ Alteration (Construction) ☐ Other, <i>specify</i>	☐ Shallow ☐ Deep	25	25
Recharge Well		Recommended pump depth Metres	30	30
Please provide a map below showing:		Recommended pump rate (Litres/min)	40	40
 all property boundaries, and measurements sufficient to locate the an arrow indicating the North direction 	/V'/	If flowing give rate	50	50.
 detailed drawings can be provided as attachments no larger that vidigital pictures of inside of well can also be provided 		(Litres/min)	60	60
188#	March Road	Wat	er Details	
	Mard D	, , , , , , , , , , , , , , , , , , , ,	l of Water resh	Ilphur Minerals
V135	, lood	The state of the s	of Water	ipital [milotalo
Ø			resh Salty Su	llphur Minerals
	Sec.		l of Water resh □Salty □Su	ılphur
×181		Casing Used Screen Use	ed Casing an	d Well Details
House		Galvanized Galvanized	Diameter of the I-	lole (Centimetres)
salle 7		Steel Steel Steel Fibreglass	Depth of the Hole	(Metres)
(yyyy/mm/dd) package delivered? De	ite the Well Record and Package livered to Well Owner (yyyy/mm/dd)	Plastic Plastic Concrete	Wall Thickness (i	Metres
900 1 01 - 02 Yes XI No	2007-08-27	No Casing and Screen Use	d	
Well Contractor and Well Technicia Business Name of Well Contractor	n Information Well Contractor's Licence No.	Open Hole	Inside Diameter of	of the Casing (Metres)
AIRROCK DRUING COLT	DILIA	Disinfected?	Depth of the Cas	ing (Metres)
Business Address (Street No./Name, number, RR)	Monicipality NCHMOND	Yes No	<u> </u>	
Province Postal Code Business E-mail Add		Audit No. CO170	ry Use Only Well Contractor No.	
Bus Telephone No. (inc. area and Name of Wall Telephone (in	et Nomo Eirot Norra	Z DUL/Z		9
Bus.Telephone No. (inc. area code) Name of Well Technician (La	st Name, First Name)	Date Received (1/2007)/dd)	Date of Inspection (y)	vyy/mm/dd)
Well Jechnician's Licence No. Signature of Technician	Pate Submitted (yyyy/mm/dd)	Remarks		
0506E (11/2006)	067.07-00 Ministry's Conv		@ O	Printer for Ontario 200
	BEFFEEL B 200 AS BE SOURCE		⊕ Gueens i	THE REAL PROPERTY OF THE PARTY

Ontario Ministry of the Environment Well Tag No. (Place Sticker and/or Print Below) Regulation 903 Ontario Water Resources Act Page of															
Well Owner's Inf							1 0 11						4.T-ME	W-II C-	alay ota d
First Name McKeown Cons		.ast Name				E-mai	il Address	3						Well Cor by Well	Owner
Mailing Address (Str	eet Number/Name,	RR)		Municip				Provin		Postal C			,		area code) 4 80 8
P.O. Box 296 Part A Construct		r Alterati	ion of a V		eely			On	tario	K 4P	I IN	15 0	1100	2 1	4 00 0
Address of Well Loca	ation (Street Number				Township		Va	nata		Lot 10)	C	concession	3	
846 March Ro					City/Town	/Village		lliata		10		Provinc	e	Postal	
Ottawa Carle		N	#L1					ınata	Made of	Occaptions		Onta			
UTM Coordinates 2	Zone Easting		thing Ob. 3 IO		SPS Unit Ma	ake	Model GArmi	n		Operation: intiated, sper		Jndiffer	entiated	Ave	raged
Overburden and B			ictions on th	e back of			OH III							Denth	(Metres)
General Colour	Most Common Ma	aterial		Other Ma	iterials				General [escription				From	To
					11 575										
	Annular Space	/Abandor	nment Sea	ling Rec	ord					Results o	of We	II Yield	d Testing		
Depth Set at (Metres		ype of Sea Material and				olume P		Check bo water wa		st of well yiek	d,		Water Lev	_	ecovery Water Level
16 76 0	Grouted -	Ronto	nite	3/4 i	nch Ho	1e P	1119	_	r and sand not develo	free p to sand-fre	e	(Min) Static	(Metres)	(Min) Static	(Metres)
16.76 0	Grouted	пенсо	mile,	3/4 1		bags	- (state	9	ued, give rea		Level		Level	
						bags						1		1	
								Pumping	test meth	od		2		2	
Method of C	Construction	T		Water	Use	125, 73		Pump in	take set at	(Metres)		3		3	
Cable Tool	Diamond	Pub		Com		□ No	t used watering	Pumping	rate (Litre	s/min)		4		4	
Rotary (Convention Rotary (Reverse)	Driving	Live	estock	☐ Test	Hole	☐ Mo	onitoring	, diriping	y rato (Eliro			5		5	
Rotary (Air) Air percussion	☐ Digging ☐ Boring	☐ Irrig		Cool	ing & Air Co	nditionin	ig .		i of pumpir hrs +	ng min		10		10	
Other, specify		Status o	er, specify						ter level en	d of pumping	17	15		15	
☐ Water Supply	Dewatering) I AAGII	Obse	ervation and/o	or Monito	oring Hole	(Metres)	nended pu	mp type		20		20	
Replacement Well Test Hole	Abandoned Abandoned				ation (Const er, specify	ruction)		Sha	llow [Deep		25		25	
Recharge Well	Abandoned	d, other, spe	ecify					Recomm	nended pu Metro			30		30	
Please provide a mag		Location	of Well					Recomm /Litres/m	mended pu			40		40	
 all property boundar an arrow indicating t 	the North direction						nts.		g give rate			50		50	
 detailed drawings ca vidigital pictures of in 				an legal si:	ze (8.5" by 1	4")	R	(Litres/m	iin)			60		60	
							!					Detai			
	-							water	found at D Metres	Carried States and Professional		of Wate		Sulphur	Minerals
	*	846			3			Water	found at D			of Wate		Culphur	Minerals
			®	10	X			Water	Metres found at D	000		of Wate	7711	Sulpriur	L_IMITOTALS
				-	Tarch Kd				Metres	Gas	Fre	sh _	Salty	Sulphur	Minerals
				- 3	191				ng Used			_			I Details entimetres)
								Steel	anized	Galvaniz Steel	rea				
Date Well Complete	ed Was the well ow	vner's inform	mation [ate the W	Vell Record a	and Pack	kade	Fibre	_	Fibregla:	SS	De	pth of the h	tole (Metr	es)
(yyyy/mm/dd)	package delivere			Delivered t	o Well Owne	er (yyyyn	mm/dd)	Conc		Concrete	е	W	all Thicknes	s (Metres)
2008/3/3	Well Contractor			ian Infor	mation			No Casing and Screen Used Inside Diameter of the Casing			Casing (Metres)				
Business Name of V	Vell Contractor				Well Contrac							etres)			
Capital Wat Business Address (S	ter Supply Street No./Name, nu	Ltd. Imber, RR)	Muni	1 5 cipality	5	8	X Ye	-			De	puror ne t	Jeaning (M	0.000)
Box 490	Postal Code	Province	. E		tittsv	ille		Audit M			nistr	y Use	Only contractor N	lo.	
Province	Postal Code	busines	s E-mail Ad	Juress				Audit No	z 77	317		TYON C	JIM ACIOI I		

Ontario K 2 S 1 A 6 office capitalwater.ca
Bus.Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name) 6 13 8 3 61 7 6 6 Miller, Stephen Well Technician's Licence No. Signature of Technician 0506E (11/2006)

Date Submitted (yyyy/mm/dd) Remarks

Ministry's Copy

2008/3/3

Date Received (yyyamay/dd)

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Date of Inspection (yyyy/mm/dd)

Ontario	Ministry of the Environ	ment
Measurements recorded in	: X Metric	_ Imperi
Well Owner's Informat	tion	
First Name	Last Na	me / Organ

McKeown Contracting
Mailing Address (Street Number/Name)

2878 Stagecoach Road

We	II Tag No. (Plac	ce Sticker and	t/or Print Below)	Regulation	1 903 C			Record cources Act
					164	HELLE		
zation			E-mail Address					Constructed
	Municipality		Province	Postal Code		Telephone I		ell Owner area code)
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		THE REAL			HIH			000
	Township			Lot		Concession	1	
	Kanata City/Town/Vil	lage		11	Provin	ice 4	Posta	Code
	Kanata				Ont	ario		
	Municipal Pla	an and Sublot	Number		Other			
	Page of (see insta	ustions on the b	and of this form		10111111			
Sealing	Record (see instri Other Materials			ral Description	HAME.	ARTESISTS.		th (m/ft)
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sed)		Placed 3/ft³)	After test of well yield, Clear and sand f		-	aw Down Water Leve	-	ecovery Water Level
1/8" H	ole Plug (11 12 11	Other, specify		(min)	(m/ft)	(min)	(m/ft)
70 110	ore riug (12 bags	If pumping discontinue	d, give reason:	Static Level			
					1		1	
			Pump intake set at (r	n/ft)	2		2	
W	ell Use		Pumping rate (Vmin /	GPM)	3		3	
c	ommercial	Not used	Duration of pumping		4		4	
	lunicipal est Hole	Dewatering Monitoring	,	nin	5		5	
	ooling & Air Condition		Final water level end of	f pumping (m/ft)	10		10	
	7 1 (4 (50))							
ecify			If flowing give rate (Vi	nin-/ GPM)	15		15	
Depth (m/ft)		of Well	Recommended pump	depth (m/ft)	20		20	
		ement Well	Teconimended pully	doper (mm)	25		25	
	Test Ho	ole ge Well	Recommended pump	rate	30		30	
		ge vveil ering Well	(Vmin / GPM)					
	Observ	ation and/or	Well production (l/mir	r / GPM)	40		40	
	Monitor Alterati	ing Hole on	Disinfector		50		50	
	(Constr	ruction)	Disinfected? Yes No		60		60	
*511111111	Insuffic	ient Supply		Map of W	elllo	cation	35550	
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	Address of Well Location (Street Number/Name) Township						elchamu.		Lot	£11415	Concession		40,000,000,000	
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County/Dist			_			С	Kanata ity/Town/Vil			11	Provin	ice 4	Postal	Code
Ottawa	Carl	et	on				Kanata				Onta	ario		111
UTM Coordin					orthing	M	lunicipal Pla	an and Sublo	ot Number		Other			
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		,				11 11 1			Other end		(min)	(m/ft)	(min)	(m/ft)
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								an an an a						
									Pump intake s	et at (m/nt)	2		2	
					_		- 75.6		Pumping rate (Vmin / GPM)	3		3	
		Con	struction			Well Us		HUBERR	, amping rate (onant or my	4		4	
Cable To		nnal)	☐ Diamond ☐ Jetting		blic mestic	Commer Municipa		Not used Dewatering	Duration of pur	mping	1		-	
Rotary (R			Driving		estock	Test Hole		Monitoring	hrs +	min	5		5	
Boring			Digging	_ lrrig		Cooling (& Air Conditi	oning	Final water leve	l end of pumping (m/lt)	10		10	
☐ Air percus					lustrial ner, <i>specify</i>						15		15	
		Can	etruction D			*********	Statue	of Well	If flowing give r	ate (Vmin-/ GPM)	13		13	
Inside			OR Material	Wall	_	(m/ft)	Water :		Recommended	pump depth (m/ft)	20		20	
Diameter (cm/in)	(Galva	anized	f, Fibreglass, Plastic, Steel)	Thickness (cm/in)	From	То	Replac	ement Well		panip aspenting	25		25	
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								ruction)	Disinfected? Yes	No.	60		60	
							Abando	onea, cient Supply	165				1000000	1111111111111
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(m	v/ft)	3as	Other, spe	ecify		From	То	(cm/in)						
Water found	d at De	pth	Kind of Wate	r: Fresh	Untested					9	\otimes			
			Other, spe						ii	g				
			Kind of Wate		Untested					4				
(m	v/ft) [(Other, spe							39				
Business Na	Well Contractor and Well Technician Information Business Name of Well Contractor Well Contractor's Licence N						s Licence No.	{{						
			Supply	Ltd.		1	5	5 8						
			et Number/Na			Mu	nicipality	5 0	Comments:					
Box 490)					St	ittsvi	11e						
Province			stal Code		s E-mail Add	dress								0.1
Ontario)	K .	2 S 1 A	6 off	ice 🍥 c	apitalw	ater.c	а	information	Date Package Deliver	ed	Audit No. 7	try Use	Only
	ne No.	(inc. ε	wea code) Na	ime of Well 1	Fechnician (I	Last Name,	rirst Name)		package delivered	YYYYMM		7. Z	84	393
Well Technici	ian's Lice	ence	7 6 6 No. Signature	of Technicis	an and/or Co	en ontractor Dat	e Submitted		Yes	Date Work Completed		00	114	2008
0 0	9	-	7 Koll	when			008		X No	2 0 0 8 0 9	05	Received		
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£>0	ntario Minisi	try of nvironment	Well T	ag No. (Place Sticker a	nd/or Print Below)]		W	ell F	Record
Measureme	ents recorded in:	Metric Imperial				Regulation	n 903 (Ontario Wa Page	ter Re	of
Well Own	ner's Information							rage _.		OI
First Name	n Contracting	Last Name / Organiza	tion		E-mail Address					Constructed
Mailing Add	ress (Street Number/Na			Municipality	Province	Postal Code)	Telephone I	,	(ell Owner . area code)
2878 St	tagecoach Road			Greely	Ontario	K O A 2	W O	613 8	322 2	599
Address of \	Well Location (Street Nu	mber/Name)		Township		Lot		Concession	1	
	rch Road rict/Municipality			Kanata City/Town/Village		11	Provi	4	Dooto	Codo
Ottawa	Carleton			Kanata			Ont		Posta	l Code
	nates Zone Easting	Northing 502314		Municipal Plan and Suble	ot Number		Other			
			Sealing Rec	ord (see instructions on the	back of this form)					
General Co	lour Most Comm	non Material	0	ther Materials	Gene	ral Description	1		Dep From	oth (<i>m/ft</i>) To
-										
		Annular Space				Results of We	all Yiel	d Testing		
Depth Set	at (m/ft) To	Type of Sealant User (Material and Type)	1	Volume Placed (m³/ft³)	After test of well yield,	water was:	Dr	aw Down		ecovery
9.44			8" Hole	Plug (5 bags)	☐ Clear and sand fr ☐ Other, specify	ree	Time (min)	(m/ft)	(min)	Water Level (m/ft)
	0.0000	Dentonite 3/	0 11016	: riug (5 bags)	If pumping discontinue	d, give reason:	Static Level			
							1,		1	
					Pump intake set at (n	n/ft)	2		2	
Metho	od of Construction		Well U	Se	Pumping rate (Vmin /	GPM)	3		3	
Cable Too	Diamond		Comm	ercial Not used	Duration of pumping		4		4	
Rotary (Co		☐ Domestic ☐ Livestock	Municip			nin	5		5	
☐ Boring ☐ Air percus	☐ Digging	☐ Irrigation ☐ Industrial	Cooling	g & Air Conditioning	Final water level end of	f pumping (m/ft)	10		10	
Other, spe		Other, specif	y		If flowing give rate (Vn	nin-/ GPM)	15		15	
Inside	Construction Re		pth (<i>m/ft</i>)	Status of Well Water Supply	D	1 - 11 (- 20)	20		20	
Diameter (cm/in)	(Galvanized, Fibreglass, Concrete, Plastic, Steel)	Thickness (cm/in) From	То	Replacement Well	Recommended pump	depth (m/tt)	25		25	
	,	, and a		☐ Test Hole ☐ Recharge Well	Recommended pump (Vmin / GPM)	rate	30		30	
				Dewatering Well Observation and/or			40		40	
				Monitoring Hole Alteration	Well production (I/min	/ GPM)	50		50	
				(Construction)	Disinfected? Yes No		60		60	
ACMERICAN .	Construction Re	ecord - Screen	Hollerin	Insufficient Supply Abandoned, Poor	Mark Control of the C	Map of We	ell Loc	ation	211111	Minim
Outside Diameter	Material (Steel)	Slot No.	oth (m/ft)	Water Quality	Please provide a map				ack.	-
(cm/in)	(Plastic, Galvanized, Steel)	From	То	Abandoned, other, specify	17 1					
				Other, specify	*					
Water found	at Depth Kind of Water			Hole Diameter oth (m/ft) Diameter	-		_			
(m/f	f) Gas Other, spec	cify	From	To (cm/in)	N	860 C	\			
	at Depth Kind of Water (t) Gas Other, spec		ed	-	889	K	b			
	at Depth Kind of Water		ed		9					
(m/t	t) Gas Other, spec] -					
Business Nar	me of Well Contractor	r and Well Technic		ell Contractor's Licence No.	2					
Capital	Water Supply	Ltd.	1	5 5 8						
Box 490	dress (Street Number/Nar	me)	M	unicipality	Comments:					
Province	Postal Code	Business E-mail A	ddress	tittsville						
	e No. (inc. area code) Nar	6 office ome of Well Technician	capital (Last Name,	Water.ca First Name)	information package	ackage Delivered	. 1	Minist Audit No. Z		Only
6 1 3 8 Well Technician	3 6 1 7 6 6 n's Licence No. Signature	Miller, Step	hen ontractor Da	ate Submitted	res	ork Completed		027	147	008
0 0	9 7 Kall	Kaan		0080908	X No 2 0	0 8 0 9 0	8 5	Received		- OU
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Ministry of the Environment

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

Well	Record
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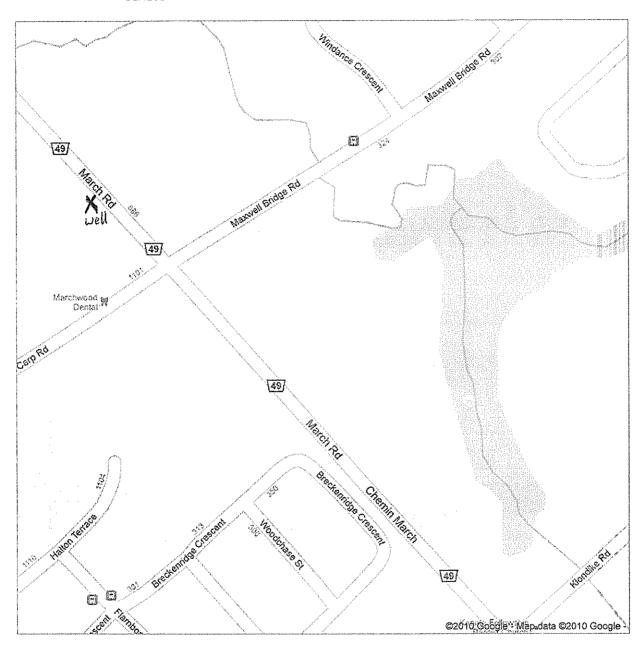
Regulation 903 Ontario Water Resources Act

Weastrem				52505'8046740'80'98'8		sivasi amaa sakaa				AUSSYA 025S424	ray		_ 01 1
First Name	was en empere restel	nformation	Last Name (C		. 1			E-mail Add	dress				Constructed
		treet Number/Na		84	Ottawa 1	Municipality		Province	Postal Code			e No. (inc	/ell Owner . area code)
***************************************		lation Cresc	ent			Ottav	a	Ontwi) [14] 1[G] 6	2 8	6 1 3	<u> </u>	2141010
Well Loca	eraniyan din kedib	cation (Street Nu	imber/Name)			Township Lot Concession					ion		
895													
County/Dis	trict/Mu	nicipality			(City/Town/Vi		Ţ		Provir Ont			al Code
UTM Coord	inates L	Zone , Easting	. No	rthing	1	Municipal Pla	Kana an and Suble			Other		10 1	K X 7
		18426			1								
		Bedrock Mater				ord (see instr	uctions on the	back of this form				Do	oth (m/ft)
General C	olour	Most Com	mon Material			ner Materials			General Description			From	pth (<i>m/ft)</i>
			Stati	c Wa	ter lev	el at	21					A.V.A.A.V.	
					oned to		l Constu	uction					
			GPS.	- Gar	min E	trex							
-	(CANADA (SOL)		Annular	Snace					Results of W	ell Yie	ld Testin	ıcı	
Depth So	et at (m/	t)	Type of Sea	lant Usec	j	1	e Placed	i I	ll yield, water was:	Di	raw Down	. F	Recovery
From	To		(Material and	d Type)		(m	³ /ft³)	☐ Clear and ☐ Other, spe		Tìme (min)		vel Time (min)	Water Level (m/it)
29'	24	<u> </u>	ole-play So	nd_					continued, give reason:	Static	1 , , , ,		
34,	3	<u> </u>	tle plus							Level 1		1	
3`	0.8	Sa	mel					Pump intake s	et at (m/ft)				
0.8	0		an Ruck		•			Trump intake s	et at (mmt)	2		2	
		Construction			Well Us			Pumping rate	(l/min / GPM)	3		3	
☐ Cable Tool ☐ Diamond ☐ Public ☐ Comme			2822 1011 0-91361 0-93 \$309 5 4 5 5 5 5	Not used	Duration of pu	mping	4		4				
	☐ Rotary (Conventional) ☐ Jetting ☐ Domestic ☐ Municip ☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☐ Test Ho			Dewatering Monitoring	hrs +	min	5		5				
Boring	reverse,	☐ Dilyling	*******			& Air Conditi		Final water leve	el end of pumping (m/ft)	10		10	
Air percu			☐ Indi	ustrial er, <i>specif</i> j	iv.					15		15	
		Construction F				Status	of Well	I If flowing give	rate (I/min / GPM)				
Inside	Орел	Hole OR Material	Wall		pth (<i>m/ft</i>)	☐ Water	***************************************	Recommende	d pump depth (m/ft)	20		20	
Diameter <i>(cm/in)</i>	(Galva	nized, Fibreglass, ete, Plastic, Steel)	Thickness (cm/in)	From	То	Replac	ement Well			25		25	
						Rechar		Recommende (I/min / GPM)	d pump rate	30		30	
						Dewate	ering Well ation and/or	10/all and distant	- ((G-i- 100H))	40		40	
						_ Monitor	ing Hole	vveii productio	n (I/min / GPM)	50	<u> </u>	50	
							ruction)	Disinfected?		60		60	
						Abando Insuffic	oned, ient Supply	Yes		ا	C20/11: 21 // NEW N. VISION	100	est samples and the control of the
Outside	T	Construction F	Record - Scre	2.52.500	pth (<i>m/ft</i>)	Abando /Water	oned, Poor	Please provide	Map of W			e back.	
Diameter (cm/in)	(Plastic	Material , Galvanized, Steel)	Slot No.	From	то То	☑ Abando	oned, other,						
(0	<u> </u>					specify	truction						
	1					☐ Other,	specify						
Water four	nd at De	Water De	~	Untest		Hole Diame th (<i>m/ft</i>)	ter Diameter						
		Sas Other, sp			From	To	(cm/in)						
Water four	nd at De	pth Kind of Wate	er: Fresh [Untest	ed								
		Sas Other, sp pth Kind of Wate		7 Untoot									
		or values of values of the part of the pa		onlesi	30								
L'/	y <u></u>	Well Contract		Technic	ian Informa	tion	1						
		Well Contractor	Ł			ell Contractor's							
Pusiness A	nun [Street Number/N	Lt().			6 8 unicipality	9 4	Comments:					
		m Dr.	ын <i>б)</i>		IMI	unicipality Ottoru) <u>r</u> a	Comments.	See At	tach	ed		
Province		Postal Code	Business	E-mail A	ddress								
Outowi	0	K 4 P I A	12 jschel	1@mai	vathondvi	Hing-cor	n	Well owner's information	Date Package Deliver	ed	Mir Audit No	nistry Us	se Only
Bus.Telepho	one No. Ç⊥1⊥∧	inc. area code) N 0 5 7 1	ame of Well T			First Name)		package delivered	YYYYMM		Audit No	209	6933
		nce No. Signatur			Contractor Da	ite Submitted	1 -	☐ Yes	Date Work Completed	I		Topic Registre	es Tan Tan
3 2	15	14 June	1/		2	010		□No	YYYYMM	0 0	Receiv	327	<u>2 2010</u>
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Google maps

Notes



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DEC 2 2 2010

How can we help you

Search

contact us Français Popular +

Trending Now

- Ontario Public Service careers
 OSAP: Ontario Student Assistance Program
 Government services
 Outdoors Cards, Licences and Draws
 Renew a licence plate sticker
 Change the address on identification cards

- Driving and Roads

Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the Open Data catalogue.

Recommended for you

How to use a Ministry of the Environment map

Technical documentation: Metadata record

Go Back to Map

Well ID

Well ID Number: 7201372 Well Audit Number: *C21215* Well Tag Number: *A130127*

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

Well Location

Address of Well Location	
Township	MARCH TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 426635.00 Northing: 5023491.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

Annular Space/Abandonment Sealing Record

Depth Depth Type of Sealant Used Volume From To (Material and Type) Placed

Method of Construction & Well Use

Method of Construction Well Use

Status of Well

Construction Record - Casing

Inside Diameter Open Hole or material Pepth From To

Construction Record - Screen

Outside Diameter Material Depth Depth From To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

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?

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	Depth	Diameter	
From	To	Diameter	

patersongroup

Consulting Engineers

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

Fax: (613) 226-6344
Geotechnical Engineering

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

www.patersongroup.ca

October 1, 2019 File: PE4760-HLUI

City of Ottawa 110 Laurier Avenue W Ottawa, Ontario K1P 1J1

Subject: Authorization Letter, HLUI Search

Phase I-Environmental Site Assessment

910 March Road, Ottawa ON

Dear Sir or Madame,

Please consider this letter as confirmation that Paterson Group has been retained to conduct a Phase I-Environmental Site Assessment at the aforementioned property.

With this letter, the property owner authorizes the City of Ottawa and other regulatory bodies to release, to Paterson Group, information requested for the purpose of completing an environmental assessment of the property.

Name of Company/Property Owner:	9
Name of Representative	
Signature of Representative	
Date	

Mandy Witteman

From: Public Information Services <publicinformationservices@tssa.org>

Sent: October-02-19 3:13 PM To: Mandy Witteman

RE: Search Records Request (PE4760) Subject:

Follow Up Flag: Follow up Flag Status: Flagged

Good afternoon,

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 publicinformationservices@tssa.org or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

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



Sherees Thompson | Public Information Agent

Facilities 345 Carlingview Drive Toronto, Ontario M9W 6N9

Tel: +1-416-734-3363 | Fax: +1-416-231-6183 | E-Mail: sthompson@tssa.org

www.tssa.org







From: Mandy Witteman < MWitteman@Patersongroup.ca>

Sent: October 2, 2019 11:10 AM

To: Public Information Services <publicinformationservices@tssa.org>

Subject: Search Records Request (PE4760)

Good Morning,

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:

March Rd: 910, 866, 846, 927, 905, 895

Halton Terrace: 1054, 1083 Maxwell Bridge Dr: 349

Thank you!

Cheers,

patersongroup

solution oriented engineering over 60 years servicing our clients

154 Colonnade Road South Ottawa, Ontario, K2E 7J5 Tel: (613) 226-7381 Ext. 339

Cell: (403) 921-1157

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.

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

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



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

Mark S. D'Arcy, P. Eng.

patersongroup

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