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Phase I Environmental Site Assessment

Part of 1380 Howie Road
Ottawa, Ontario

Prepared For

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Report: PE5276-1

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EXECUTIVE SUMMARY

Paterson Group was retained by T.G. Carroll Cartage Ltd. to conduct a Phase I Environmental Site Assessment (ESA) for a portion of 1380 Howie Road, in the City of Ottawa, Ontario. The purpose of this Phase I-Environmental Site Assessment (Phase I-ESA) was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

The Phase I property has never been developed. No structures have been constructed on or are present on the Phase I property.

Surrounding properties historically consisted of agricultural fields, residential dwellings, and pits/quarries. The property adjacent to the northwest, a waste disposal site, represents a PCA (Potentially Contaminating Activity) resulting in an APEC (Area of Potential Environmental Concern) on the subject property. Remaining neighbouring properties are not considered to represent PCAs.

Following the historical research, a site visit was conducted to assess the subject site and Phase I ESA study area. Fill piles were encountered on site and were noted to largely consist of native organics (peat) and topsoil, native sand and till, and clean aggregates. Some fill piles were noted to contain debris (brick, metal, concrete) on the western portion of the subject site, including some fill piles containing soil of unknown quality. The presence of this fill material is considered to represent a PCA resulting in an APEC on the Phase I property.

A heavy equipment (vehicle) storage area was observed in the west-central portion of the site, with vehicles and equipment related to seasonal road maintenance and excavation activities. This area is considered to represent a PCA resulting in an APEC on the Phase I property.

The eastern portion of the subject site was comprised of vacant, treed land and wetlands area. No concerns were identified on the eastern portion of the site.

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

1.0 INTRODUCTION

At the request of T.G. Carroll Cartage Ltd., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of 1380 Howie Road, in the City of Ottawa (Carp), Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Tom Carroll of T.G. Carroll Cartage. Mr. Carroll can be reached by telephone at (613) 836-7927.

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

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

2.0 PHASE I PROPERTY INFORMATION

Address:	Part of 1380 Howie Road, Ottawa, Ontario.
Legal Description:	Part of Lot 13, Concession 7, Geographic Township of Huntley, in the City of Ottawa, Ontario.
Location:	The subject site is located on the north side of Howie Road, approximately 1.3 kilometres southeast of March Road, in the City of Ottawa, Ontario. Refer to Figure 1 - Key Plan following the body of this report for the site location.
Latitude and Longitude:	45° 17' 14" N, 76° 04' 14" W

Site Description:

Configuration:	Irregular
Site Area:	67.5 ha (approximately)
Zoning:	RU – Rural Countryside Zone
Current Use:	The subject site is currently undeveloped, with an equipment storage area, a sand, aggregate and fill stockpile area, and vacant, treed and wetland areas.
Services:	The subject site is located in a privately serviced area.

3.0 SCOPE OF INVESTIGATION

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

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

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

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

First Developed Use Determination

According to the aerial photographs, the subject site was used for agricultural purposes prior to 1976, and the larger 1380 Howie Road property was developed for residential use in approximately 2015. No structures exist on the Phase I property.

Fire Insurance Plans

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

City of Ottawa Street Directories

City Directories were not obtained for the area of the subject site during this investigation due to COVID-19 restrictions. A review of past Paterson directory searches did not identify any records in the Phase I study area.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on June 30, 2021. The subject site was not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

A search of national PCB waste storage sites was conducted electronically on June 30, 2021 as part of this assessment. No PCB waste storage sites were identified in the Phase I study area.

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

A request was submitted to the MECP Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site. A response from the MECP had not been received prior to the issuance of this report.

MECP Coal Gasification Plant Inventory

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

MECP Incident Reports

A request was submitted to the MECP Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP for the subject site or adjacent properties. A response from the MECP had not been received prior to the issuance of this report.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties, and the general area of the site. No Records of Site Condition (RSCs) were filed for the subject site or adjacent properties.

MECP Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario.

A waste disposal site identified as The City of Almonte Waste Disposal Site (Site #A461001 of active sites in MOE inventory) was identified within the Phase I study area (immediately northwest of the Phase I property). The site is listed as operational from 1951 and has a site area of 250 x 300 metres. Based on the adjacent proximity to the subject site, the presence of this waste disposal site represents a PCA resulting in an APEC on the northwest corner of the subject site.

MECP Waste Management Records

A request was submitted to the MECP Freedom of Information office for information with respect to waste management records. A response from the MECP had not been received prior to the issuance of this report.

MECP Submissions

A request was submitted to the MECP Freedom of Information office for information with respect to reports related to environmental conditions. A response from the MECP had not been received prior to the issuance of this report.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on June 30, 2021. The search did not reveal any natural features or areas of natural significance within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA Fuels Safety Branch was contacted electronically on May 19, 2021. The response indicated that there are no underground storage tanks recorded in the TSSA registry for the subject property or neighbouring lands.

City of Ottawa Landfill Document

The document entitled “Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa”, was reviewed. No former waste disposal sites were identified in this document within the Phase I study area. It should be noted that the Howie Road Recycling Depot (Almonte Waste Disposal Site, formerly called The Mississippi Mills Waste Disposal Site and The Corkery Dump) is present immediately northwest of the Phase I property (Site #A461001 of active sites in MOE inventory).

City of Ottawa Historical Land Use Inventory

A requisition was sent to the City of Ottawa to request information from the City’s Historical Land Use Inventory (HLUI 2011) database for the subject property. The response letter identified the presence of the aforementioned City of Almonte Waste Disposal Site, also referred to as the Corkery Dump, immediately north of the northwest quadrant of the Phase I Property.

A copy of the HLUI request form and the provided response are provided in Appendix 2.

ERIS Search

An ERIS (Environmental Risk Information Service) Report was obtained for the Phase I Property and properties within the Phase I Study Area.

Based on the ERIS search, there are three (3) records identified for 1380 Howie Road (larger Phase I property), all of which are domestic water well records. Two (2) of the wells were identified to be misattributed to the property, drilled in 1985. A domestic water well was identified on the residential portion of 1380 Howie Road (not part of the Phase I property) and was drilled to fresh water in 2015, at the time of residential construction. No concerns were identified with respect to the well records.

13 total records from various databases were identified in the ERIS search within the 250 m search radius, which included domestic water wells from adjacent properties, and various records from an adjacent waste disposal site (Mississippi Mills Landfill / Corkery Dump) to the north. The presence of this waste disposal site represents a PCA in the Phase I study area and an APEC on the northwest property corner.

A copy of the ERIS report is included in Appendix 2.

Previous Environmental Reports

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

Geotechnical Field Investigation

A geotechnical field investigation was carried out by Paterson Group on May 18, 2021, which consisted of twelve (12) test pits placed on the subject property. In general, the observed stratigraphy consists of topsoil over native silty sand and glacial till. The bedrock surface was encountered in one test pit (TP12-21) on the northwestern portion of the property, approximately 2.0m below existing ground surface. No visual or olfactory evidence of contamination was encountered in any of the test pits. Fill was not encountered in any of the test pit locations.

4.3 Physical Setting Sources

Aerial Photographs

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

- | | |
|------|---|
| 1976 | (City of Ottawa website) The subject site appears to be used for agricultural purposes in the western portion of the property, and the eastern portion appears to be vacant, treed land. Neighbouring properties appear to be a mixture of unused land, agricultural use land, and aggregate pits, with a landfill visible north of the subject site. Howie Road is visible in its current orientation. |
| 1991 | (City of Ottawa website) No significant changes have been made to the subject site. Residential development has begun northwest of the subject site. Bearhill Road is present at this time, extending northwest from the northernmost corner of the property. |
| 2002 | (City of Ottawa website) The residential development northwest of the site has been completed. No significant changes have been made to the subject site. |
| 2011 | (City of Ottawa website) No significant changes have been made to the subject site or surrounding lands. |
| 2019 | (City of Ottawa Website) A residential dwelling has been constructed immediately south of the Phase I property. No significant changes have been made to the subject site. |

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

Topographic Maps

Topographic information was obtained from the City of Ottawa “Geo Ottawa” website and Natural Resources Canada – The Atlas of Canada website. The topographic maps indicate that the elevation of the subject site is approximately 135 m ASL, and that the regional topography in the general area of the site slopes downward to the northwest. 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 St-Lawrence Lowlands physiographic region, described as a plain-like area that was all affected by the Pleistocene glaciations and is therefore covered by surficial deposits and other features associated with the ice sheets. Mapping shows the subject site as situated on an area of deltaic and estuarine deposits.

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 available geological mapping, the bedrock in the eastern portion of the site consists of limestone of the Bobcaygeon formation, while the bedrock in the western portion of the site consists of limestone and dolomite of the Gull River formation, with overburden drift thicknesses ranging from 1 to 5 m across the site.

Water Well Records

A search of the MECPs website for all drilled well records within a 250 m radius of the subject site was conducted as part of this assessment. No well records were located on the Phase I property. The search identified 9 well records within the Phase I study area, all of which were potable drinking wells. In general, according to the well records, the strata in the Phase I study area includes sand and sandy glacial till, overlying limestone bedrock approximately 0.5 to 6 metres below ground surface. No environmental concerns were identified in the well record review.

Water Bodies and Areas of Natural Significance

Ponded water and drainage ditches were observed on the subject site (wetlands area), as well as adjacent lands. No concerns were identified with respect to ponded water or water channels. No areas of natural significance are known to exist within the Phase I study area.

5.0 INTERVIEWS

Property Owner Representative

Mr. Tom Carroll, the current property owner, was available at the time of the site visit to respond to questions pertaining to the subject site. Mr. Carroll stated that he purchased the property (1380 Howie Road) in approximately 2009-2010. Prior to purchase, the land was primarily vacant treed land, with a natural moraine

fronting Howie Road which was historically excavated and used as road construction material. Following the land acquisition, the site was primarily used for the storage of construction and transportation maintenance equipment (salt trucks, excavators, water trucks, etc), and stockpiled aggregates. A residential dwelling was constructed on the larger property (outside of the Phase I property) in approximately 2015, fronting Howie Road. The remainder of the site is comprised of vacant treed lands, cleared forested area, and wetlands. Mr. Carroll was not aware of any environmental concerns with the subject property or surrounding properties in the Phase I study area beyond the adjacent landfill.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on June 29, 2021. Weather conditions were clear, with a temperature of approximately 25° C. Mr. Jesse Andrechek from the Environmental Department of Paterson Group conducted the site visit. In addition to the site, the uses of neighbouring properties within the Phase I study area were also assessed at the time of the site visit.

6.2 Specific Observations at Phase I Property

Buildings and Structures

No buildings or structures were observed on the Phase I property.

Site Features

The subject site consists mostly of vacant land, with a mixture of trees, brush, and cleared land. Some fill piles of varying sizes were present across the site, from clearing operations (peat and topsoil/organics) and aggregates (sand, crushed stone, pea gravel, etc). Some demolition generated fill material (brick, asphalt, concrete, etc.) was also present in various stockpiles in the western portion of the site. Site drainage consists primarily of infiltration, with ponded water and drainage ditches throughout the wetland portion of the site (eastern portion of the site).

No private sewage systems exist on the Phase I property. No evidence of current or former railway or spur lines on the subject property was observed at the time of the site inspection. There were no unidentified substances observed on the subject site.

A heavy equipment parking area was identified in the west-central portion of the site, which contained vehicle storage related to seasonal road maintenance and excavation activities. This area is considered to represent an on-site PCA resulting in an APEC on the subject site.

Fill Material

Fill piles were present on the site at the time of the site visit. During the site reconnaissance, the fill was identified to largely consist of stockpiled organics (peat) and topsoil from clearing operations, native site excavated glacial till, and imported aggregates (sand, gravel, crushed stone, etc.). Some fill piles containing building debris (brick, asphalt, concrete) were also present. While the majority of the fill material is comprised of native material (organics, topsoil, glacial till) and clean aggregates, some construction debris and fill of unknown quality was identified in stockpiles in the western portion of the site. The presence of this fill material is considered to represent an on-site PCA resulting in an APEC on the subject site.

Below Ground Structures or Utilities

No below ground structures or utilities were identified on the Phase I property.

Fuels and Chemical Storage

Some decommissioned ASTs were observed in the heavy equipment parking area at the time of the site visit. According to Mr. Carroll, on-site fuelling does not occur. The tanks were empty at the time of the site visit. No visual or olfactory evidence of a historical spill was noted in the vicinity of the decommissioned ASTs at the time of the assessment. No concerns were identified with respect to on-site fuel and chemical storage.

Neighbouring Properties

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

- ☐ North Howie Road Recycling Depot (waste disposal site (northwest)) and residential housing development (northeast);
- ☐ South Vacant treed land, with residential properties along Howie Road;
- ☐ East Howie Road, followed by commercial aggregate pits and residential dwellings;

- ☐ West Bearhill Road allowance, followed by vacant/treed land and a commercial sand pit.

Potentially Contaminating Activities within the Phase I study area include a waste disposal site, located adjacent northwest of the subject site. Based on the proximity to the subject site, the presence of this waste disposal site is considered to represent an APEC (Area of Potential Environmental Concern) on the Phase I Property.

Property use within the Phase I study area is shown on Drawing PE5276-3 - Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

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

Table 1 - Land Use History – 1380 Howie Road			
Time Period	Land Use	Potentially Contaminating Activities	Areas of Potential Environmental Concern
Prior to 2010	Agricultural or Other Use	None	None
2010 to 2015	Agricultural or Other Use	Imported fill material of unknown quality on western portion of the subject site	Imported fill material of unknown quality on western portion of the subject site
2015 to 2021	Residential	Heavy equipment storage, imported fill material of unknown quality	Heavy equipment storage, imported fill material of unknown quality

Potentially Contaminating Activities (PCAs)

Based on the findings of this Phase I ESA, two on-site PCAs, resulting in APECs, were identified as pertaining to the subject site. These APECs include:

- ☐ A heavy equipment (vehicle) storage area, used to maintain transportation systems (seasonal road maintenance);

- ☐ Fill material of unknown quality, located on the western portion of the subject site;

One off-site PCA, resulting in an APEC on the Phase I property, was identified during the historical review.

- ☐ A waste disposal site (Howie Road Recycling Depot / Almonte Waste Disposal Site / Corkery Dump / Mississippi Mills Landfill), located adjacent northwest of the Phase I property (1470 Howie Road).

No additional PCAs were identified within the Phase I study area.

Areas of Potential Environmental Concern (APEC)

The Areas of Potential Environmental Concern (APECs) identified on the Phase I property are summarized below in Table 2.

Table 2 Areas of Potential Environmental Concern					
APEC	Location of APEC	PCA (O. Reg. 153/04 – Table 2)	Location of PCA	Contaminants of Potential Concern	Media Potentially Impacted
APEC #1 Heavy Equipment Storage for Seasonal Road Maintenance	West-central portion of subject site	<i>"Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems"</i>	On-Site	BTEX PHCs (F ₁ -F ₄) EC SAR	Soil and Groundwater
APEC #2 Fill Material of Unknown Quality	Western portion of subject site	<i>"Item 30: Importation of Fill Material of Unknown Quality"</i>	On-Site	BTEX PHCs (F ₁ -F ₄) Metals	Soil
APEC #3 Waste Disposal Site	Northwestern corner of subject site	<i>"Item 58: Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners"</i>	Adjacent northwest	BTEX PHCs (F ₁ -F ₄)	Groundwater

Contaminants of Potential Concern (CPC)

Based on the APECs identified above, the contaminants of potential concern (CPCs) in the soil and/or groundwater include BTEX (benzene, toluene, ethylbenzene and xylene) compounds, petroleum hydrocarbons (PHCs, fractions F₁-F₄), EC/SAR, and metals (including mercury and hexavalent chromium).

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, bedrock beneath the eastern portion of the site consists of limestone of the Bobcaygeon formation, while the bedrock in the western portion of the site consists of limestone and dolomite of the Gull River formation. Surficial soils consist of till and marine deposits, with a drift thickness of 1 to 5 metres.

Hydrogeological conditions are considered to mimic the topographic setting; as a result, groundwater is expected to flow west.

Contaminants of Potential Concern

The contaminants of potential concern (CPCs) associated with the aforementioned APECs are considered to be:

- ☐ Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX);
- ☐ Petroleum Hydrocarbons, fractions 1 - 4 (PHCs F₁-F₄);
- ☐ Metals (including Mercury and Hexavalent Chromium);
- ☐ Electric Conductivity (EC) and Sodium Absorption Rate (SAR).

These CPCs have the potential to be present in the soil matrix and/or the groundwater situated beneath the subject site.

Existing Buildings and Structures

No buildings or structures exist on the Phase I property.

Water Bodies

Some ponded water and drainage channels are present on the Phase I property, notably in the eastern portion of the site (wetlands area). No concerns were identified with respect to water bodies.

Areas of Natural Significance

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

Drinking Water Wells

Potable drinking water wells are located within the Phase I study area, along Howie Road to the south, and Rocky Creek Way to the north.

Neighbouring Land Use

Neighbouring land use in the Phase I study area consists of vacant and agricultural lands, residential properties, commercial pits/quarries, and a waste disposal site adjacent northwest to the subject site.

Land use is shown on Drawing PE5276-3-Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

Based on the findings of this Phase I ESA, two on-site PCAs, resulting in APECs, were identified as pertaining to the subject site. These APECs include:

- ☐ A heavy equipment (vehicle) storage area, used to maintain transportation systems (seasonal road maintenance);
- ☐ Fill material of unknown quality, located in stockpiles on the western portion of the subject site;

One off-site PCA, resulting in an APEC on the Phase I property, were identified during the historical review.

- ☐ A waste disposal site (Corkery Dump / Mississippi Mills Landfill / Almonte Waste Disposal Site), currently the Howie Road Recycling Depot, located adjacent northwest of the Phase I property (1470 Howie Road).

No additional PCAs were identified within the Phase I study area.

Contaminants of Potential Concern

The contaminants of potential concern (CPCs) associated with the aforementioned APECs are considered to be:

- ☐ Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX);
- ☐ Petroleum Hydrocarbons, Fractions 1 - 4 (PHCs F₁-F₄);
- ☐ Metals (including Mercury and Hexavalent Chromium);
- ☐ Electric Conductivity (EC), and Sodium Absorption Rate (SAR).

These CPCs have the potential to be present in the soil matrix and/or the groundwater situated beneath the subject site.

Assessment of Uncertainty and/or Absence of Information

The PCAs within the Phase I study area were confirmed by a variety of independent sources. As such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSIONS

Assessment

Paterson Group was retained by T.G. Carroll Cartage Ltd. to conduct a Phase I Environmental Site Assessment (ESA) for a portion of 1380 Howie Road, in the City of Ottawa, Ontario. The purpose of this Phase I-Environmental Site Assessment (Phase I-ESA) was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

The Phase I property has never been developed. No structures have been constructed or are present on the Phase I property.

Surrounding properties historically consisted of agricultural fields, residential dwellings, and pits/quarries. The property adjacent to the northwest, a waste disposal site, represents PCA (Potentially Contaminating Activity) resulting in an APEC (Area of Potential Environmental Concern) on the subject property. Remaining neighbouring properties are not considered to represent PCAs.

Following the historical research, a site visit was conducted to assess the subject site and Phase I ESA study area. Fill piles were encountered on site, and were noted to largely consist of native organics (peat) and topsoil, native sand and till, and clean aggregates. Some fill piles were noted to contain debris (brick, metal, concrete) on the western portion of the subject site, including some fill piles containing soil of unknown quality. The presence of this fill material is considered to represent a PCA resulting in an APEC on the Phase I property.

A heavy equipment (vehicle) storage area was observed in the west-central portion of the site, with vehicles and equipment related to seasonal road maintenance and excavation activities. This area is considered to represent a PCA resulting in an APEC on the Phase I property.

The eastern portion of the subject site was comprised of vacant, treed land and wetlands area. No concerns were identified on the eastern portion of the site.

Conclusion

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

9.0 STATEMENT OF LIMITATIONS

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

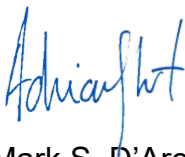
Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of T.G. Carroll Cartage Ltd. Permission and notification from the above noted party and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Jesse Andrechek, BASc.



for

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



Report Distribution:

- ☐ T.G. Carroll Cartage Ltd.
- ☐ Paterson Group Inc.

10.0 REFERENCES

Federal Records

Air photos at the Energy Mines and Resources Air Photo Library.
National Archives.
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Environment Canada, National Pollutant Release Inventory.
PCB Waste Storage Site Inventory.

Provincial Records

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MECP document titled “Waste Disposal Site Inventory in Ontario”.
MECP Brownfields Environmental Site Registry.
Office of Technical Standards and Safety Authority, Fuels Safety Branch.
MNRF Areas of Natural Significance.
MECP Water Well Inventory.
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Municipal Records

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The City of Ottawa Historical Land Use Inventory.
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The City of Ottawa GeoOttawa website.

Local Information Sources

ERIS Environmental Risk Information Services
Previous Engineering Reports
Personal Interviews

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE5127-1 – SITE PLAN

DRAWING PE5127-2 – SURROUNDING LAND USE PLAN

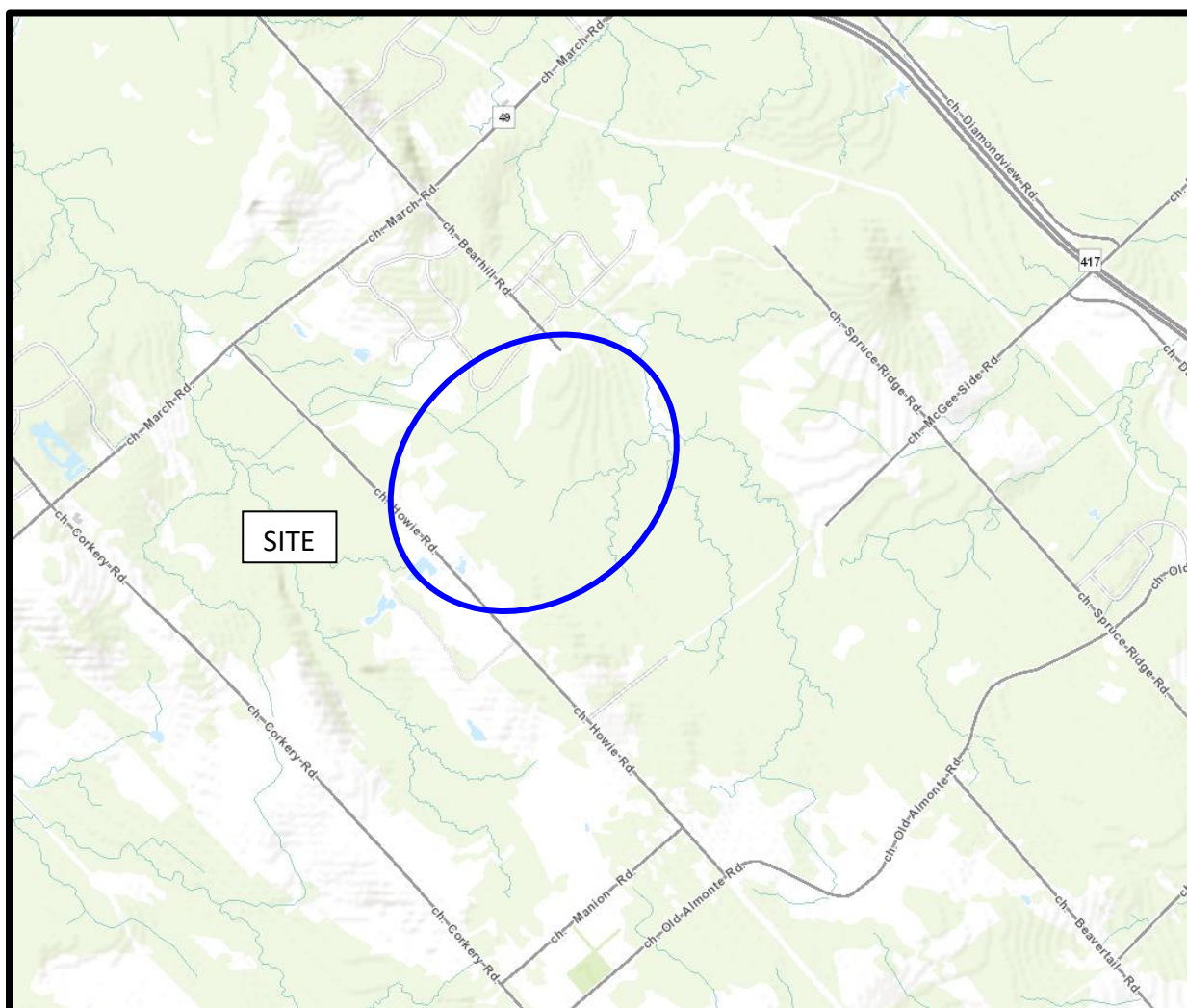


Figure 1:
KEY PLAN

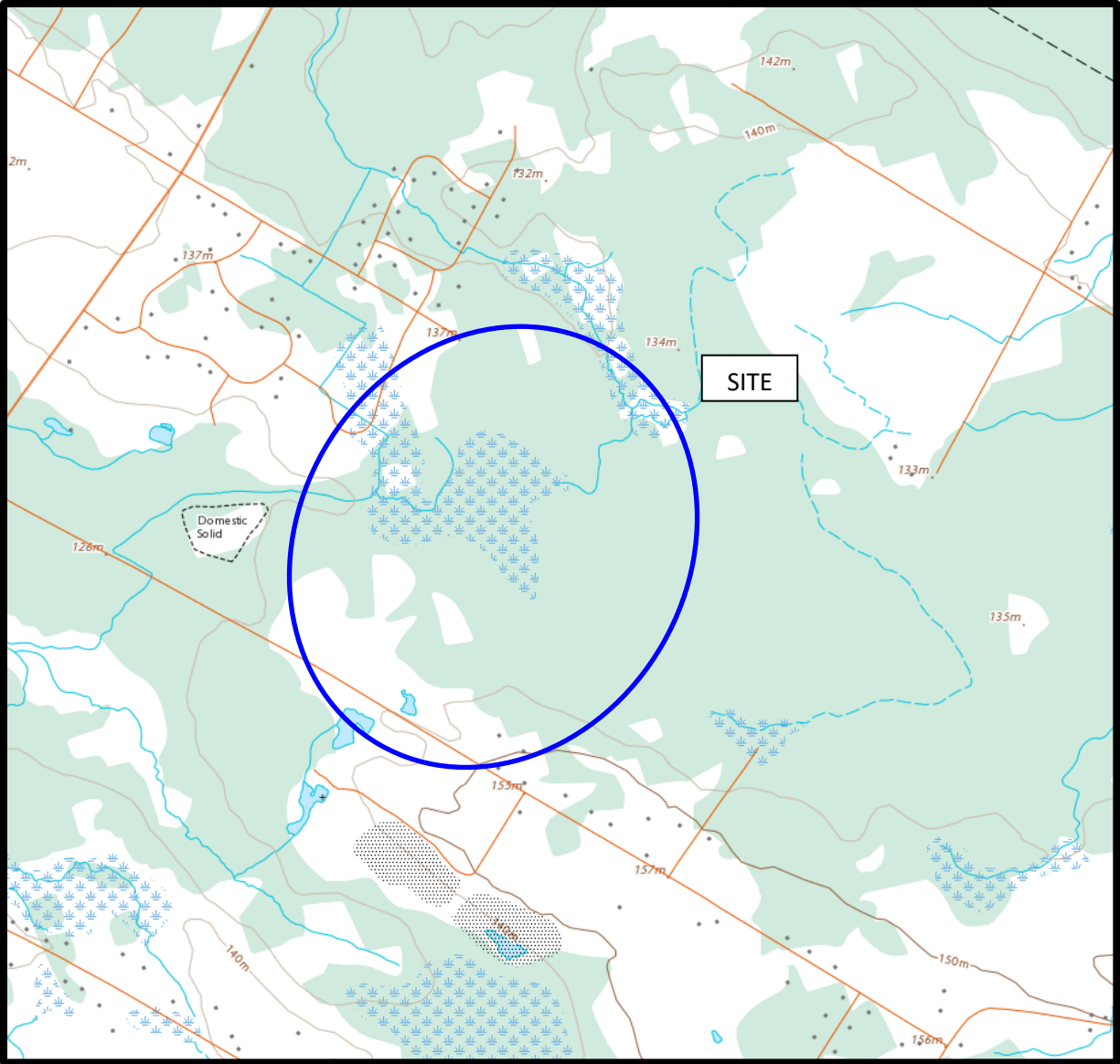
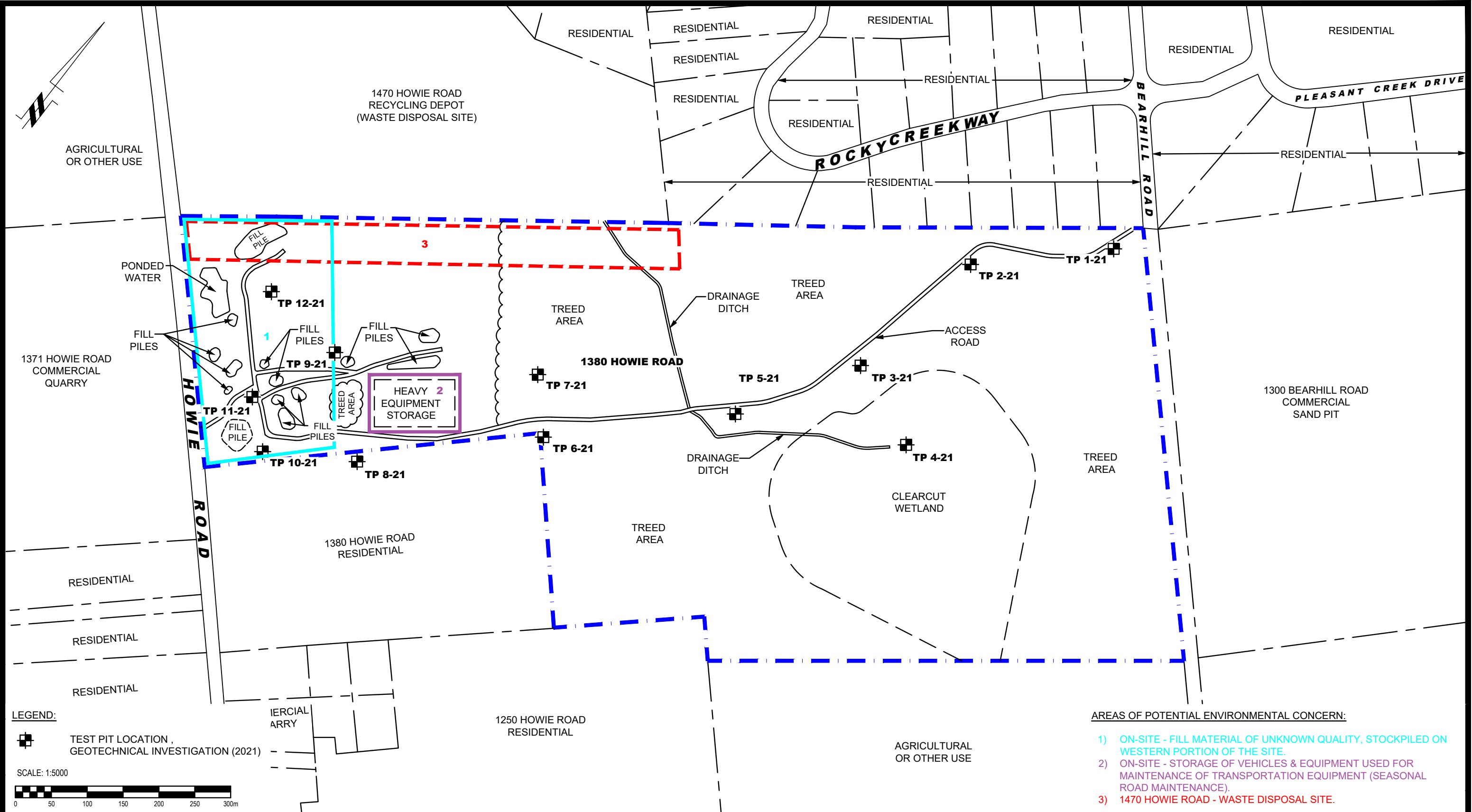


FIGURE 2

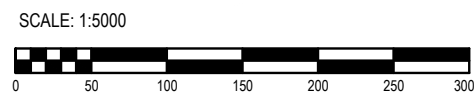
TOPOGRAPHIC MAP

patersongroup



LEGEND:

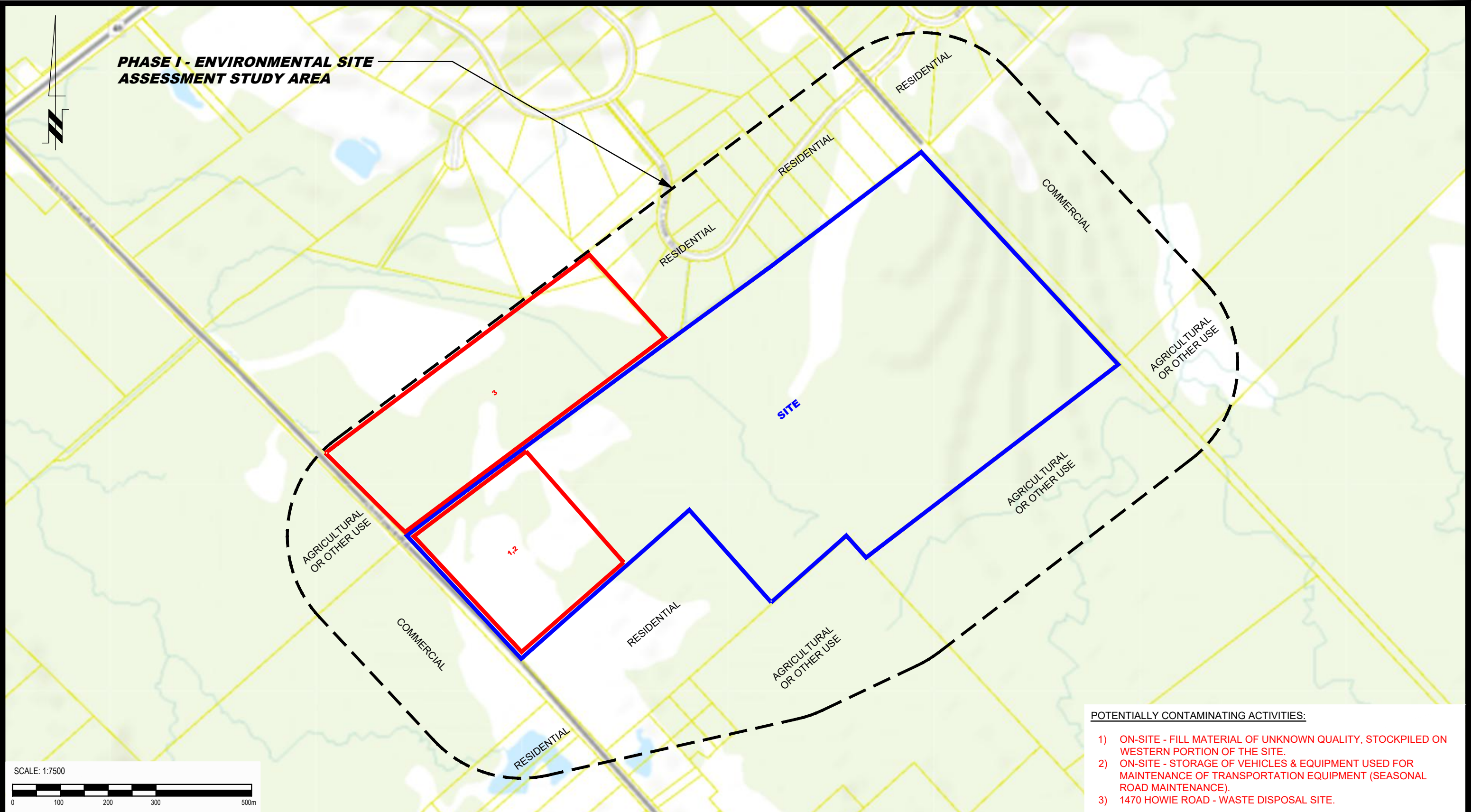
 TEST PIT LOCATION, GEOTECHNICAL INVESTIGATION (2021)



AREAS OF POTENTIAL ENVIRONMENTAL CONCERN:

- 1) ON-SITE - FILL MATERIAL OF UNKNOWN QUALITY, STOCKPILED ON WESTERN PORTION OF THE SITE.
- 2) ON-SITE - STORAGE OF VEHICLES & EQUIPMENT USED FOR MAINTENANCE OF TRANSPORTATION EQUIPMENT (SEASONAL ROAD MAINTENANCE).
- 3) 1470 HOWIE ROAD - WASTE DISPOSAL SITE.

 154 Colonnade Road South Ottawa, Ontario K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344					T.G. CARROLL CARTAGE LTD.		Scale:	1:5000	Date:	07/2021
					PHASE I - ENVIRONMENTAL SITE ASSESSMENT		Drawn by:	JM	Report No.:	PE5276-1
					PART OF 1380 HOWIE ROAD		Checked by:	JA	Dwg. No.:	PE5276-2
					OTTAWA, ONTARIO		Approved by:	MSD	Revision No.:	
	NO.	REVISIONS	DATE	INITIAL	Title:					



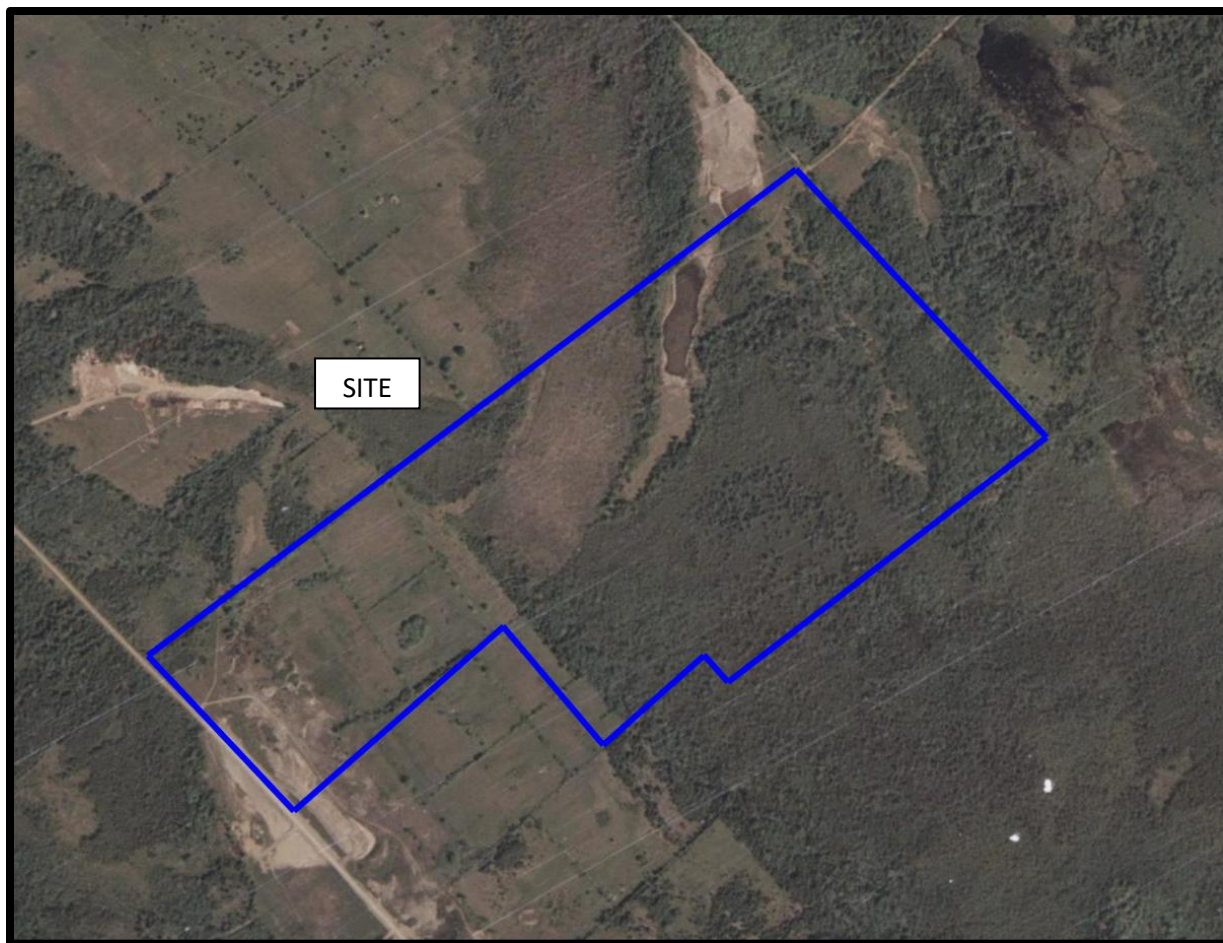
- POTENTIALLY CONTAMINATING ACTIVITIES:
- 1) ON-SITE - FILL MATERIAL OF UNKNOWN QUALITY, STOCKPILED ON WESTERN PORTION OF THE SITE.
 - 2) ON-SITE - STORAGE OF VEHICLES & EQUIPMENT USED FOR MAINTENANCE OF TRANSPORTATION EQUIPMENT (SEASONAL ROAD MAINTENANCE).
 - 3) 1470 HOWIE ROAD - WASTE DISPOSAL SITE.

patersongroup consulting engineers 154 Colonnade Road South Ottawa, Ontario K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344					T.G CARROLL CARTAGE LTD. PHASE I - ENVIRONMENTAL SITE ASSESSMENT PART OF 1380 HOWIE ROAD OTTAWA, ONTARIO	Scale:	1:7500	Date:	07/2021
						Drawn by:	JM	Report No.:	PE5276-1
						Checked by:	JA	Dwg. No.:	PE5276-3
						Approved by:	MSD	Revision No.:	
					Title: SURROUNDING LAND USE PLAN				
	NO.	REVISIONS	DATE	INITIAL					

APPENDIX 1

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS



AERIAL PHOTOGRAPH
1976



AERIAL PHOTOGRAPH
1991



AERIAL PHOTOGRAPH
2002



AERIAL PHOTOGRAPH
2011



AERIAL PHOTOGRAPH
2019

Photo 1: Demolition generated debris and fill of unknown quality on western portion of the property, facing east.



Photo 2: Vehicle and heavy equipment storage area in the west-central portion of the subject site, facing north.



Photo 3: Vehicle and heavy equipment storage area in the west-central portion of the subject site, facing north.



Photo 4: Vacant cleared wetlands area in eastern portion of the site, facing east.



Photo 5: Along the drainage ditch on the vacant cleared wetlands area in eastern portion of the site, facing northeast.



Photo 6: Vacant forested area in the east portion of the subject site, facing south.



Site Photographs

PE5276

Part of 1380 Howie Road
Ottawa, Ontario

June 28, 2021

Photo 7: Near the northeast property corner, facing north towards the adjacent waste disposal site.



APPENDIX 2

MECP FREEDOM OF INFORMATION REQUEST

HLUI RESPONSE

ERIS REPORT

TSSA CORRESPONDENCE

Freedom of Information and
Protection of Privacy Office
40 St. Clair Avenue West, 12th Floor
Toronto ON M4V 1M2
Telephone 416 314-4075

Instructions

Use this form to request records that are in the Ministry's files on environmental concerns related to properties. Our fax number is 416 314-4285.

For Ministry Use Only

FOI Request Number	Date Request Received (yyyy/mm/dd)
Fee Paid	☐ Cheque ☐ VISA/MC ☐ Cash/Money Order
☐ CNR ☐ ER ☐ NOR ☐ SWR ☐ WCR ☐ IEB ☐ EAA ☐ EMR ☐ SCB ☐ SDW	

1. Requester Data

Last Name Andrechek	First Name Jesse	Middle Initial J
Title Environmental Technician	Company Name Paterson Group	

Mailing Address

Unit Number	Street Number 154	Street Name Colonnade Road South	PO Box
City/Town Ottawa		Province Ontario	Postal Code K2E 7J5
Email Address jandrechek@patersongroup.ca		Telephone Number 613 226-7381	Fax Number ext.
Project/Reference Number PE5276	Signature of Requester 		

2. Request Parameters

Municipal Address (Municipal address mandatory for cities, towns or regions)

Unit Number	Street Number 1380	Street Name Howie Road	PO Box
Lot Number	Concession	Geographic Township Carp	
City/Town/Village Ottawa		Province ON	Postal Code KOA 1L0

Present Property

1. Owner Tom Carroll	Date of Ownership (yyyy/mm/dd)
Tenant (if applicable)	

Previous Property

1. Owner	Date of Ownership (yyyy/mm/dd)
Tenant (if applicable)	

3. Search Parameters

Search Parameters	Specify Year(s) Requested
Environmental concerns (General correspondence, occurrence reports, abatement)	All
Orders	All
Spills	All
Investigations/prosecutions ► Owner and tenant information must be provided	2003-Present
Waste Generator number/classes	All
Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.	

4. Environmental Compliance Approvals/Certificates of Approval

Environmental Compliance Approvals/Certificates of Approval	SD	Specify Year(s) Requested
air - emissions	☒	1986- Present
renewable energy	☒	1986- Present
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)	☒	1986- Present
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations	☒	1986- Present
waste water - industrial discharge	☒	1986- Present
waste sites - disposal, landfill sites, transfer stations, processing sites, incinerator sites	☒	1986- Present
waste systems - haulers: sewage, non-hazardous & hazardous waste, mobile waste processing units, PCB destruction	☒	1986- Present

Proponent information must be provided and Environmental Compliance Approval/Certificate of Approval number(s) (if known). 1985 and prior records are searched manually. Search fees in excess of \$300.00 may be incurred, depending on the types and years to be searched. Specify Approval number(s) (if known). If supporting documents are also required, mark SD box and specify type e.g. maps, plans, reports, etc.

**Ministry of the Environment,
Conservation and Parks**

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

**Ministère de l'Environnement, de
la Protection de la nature et des
Parcs**

Bureau de l'accès à l'information et
de la protection de la vie privée
12^e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél. : (416) 314-4075
Télec.: (416) 314-4285



May 31, 2022

Jesse Andrechek
Paterson Group
154 Colonnade Road South
Ottawa, ON K2E 7J5
jandrechek@patersongroup.ca

Dear Jesse Andrechek:

RE: *Freedom of Information and Protection of Privacy Act Request*
Our File #: A-2021-03999, Your Reference #: PE5276

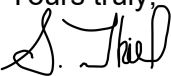
This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 1380 Howie Road, Township of Carp, Ottawa.

After a thorough search of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Client Services and Permissions Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, records were located in response to your request. A final decision has been made to provide you with partial access to the records as identifying information pertaining to private individuals has been removed to protect privacy (Section 21 of the Act).

The District Office has advised that there may be inactive records in the Records Centre, Mississauga. To retrieve these files there is a charge of \$60.00 with no guarantee that any records will be located responsive to your request. If you would like us to retrieve these files, please forward to me at the above address payment by money order or cheque (made payable to the "Minister of Finance (FOI)") or by credit card in the amount of \$60.00. Credit card forms are available on the Ministry's website <http://www.ontario.ca/environment-and-energy/freedom-information-request-form>.

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

If you have any questions regarding this matter, please contact Stephanie Thiel at 647-205-0554 or Stephanie.Thiel@ontario.ca.

Yours truly,


For
Ryan Gunn
Manager (A), Access and Privacy Office

Attachment

Ottawa

Roads

Transportation

Property

 Property Parcels

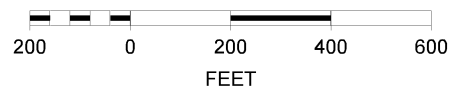
Surface Water

Air Photos 2011

Boundaries



SCALE 1 : 4,455



N



000001

INCIDENT REPORT

Reference Number:	0488-8WLQUP	File Storage Number:	SI OT OT HO 100
Module:	Incident Reporting	Module Type:	Pollution Incident Report (PIR)
Cross Reference:	(doc link)	Task Link:	5308-8WLQX6 
Originating Document:		Created by:	Christian Grothe
Incident Report Reference Number:	0488-8WLQUP 		
Date Created:	2012/07/27	Date Completed:	
Bring Forward Date:		Bring Forward Reason:	
Status:	Recommended		
Program	Waste - Solid/Non-hazardous	Activity:	Pollution Incident Reports

Is this an **air emission** (measured or modelled) or **wastewater** (sewage) **discharge exceedance** that will become part of the Environmental Compliance Report?

(legislation, certificate of approval, order, or guideline)

☐ Yes ☒ No ☐ To be determined

[Click here for Guidance](#)

Caller or PO Information

s.21		Name of Company:	
		Unit Identifier:	
		Delivery Identifier:	
Province/State:		Postal Code:	
Ontario			
Telephone Number:	Extension:	Other Number:	Email Address:
		Fax	

Reported By:

MOE Information

Date & Time Reported to MOE:	2012/07/27 15:23		
Office Receiving Incident Report:	Ottawa District Office		
Incident Info Received By:	Christian Grothe		
MOE Response:	Deferred Field Response	Site Region:	Eastern
Date & Time of MOE Arrival at Scene:	2012/08/08		
Master Incident Report Number:			

SAC Action Class:	
Non-Standard Procedure:	No
ERP Call-out Initiated:	

Client(s)

Client Details
T.g. Carroll Cartage Mailing Address: 2054 Carp Rd, Ottawa, Ontario, Canada, K0A 1L0 Physical Address: 2054 Carp Rd, Ottawa, City, Ontario, Canada, K0A 1L0 Telephone: (613)836-7927 Client #: 0588-92EKHE, Client Type: Corporation

Site(s)

Site Details
Howie rd of March Rd<UNOFFICIAL> Address: Lot: , Part: , Ottawa, City, District Office: Ottawa

Incident Information

Incident Summary:	dumping of demolition material <i>cannot be longer than 60 characters</i>
Incident Description:	s.21 He has observed a pile of construction material being piled in a field. The pile is slowing getting larger. The site cannot be miss. He also has observed waste on the road. He believe that the dumping occurs during the night has he never saw a truck. The caller would not provide his phone number s.21 LL - July 31, 2012 - I'm scheduled for phone duty tomorrow August 8, 2012 - completed a site inspection. Site is located about 1/2 kilometre south of March Road. Confirmed that the following wastes were deposited at the site: 1 - small pile of asphalt 1 - small pile of concrete (~2% with rebar) 1 - television set 1 - dump truck load of C&D containing metal siding, ceiling tiles, other granular material. This material was spread out over a brush pile. Brush pile originating from on-site road clearing. Tom Carroll, Carroll Cartage, owns the site. He called me at 14:11. He informed that the ashphalt was likely an illegal dumping over the weekend. He said he was aware of the C&D load because he wanted to retrieve the metal. The load wasn't supposed to contain other wastes. I explained legal responsibilities. He said he would have site clean up within approx. 1 week. Mr. Carroll is planning to install a fence to secure the Site. Sep 6, 2012 - Mr. Tom Carroll never followed up with me. Due to District program priorities and since only solid non-haz waste was observed at the Site, I am deferring a follow up inspection to the Site. Faxed attached (see related docs button above) letter to Mr. Carroll. 10:35 - Left message at T.g. Carroll voice mail - requested confirmation that fax was received. Verifying Ottawa emap: Twp of Mississippi Mills landfill Site (1470 Howie Rd) property (ECA #A461001) is located just north of where Carroll's site. eMap shows the plot of land just south of the Mississippi Mills property to be under 1380 Howie Road. Sep 6, 2012 - requested detailed land registry abstract for 1380 Howie Road from IRC. Attached below Ottawa eMap aerial photo taken of Site in 2011. Appears that pond has been filled in with rubble based on Aug 8, 2012 inspection.

s.21

Sep 13, 2012 - 11:45 - Left voice mail at 613-836-7927 to find out if they've received my letter dated Sep 6, 2012. Called cell phone number of Mr. Carroll: 229-1708. Mr. Carroll said he received the letter. [REDACTED] supposed to send it to me. He said they took steel and cement out of it. Burnt all wood. Ashpalt was dumped there. He said he would take it away to Carp. He had an MOE system approval about 5 years ago. He said he's going through motions again (to get approval). [REDACTED] was dealing with Emily from Ottawa. I asked him to have [REDACTED] call me since she's dealing with administrative matters. I also informed that no person can transfer waste in Ontario without an approval. Spoke to officer Emily Tieu, that she advised the company to obtain an ECA.

Sep 14, 2012, 10:17 - Called 613-836-7927 - Left message informing that I am expecting a response to my Sep 6, 2012 letter and that the company should apply for an ECA for a waste management system.

Sep 18, 2012 - left voice mail requesting response to my letter dated Sep 6, 2012. I informed that failure to respond could result in me seizing the plates of their vehicles. 14:06 - Called Mr. Carroll. He said he would have paperwork for his approval ready by this Friday.

Sep 19, 2012 - Received a fax from Mr. Tom Carroll (tgcarrroll@sympatico.ca). In his letter he notes that 1 pile of asphalt, 1 pile of concrete, 1 television set, 1 dump truck load of construction/demolition waste containing metal siding, ceiling tiles, granular material was all have been managed. He said the "person"?? who dumped the dump truck load of waste came back and took it away, and the steel was picked out of the pile as well as the concrete and was disposed of. He said Steel is regularly disposed of at Baker in Ottawa, and the concrete crushed through a crusher for stone, and that the television was taken away. He said he does intend on working on the Environmental Waste Disposal application in the very near future. Updated VAMA table below with Sep 13, 2012 due date. The response provided doesn't clarify if waste such as asphalt was transported by an approved waste hauler. Provided a response email dated Sep 21, 2012 (attached).

Oct 10, 2012 - emailed copy of non-haz-solid wds inspection report.

Oct 22, 2012 - Extended compliance dates to temporarily stop notifications.
 -Have ECA paperwork preped. Changed from Sep 21 to November 15.
 -Ensure waste managed. Changed from Sep 6 to November 15.

Nov 26, 2012 - Checked IDS. There are no pending WMS applications. I recall that the last telephone conversation I had with Mr. Carroll was that he wasn't 1000% sure if he needed a WMS since there would only be few occasions where he would need to transfer. Emailed Mr. Carroll regarding new requirements to be Registered (EASR). Sent him email with guidance documents (attached). Warning and guidance provided. No further action.

Links & Comments:	
Attachments Names:	1380 Howie Road Ottawa eMap Sep 6 2012 - 2011 air photo.pdf; Nov 26 2012 email to Mr Carroll.pdf; Sep 21 2012 Email to Client Letter received by fax on September 19, 2012..pdf

Date & Time of Incident	Incident Date Confirmation? Actual 2012/07/27		
Source Type:		Sector Type:	
Nearest Watercourse:		Watershed Category Code:	
Environmental Impact:			
Nature of Impact:			
Incident Cause:		Incident Reason:	
Damaged Party:	No		

Contaminants Table						
Contaminant Name	Code	UN#	Limit	Quantity	[units]	[freq]

Controller of Material:				Owner of Material:			
Estimated Clean Up Cost:				Who Cleaned Up:			
% Clean Up:		%		Agencies Involved:			

Voluntary / Mandatory Abatement

Is there Voluntary Abatement Activity?	☒ Yes	☐ No	☐ To be determined
--	--------------------------------------	--------------------------	--

Voluntary / Mandatory Compliance Items

Type	Parent RefNo	Work Summary (may be truncated)	Date	AttainList
VA	0488-8WLQUP	Submit compliance report as per ...	2012/09/13	2012/09/19
VA	0488-8WLQUP	Have paperwork for ECA prepared	2012/11/15	VA not Required
VA	0488-8WLQUP	No transfer of waste without re ...	2012/11/26	2012/11/26
VAI	6874-8XVM3Z	Ensure waste deposited at the S ...	2012/11/15	VA not Required

Offence(s)

Suspected Violation(s)/Offence(s):	
Act - Regulation - Section, Description {General Offence}	

Provincial Officer:

Name: Lance Larkin
Badge No: 723

Work Unit:

District/Area Office: Ottawa District Office
Date: 2012/11/26

Signature:



District/Area Supervisor:

Name:

Work Unit:

District/Area Office:
Date:

Signature:

From: [Larkin, Lance \(ENE\)](#)
To: tgcarroll@sympatico.ca;
Subject: Letter received by fax on September 19, 2012.
Date: September 21, 2012 8:48:23 AM

Dear Mr. Carroll,

Thank you for your letter. In your letter you note that the person who dumped the dump truck load of waste came back and took it away. For compliance reasons, I'm interested in knowing who came and picked up the waste such as the asphalt and the construction/demolition waste. Please advise if waste was transported by one of your hauler's and/or by another hauler. The person that took the waste away from your property should have a Environmental Compliance Approval to haul waste. It's important that I follow up with this person who may be contravening the Environmental Protection Act.

Please be advised, that without an approval, you are prohibited from transporting any mixed waste such as construction/demolition waste. License plate seizure could be taken to prevent a violation from reoccurring. As such, please ensure that you are not transporting any waste until you receive an approval. I'll be in touch to follow up on your progress with the application process.

Regards,

Lance Larkin

Senior Environmental Officer
Ministry of the Environment, Ottawa District Office
2430 Don Reid Drive, Ottawa, ON K1H 1E1
tel: 613-521-3450 ext. 229, fax: 613-521-5437
toll free: 1 800-860-219

Agent principal de l'environnement
Ministère de l'Environnement, District d'Ottawa
2430, promenade Don Reid, Ottawa (Ontario) K1H 1E1
tél. : 613-521-3450 poste 229, téléc. : 613-521-5437
sans frais. : 1-800-860-2195



Non-Hazardous Waste Transfer Processing Inspection Report

Client:	Tom Carroll Mailing Address: 2054 Carp Rd, Ottawa, Ontario, Canada, K0A 1L0 Physical Address: 2054 Carp Rd, Ottawa, City, Ontario, Canada, K0A 1L0 Telephone: (613)836-7927, FAX: (613)836-7658 Client #: 0121-8XVLDF, Client Type: Individual		
Inspection Site Address:	1380 Howie Road Address: 1380 Howie Rd, Ottawa, City, K0A 1L0 District Office: Ottawa GeoReference: , LIO GeoReference: Zone: , UTM Easting: , UTM Northing: , Latitude: , Longitude:		
Contact Name:	Tom Carroll	Title:	Owner
Contact Telephone:	(613)836-7927 ext	Contact Fax:	(613)836-7658
Last Inspection Date:			
Inspection Start Date:	2012/08/08	Inspection Finish Date:	2012/08/08
Region:	Eastern		

1.0 INTRODUCTION

This inspection was prompted by an anonymous complaint. Mr. Tom Carroll reportedly owns the Site which is located south of March Road, and just South of the Mississippi Mills Municipal landfill located at 1470 Howie Road.

Ownership confirmation for 1380 Howie Road by land registry abstract search is currently pending. Mr Tom Carroll is also owner of T.g. Carroll Cartage a private company that is categorized under Excavating Contractors on-line. The company reportedly conducts highway maintenance related work as well. There are no approvals associated with the Site or with the cartage company. Please pay particular attention to section 5.0 below to address non-compliance issues.

2.0 INSPECTION OBSERVATIONS

Certificate of Approval Number(s): ☐ Yes ☒ No

2.1 SITE OPERATION:

Specifics:

The site is vacant but is being used as a temporary storage area for top soil. Waste management activities were also observed. The following waste was observed at the Site. Roughly,

- 1 pile of asphalt (~3 cubic yards);
- 10 cubic yards of concrete with rebar (2% containing rebar);
- 1 television;
- 10 cubic yards of construction/demolition waste, including ceiling tiles, insulation, metal siding, and unknown

granular material. Mr. Carroll informed that this load of construction/demolition waste was deposited at the Site for the retrieval of recyclable material. The load in question was found in a brush burn pile. The brush was generated from on-site road clearings.

2.2 FINANCIAL ASSURANCE:

Specifics:

There is no record of financial assurance on file.

2.3 SITE SERVICE AREA:

Specifics:

There is no approved service area.

2.4 APPROVED SITE CAPACITY:

Specifics:

There is no approved Site capacity.

3.0 REVIEW OF PREVIOUS NON-COMPLIANCE ISSUES

No previous non-compliance issues noted.

4.0 SUMMARY OF INSPECTION FINDINGS (HEALTH/ENVIRONMENTAL IMPACT)

Was there any indication of a known or anticipated human health impact during the inspection and/or review of relevant material, related to this Ministry's mandate?

No

Specifics:

Was there any indication of a known or anticipated environmental impact during the inspection and/or review of relevant material ?

No

Specifics:

Was there any indication of a known or suspected violation of a legal requirement during the inspection and/or review of relevant material which could cause a human health impact or environmental impairment ?

Yes

Specifics:

The undersigned has reason to believe the following violations were committed:

1. Deposit of waste on a site without approval under the Ontario Environmental Protection Act
2. Transport of waste to the site without approval under the Ontario Environmental Protection Act, and
3. Transfer of waste to the site without approval with the intent of processing the waste and using the process of combustion without approval under the Ontario Environmental Protection Act

On August 8, 2012 the undersigned spoke to Mr. Tom Carroll over the telephone and requested Mr. Carroll to voluntarily manage the waste in question in accordance with the legislation and to follow up with the undersigned by August 15, 2012. The undersigned also recommended to improve security at the Site in order to prevent any illegal waste deposits (as suspected by the presence of the television set).

No follow up call or written correspondence was received from Mr. Carroll. As such, on September 6, 2012, the undersigned faxed a letter outlining violations, compliance requirements, and a request for a compliance report no later than September 13, 2012.

At the time of the inspection there were no suspected human health impacts anticipated.

Was there any indication of a potential for environmental impairment during the inspection and/or the review of relevant material ?

No

Specifics:

Was there any indication of minor administrative non-compliance?

No

Specifics:

5.0 ACTION(S) REQUIRED

Refer to letter dated September 6, 2012 for required actions.

1. Ensure waste deposited at the Site including waste items listed under Officer Larkin's September 6, 2012 letter is transferred by an approved hauler to an approved waste disposal site, all in accordance with the Ontario Environmental Protection Act.

6.0 OTHER INSPECTION FINDINGS

The attached 2011 air photo obtained from the City of Ottawa's eMap on-line service shows that there was a surface water feature at the Site. During the site inspection the Site was dry. The undersigned will refer to MNR for follow up action.

7.0 INCIDENT REPORT

Applicable
0488-8WLQUP 

8.0 ATTACHMENTS

1380 Howie Rd - Ottawa eMap - Air Photos 2011.pdf

PREPARED BY:

Environmental Officer:

Name:

Lance Larkin

District Office:

Ottawa District Office

Date:

2012/09/06

Signature



REVIEWED BY:

District Supervisor:

Name:

Tara MacDonald

District Office:

Ottawa District Office

Date:

2012/09/06

Signature:



File Storage Number:

SI OT WC HO 100

Note:

"This inspection report does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they may apply to this facility. It is, and remains, the responsibility of the owner and/or the operating authority to ensure compliance with all applicable legislative and regulatory

Larkin, Lance (ENE)

From: Larkin, Lance (ENE)
Sent: November 26, 2012 9:48 AM
To: 'tgcarroll@sympatico.ca'
Subject: Changes to Ministry of the Environment Application Process
Attachments: Fact Sheet Non-Haz Waste Transport Systems stdprod_100527.pdf

Dear Mr. Carroll,

The last time we spoke in the fall you were considering applying for a Waste Management System for the transport of Non-Hazardous Waste. I have attached a fact sheet to help guide you through our new on-line process.

http://www.ene.gov.on.ca/environment/en/industry/assessment_and_approvals/environmental_ap

Please be mindful that your Waste Management System must be registered prior to transferring any waste.

If you have any questions or concerns, please do not hesitate to contact me at 613-521-3450, ext. 229.



Office Use Only

Application Number: _____ Ward Number: _____ Application Received: (dd/mm/yyyy): _____
Client Service Centre Staff: _____ Fee Received: \$ _____



Historic Land Use Inventory

Application Form

Notice of Public Record

All information and materials required in support of your application shall be made available to the public, as indicated by Section 1.0.1 of *The Planning Act*, R.S.O. 1990, C.P.13.

Municipal Freedom of Information and Protection Act

Personal information on this form is collected under the authority the *Planning Act*, RSO 1990, c. P. 13 and will be used to process this application. Questions about this collection may be directed by mail to Manager, Business Support Services, Planning Infrastructure and Economic Development Department, 110 Laurier Avenue West, Ottawa, K1P 1J1, or by phone at (613) 580-2424, ext. 24075

Background Information

*Site Address or
Location:

1380 Howie Road, Ottawa (Carp) ON.

* Mandatory Field

Applicant/Agent Information:

Name: Paterson Group Inc
Mailing Address: 154 Colonnade Rd S, Nepean, ON K2E 7J5
Telephone: 613-226-7381 Email Address: jandrechek@patersongroup.ca

Registered Property Owner Information:

☐ Same as above

Name: Tom Carroll
Mailing Address: 1380 Howie Road, Ottawa (Carp) ON
Telephone: 613-836-7927 Email Address: tom.carroll@tgcarroll.ca

Site Details

Legal Description
and PIN:

What is the land
currently used for?

Residential / Commercial

Lot frontage:

m

Lot depth:

m

Lot area:

_____ m²

OR

Lot area: (irregular lot)

79 5873 m²

Does the site have Full Municipal Services:

☐ Yes

☒ No

Required Fees

Please don't hesitate to visit the [Historic Land Use Inventory website](#) more information. Fees must be paid in full at the time of application submission.

Planning Fee

\$128.00

Submittal Requirements

The following are required to be submitted with this application:

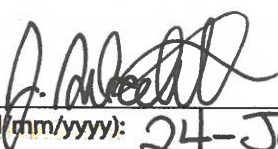
- 1. Consent to Disclose Information:** Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, **the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner.** This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.
- 2. Disclaimer:** Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, Infrastructure and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3. A site plan or key plan of the property, its location and particular features.**
- 4. Any significant dates or time frames that you would like researched.**

Disclaimer
For use with HLUI Database

CITY OF OTTAWA ("the City") is the owner of the Historical Land Use Inventory ("HLUI"), a database of information on the type and location of land uses within the geographic area of Ottawa, which had or have the potential to cause contamination in soil, groundwater or surface water.

The City, in providing information from the HLUI, to Paterson Group ("the Requester") does so only under the following conditions and understanding:

1. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.
2. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information provided by the City to the Requester is provided on the assumption that it will not be relied upon by any person whatsoever. The City denies all liability to any such persons attempting to rely on any information provided from the HLUI database.
3. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
4. Copyright is reserved to the City.
5. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
6. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
7. All information collected under this request and all records provided in response to this request are subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56, as amended.

Signed: 

Dated (dd/mm/yyyy):

24-JUN-21

Per: Jesse Andrechek

(Please print name)

Title: Environmental Consultant

Company: Paterson Group Inc

patersongroup

Consulting Engineers

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

May 19, 2021
File: PE5276-LET.01

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

Geotechnical Engineering
Environmental Engineering
Hydrogeology
Geological Engineering
Materials Testing
Building Science

Subject: **Authorization Letter, HLUI Search
Phase I-Environmental Site Assessment
1380 Howie Road
Ottawa (Carp), Ontario**

www.patersongroup.ca

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:

Tom + Lois CARROLE

Name of Representative:

Tom Curran

Authorization of Representative:

HLA

Date:

June 14/21

Ottawa

North Bay

T.G. **CARROLL
ARTAGE LTD.**

Feb 12/21

1380 HOWIE ROAD
CARP, ONTARIO K0A 1L0
Tel: (613) 836-7927 Fax: (613) 836-7658

850'

Howie Rd

1150

30 Acres



Approx 1525'

Dump Prop Line

retain
~160 acres

Phase 1 ESA Area

620'

5 Acre
Parcel

350'

Bearhill Rd Allowance.

Now a Licensed Pit, To see if we can
LiFt License on approx First 400'
* class A license here

400'



File Number: D06-03-21-0123

September 2, 2021

Jesse Andrechek
Paterson Group
154 Colonnade Road South, Ottawa

Sent via email [jandrechek@patersongroup.ca]

Dear Insert Applicant Name,

Re: Information Request
1380 Howie Road, **Ottawa, Ontario ("Subject Property")**

Internal Department Circulation

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

- No information was returned on the Subject Property from Departmental circulation.

Documents Provided:

Excel

The Excel Spread Sheet identifies HLUI area, point and line features within 250 metres of the Subject Property, as shown on the provided Map. Within 500 metres of the Subject Property, landfills and Environmental Risk Management Area (ERMA) are also identified if applicable.

Additional information may be obtained by contacting:

Ontario's Environmental Registry

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

The Ontario Land Registry Office

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

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

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an “as is” basis with no representation or warranty by the City with respect to the information’s accuracy or exhaustiveness in responding to the request.

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

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

If you have any further questions or comments, please contact Insert Your Name at 613-580-2424 ext. Insert Your Extension or HLUI@ottawa.ca

Sincerely,



Jonathan Katsouleas

Per:

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

MB / JK

Enclosures.

1. HLUI Map
2. HLUI Summary Report.

cc: File no. D06-03-21-0123



DATABASE REPORT

Project Property:	<i>PE5276 - 1380 Howie Road 1380 Howie Road Carp ON K0A 1L0</i>
Project No:	<i>PE5276</i>
Report Type:	<i>RSC Report - Quote</i>
Order No:	<i>21051700182</i>
Requested by:	<i>Paterson Group Inc.</i>
Date Completed:	<i>May 20, 2021</i>

Environmental Risk Information Services

A division of Glacier Media Inc.

1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

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Executive Summary

Property Information:

Project Property: *PE5276 - 1380 Howie Road
1380 Howie Road Carp ON K0A 1L0*

Project No: *PE5276*

Order Information:

Order No: *21051700182*
Date Requested: *May 17, 2021*
Requested by: *Paterson Group Inc.*
Report Type: *RSC Report - Quote*

Historical/Products:

Topographic Map *RSC Maps*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	1	1
AST	Aboveground Storage Tanks	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	0	0
CA	Certificates of Approval	Y	0	0	0
CDRY	Dry Cleaning Facilities	Y	0	0	0
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Manufacturers and Distributors	Y	0	0	0
CHM	Chemical Register	Y	0	0	0
CNG	Compressed Natural Gas Stations	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
DTNK	Delisted Fuel Tanks	Y	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Y	0	0	0
ECA	Environmental Compliance Approval	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	0	0	0
EIIS	Environmental Issues Inventory System	Y	0	0	0
EMHE	Emergency Management Historical Event	Y	0	0	0
EPAR	Environmental Penalty Annual Report	Y	0	0	0
EXP	List of Expired Fuels Safety Facilities	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Y	0	0	0
FST	Fuel Storage Tank	Y	0	0	0
FSTH	Fuel Storage Tank - Historic	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	0	0
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	0	0	0

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Boundary to 0.30km</i>	<i>Total</i>
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	Fuel Oil Spills and Leaks	Y	0	0	0
LIMO	Landfill Inventory Management Ontario	Y	0	1	1
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	0	0
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	2	2
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	3	6	9
Total:			3	10	13

Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
<u>1</u>	WWIS		lot 13 con 7 ON <i>Well ID:</i> 1523579	SW/0.0	0.00	<u>13</u>
<u>1</u>	WWIS		lot 13 con 7 ON <i>Well ID:</i> 1523581	SW/0.0	0.00	<u>16</u>
<u>2</u>	WWIS		1380 HOWIE ROAD RR#3 lot 13 con 7 CARP ON <i>Well ID:</i> 7260527	SW/0.0	4.00	<u>18</u>

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
3	WWIS		lot 14 con 6 ON Well ID: 1532563	NNW/98.2	-1.00	25
4	WWIS		23 ABBEY WOOD COUR lot 14 con 7 Ottawa ON Well ID: 7171754	WNW/127.1	-3.00	28
5	WWIS		121 ROCKY CREEK CARP ON Well ID: 7139813	N/173.3	1.00	35
6	WWIS		117 ROCK CREEK lot 14 con 7 CARP ON Well ID: 7151504	N/203.0	1.00	40
7	LIMO	Mississippi Mills Landfill The Corporation of the Town of Mississippi Mills	City of Ottawa 1470 Howie Road; West 1/2 Lot 14, Concession 7, (formerly West Carleton Township) Ottawa ON	W/233.5	-4.00	46
7	WDS	The Corporation of the Town of Mississippi Mills	1470 Howie Rd West 1/2 of Lot 14, Concession 7, former West Carleton Township Ottawa ON K0A 1A0	W/233.5	-4.00	47
8	ANDR	Corkery Dump 1989	Almonte ON K0A 1A0	W/275.8	-4.00	48
9	WWIS		lot 12 con 7 ON Well ID: 1535098	S/284.0	6.92	48
10	WDS	The Corporation of the Town of Mississippi Mills	West 1/2 Lot 14, Concession 7 West Carleton ON K7C 3P1	NW/295.4	-3.00	51
11	WWIS		lot 12 con 7 ON Well ID: 1520192	SE/296.6	3.00	52

Executive Summary: Summary By Data Source

ANDR - Anderson's Waste Disposal Sites

A search of the ANDR database, dated 1860s-Present has found that there are 1 ANDR site(s) within approximately 0.30 kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
Corkery Dump 1989	Almonte ON K0A 1A0	275.8	<u>8</u>

LIMO - Landfill Inventory Management Ontario

A search of the LIMO database, dated Feb 28, 2019 has found that there are 1 LIMO site(s) within approximately 0.30 kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
Mississippi Mills Landfill The Corporation of the Town of Mississippi Mills	City of Ottawa 1470 Howie Road; West 1/2 Lot 14, Concession 7, (formerly West Carleton Township) Ottawa ON	233.5	<u>7</u>

WDS - Waste Disposal Sites - MOE CA Inventory

A search of the WDS database, dated Oct 2011-Apr 30, 2021 has found that there are 2 WDS site(s) within approximately 0.30 kilometers of the project property.

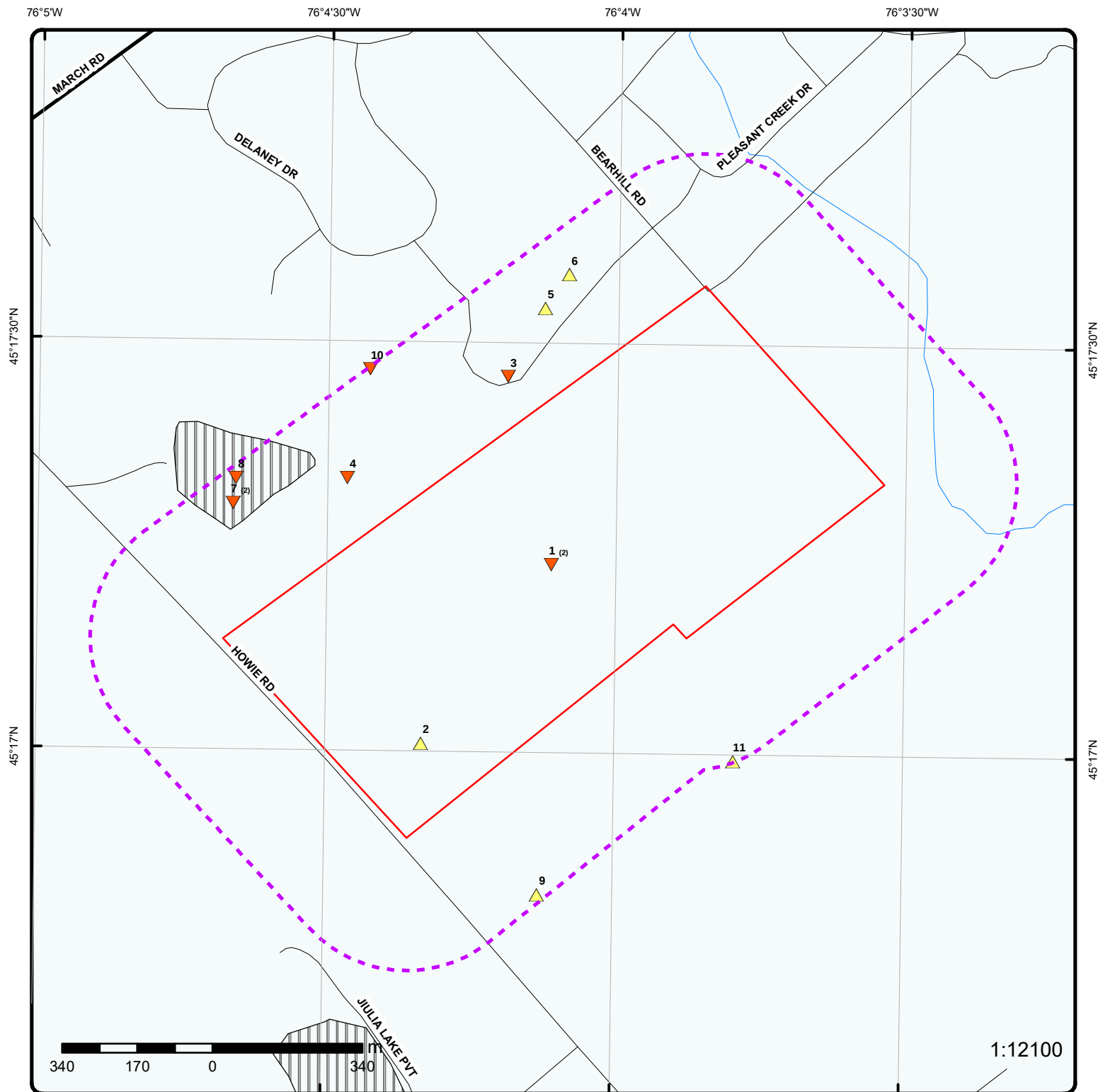
<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
The Corporation of the Town of Mississippi Mills	1470 Howie Rd West 1/2 of Lot 14, Concession 7, former West Carleton Township Ottawa ON K0A 1A0	233.5	<u>7</u>
The Corporation of the Town of Mississippi Mills	West 1/2 Lot 14, Concession 7 West Carleton ON K7C 3P1	295.4	<u>10</u>

WWIS - Water Well Information System

A search of the WWIS database, dated Apr 30, 2020 has found that there are 9 WWIS site(s) within approximately 0.30 kilometers of

the project property.

<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 13 con 7 ON Well ID: 1523581	0.0	<u>1</u>
	lot 13 con 7 ON Well ID: 1523579	0.0	<u>1</u>
	1380 HOWIE ROAD RR#3 lot 13 con 7 CARP ON Well ID: 7260527	0.0	<u>2</u>
	lot 14 con 6 ON Well ID: 1532563	98.2	<u>3</u>
	23 ABBEY WOOD COUR lot 14 con 7 Ottawa ON Well ID: 7171754	127.1	<u>4</u>
	121 ROCKY CREEK CARP ON Well ID: 7139813	173.3	<u>5</u>
	117 ROCK CREEK lot 14 con 7 CARP ON Well ID: 7151504	203.0	<u>6</u>
	lot 12 con 7 ON Well ID: 1535098	284.0	<u>9</u>
	lot 12 con 7 ON Well ID: 1520192	296.6	<u>11</u>



Map: 0.3 Kilometer Radius

Order Number: 21051700182

Address: 1380 Howie Road, Carp, ON



Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range
Eris Sites with Lower Elevation	Local road	Abandoned Line	Park or Sports Field
Eris Sites with Unknown Elevation	Trail		Other Recreation Area
	Proposed Road		
	Ferry Route/Ice Road		

76°4'30"W

45°16'30"N



45°16'30"N

Aerial

Year:

Order Number: 21051700182

Address: 1380 Howie Road, Carp, ON

Source: ESRI World Imagery



© ERIS Information Limited Partnership

76°4'30"W

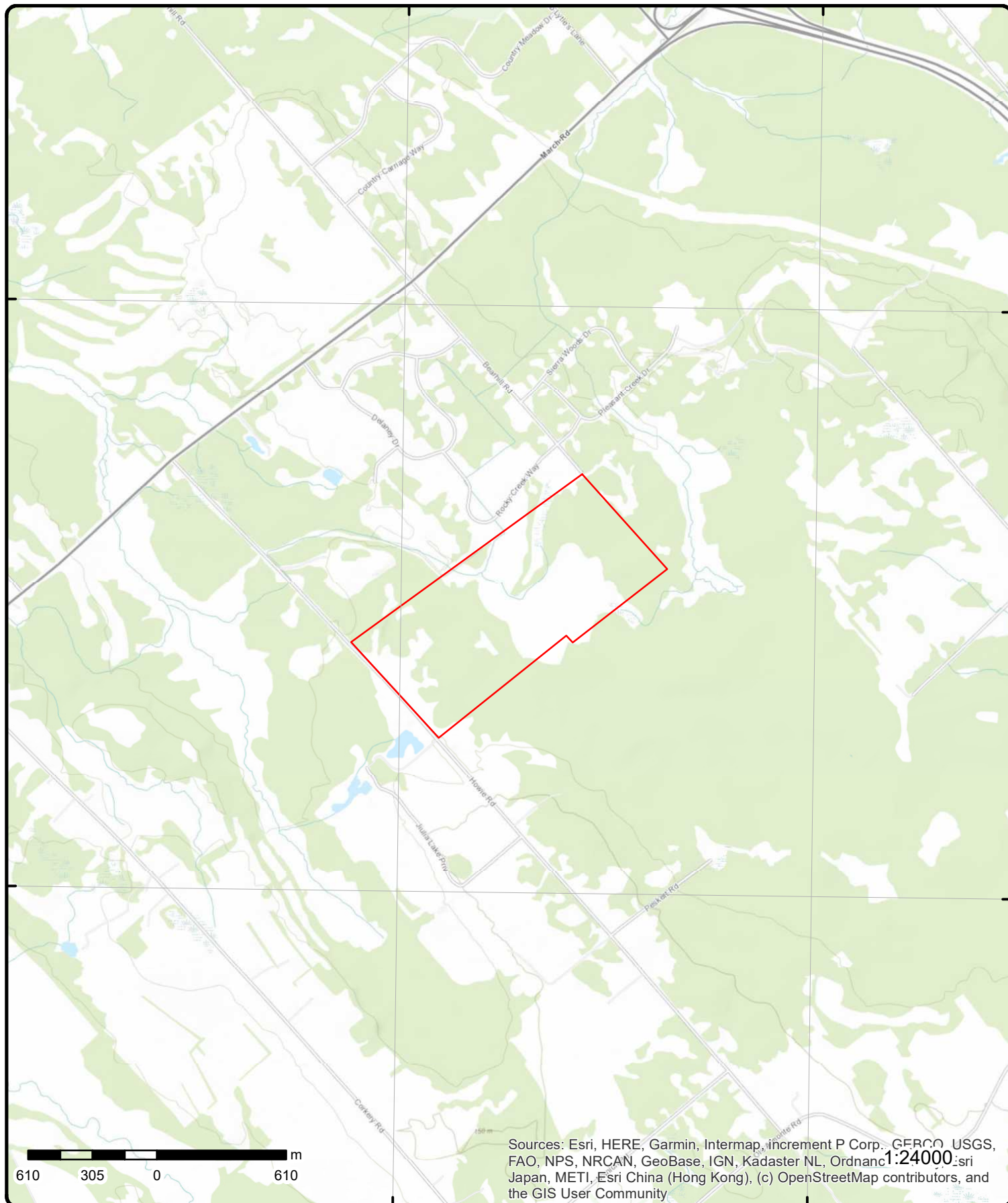
76°3'W

45°18'N

45°18'N

45°16'30"N

45°16'30"N



Topographic Map

Address: 1380 Howie Road, ON

Source: ESRI World Topographic Map

Order Number: 21051700182



© ERIS Information Limited Partnership

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
---------	-------------------	-------------------------	---------------	------	----

[1](#)

1 of 2

SW/0.0

132.9 / 0.00

lot 13 con 7
ON

WWIS

Well ID:	1523579	Data Entry Status:	
Construction Date:		Data Src:	1
Primary Water Use:	Domestic	Date Received:	8/28/1985
Sec. Water Use:		Selected Flag:	Yes
Final Well Status:	Water Supply	Abandonment Rec:	
Water Type:		Contractor:	4731
Casing Material:		Form Version:	1
Audit No:		Owner:	
Tag:		Street Name:	
Construction Method:		County:	OTTAWA
Elevation (m):		Municipality:	HUNTLEY TOWNSHIP
Elevation Reliability:		Site Info:	
Depth to Bedrock:		Lot:	013
Well Depth:		Concession:	07
Overburden/Bedrock:		Concession Name:	CON
Pump Rate:		Easting NAD83:	
Static Water Level:		Northing NAD83:	
Flowing (Y/N):		Zone:	
Flow Rate:		UTM Reliability:	
Clear/Cloudy:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/152\1523579.pdf

Bore Hole Information

Bore Hole ID:	10045353	Elevation:	132.464538
DP2BR:	1	Elevrc:	
Spatial Status:		Zone:	18
Code OB:	r	East83:	416206.5
Code OB Desc:	Bedrock	North83:	5015406
Open Hole:		Org CS:	
Cluster Kind:		UTMRC:	9
Date Completed:	6/15/1985	UTMRC Desc:	unknown UTM
Remarks:		Location Method:	lot
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931055091
Layer:	2
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:		1			
Formation End Depth:		76			
Formation End Depth UOM:		ft			
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
Formation ID:		931055090			
Layer:		1			
Color:		6			
General Color:		BROWN			
Mat1:		02			
Most Common Material:		TOPSOIL			
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:		0			
Formation End Depth:		1			
Formation End Depth UOM:		ft			
<u>Annular Space/Abandonment</u>					
<u>Sealing Record</u>					
Plug ID:		933110389			
Layer:		1			
Plug From:		0			
Plug To:		41			
Plug Depth UOM:		ft			
<u>Method of Construction & Well</u>					
<u>Use</u>					
Method Construction ID:		961523579			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		10593923			
Casing No:		1			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		930079342			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		44			
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Results of Well Yield Testing</u>					
Pump Test ID:		991523579			
Pump Set At:					
Static Level:		9			
Final Level After Pumping:		19			
Recommended Pump Depth:		40			
Pumping Rate:		10			
Flowing Rate:					
Recommended Pump Rate:		10			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:					
Water State After Test:					
Pumping Test Method:		2			
Pumping Duration HR:		1			
Pumping Duration MIN:		0			
Flowing:		No			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934105519			
Test Type:					
Test Duration:		15			
Test Level:		7			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934389746			
Test Type:					
Test Duration:		30			
Test Level:		19			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934907930			
Test Type:					
Test Duration:		60			
Test Level:		19			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934650726			
Test Type:					
Test Duration:		45			
Test Level:		19			
Test Level UOM:		ft			
<u>Water Details</u>					
Water ID:		933481892			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		50			
Water Found Depth UOM:		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	2 of 2	SW/0.0	132.9 / 0.00	lot 13 con 7 ON	WWIS

Well ID:	1523581	Data Entry Status:	
Construction Date:		Data Src:	1
Primary Water Use:	Domestic	Date Received:	8/28/1985
Sec. Water Use:		Selected Flag:	Yes
Final Well Status:	Water Supply	Abandonment Rec:	
Water Type:		Contractor:	4731
Casing Material:		Form Version:	1
Audit No:		Owner:	
Tag:		Street Name:	
Construction Method:		County:	OTTAWA
Elevation (m):		Municipality:	HUNTLEY TOWNSHIP
Elevation Reliability:		Site Info:	
Depth to Bedrock:		Lot:	013
Well Depth:		Concession:	07
Overburden/Bedrock:		Concession Name:	CON
Pump Rate:		Easting NAD83:	
Static Water Level:		Northing NAD83:	
Flowing (Y/N):		Zone:	
Flow Rate:		UTM Reliability:	
Clear/Cloudy:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/152\1523581.pdf

Bore Hole Information

Bore Hole ID:	10045355	Elevation:	132.464538
DP2BR:	1	Elevrc:	
Spatial Status:		Zone:	18
Code OB:	r	East83:	416206.5
Code OB Desc:	Bedrock	North83:	5015406
Open Hole:		Org CS:	
Cluster Kind:		UTMRC:	9
Date Completed:	5/20/1985	UTMRC Desc:	unknown UTM
Remarks:		Location Method:	lot
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931055094
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	02
Most Common Material:	TOPSOIL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0
Formation End Depth:	1
Formation End Depth UOM:	ft

Overburden and Bedrock

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Materials Interval</u>					
Formation ID:		931055095			
Layer:		2			
Color:		2			
General Color:		GREY			
Mat1:		15			
Most Common Material:		LIMESTONE			
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:		1			
Formation End Depth:		67			
Formation End Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		961523581			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		10593925			
Casing No:		1			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		930079344			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		22			
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Results of Well Yield Testing</u>					
Pump Test ID:		991523581			
Pump Set At:					
Static Level:		7			
Final Level After Pumping:		19			
Recommended Pump Depth:		40			
Pumping Rate:		10			
Flowing Rate:					
Recommended Pump Rate:		10			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		2			
Pumping Duration HR:		1			
Pumping Duration MIN:		0			
Flowing:		No			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934389747			
Test Type:					
Test Duration:		30			
Test Level:		19			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934907932			
Test Type:					
Test Duration:		60			
Test Level:		19			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934650727			
Test Type:					
Test Duration:		45			
Test Level:		19			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934105521			
Test Type:					
Test Duration:		15			
Test Level:		7			
Test Level UOM:		ft			
<u>Water Details</u>					
Water ID:		933481896			
Layer:		2			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		65			
Water Found Depth UOM:		ft			
<u>Water Details</u>					
Water ID:		933481895			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		35			
Water Found Depth UOM:		ft			
<u>2</u>	1 of 1	SW/0.0	136.9 / 4.00	1380 HOWIE ROAD RR#3 lot 13 con 7 CARP ON	WWIS
Well ID:	7260527			Data Entry Status:	
Construction Date:				Data Src:	
Primary Water Use:	Domestic			Date Received:	3/31/2016
Sec. Water Use:				Selected Flag:	Yes
Final Well Status:	Water Supply			Abandonment Rec:	
Water Type:				Contractor:	7234
Casing Material:				Form Version:	7
Audit No:	Z199428			Owner:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Tag:	A141390			Street Name:	1380 HOWIE ROAD RR#3
Construction				County:	OTTAWA
Method:				Municipality:	HUNTLEY TOWNSHIP
Elevation (m):				Site Info:	
Elevation Reliability:				Lot:	013
Depth to Bedrock:				Concession:	07
Well Depth:				Concession Name:	CON
Overburden/Bedrock:				Easting NAD83:	
Pump Rate:				Northing NAD83:	
Static Water Level:				Zone:	
Flowing (Y/N):				UTM Reliability:	
Flow Rate:					
Clear/Cloudy:					
PDF URL (Map):					

Bore Hole Information

Bore Hole ID:	1005920229	Elevation:	140.112701
DP2BR:		Elevrc:	
Spatial Status:		Zone:	18
Code OB:		East83:	415910
Code OB Desc:		North83:	5015003
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	4
Date Completed:	11/21/2015	UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:		Location Method:	www
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1006024815
Layer:	2
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	17
Formation End Depth:	140
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1006024814
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	02
Most Common Material:	TOPSOIL
Mat2:	12
Mat2 Desc:	STONES
Mat3:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Mat3 Desc:					
Formation Top Depth:		0			
Formation End Depth:		17			
Formation End Depth UOM:		ft			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1006024850			
Layer:		1			
Plug From:		0			
Plug To:		20			
Plug Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		1006024849			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		1006024812			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1006024819			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:		0			
Depth To:		22			
Casing Diameter:		8.25			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Construction Record - Casing</u>					
Casing ID:		1006024820			
Layer:		2			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:		0			
Depth To:		22			
Casing Diameter:		6.25			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Construction Record - Screen</u>					
Screen ID:		1006024821			
Layer:					
Slot:					
Screen Top Depth:					
Screen End Depth:					
Screen Material:					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Screen Depth UOM:		ft			
Screen Diameter UOM:		inch			
Screen Diameter:					
<u>Results of Well Yield Testing</u>					
Pump Test ID:		1006024813			
Pump Set At:		130			
Static Level:		8			
Final Level After Pumping:		48			
Recommended Pump Depth:		130			
Pumping Rate:		10			
Flowing Rate:					
Recommended Pump Rate:		10			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		0			
Pumping Duration HR:		2			
Pumping Duration MIN:					
Flowing:					
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024836			
Test Type:		Draw Down			
Test Duration:		20			
Test Level:		48			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024832			
Test Type:		Draw Down			
Test Duration:		10			
Test Level:		44			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024831			
Test Type:		Recovery			
Test Duration:		5			
Test Level:		18			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024823			
Test Type:		Recovery			
Test Duration:		1			
Test Level:		37			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024833			
Test Type:		Recovery			
Test Duration:		10			
Test Level:		12			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024830			
Test Type:		Draw Down			
Test Duration:		5			
Test Level:		39			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024826			
Test Type:		Draw Down			
Test Duration:		3			
Test Level:		29			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024822			
Test Type:		Draw Down			
Test Duration:		1			
Test Level:		16			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024844			
Test Type:		Draw Down			
Test Duration:		50			
Test Level:		48			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024841			
Test Type:		Recovery			
Test Duration:		30			
Test Level:		8			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024847			
Test Type:		Recovery			
Test Duration:		60			
Test Level:		8			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024824			
Test Type:		Draw Down			
Test Duration:		2			
Test Level:		22			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test Detail ID:		1006024825			
Test Type:		Recovery			
Test Duration:		2			
Test Level:		33			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024838			
Test Type:		Draw Down			
Test Duration:		25			
Test Level:		48			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024842			
Test Type:		Draw Down			
Test Duration:		40			
Test Level:		48			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024839			
Test Type:		Recovery			
Test Duration:		25			
Test Level:		8			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024845			
Test Type:		Recovery			
Test Duration:		50			
Test Level:		8			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024837			
Test Type:		Recovery			
Test Duration:		20			
Test Level:		8			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024843			
Test Type:		Recovery			
Test Duration:		40			
Test Level:		8			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024829			
Test Type:		Recovery			
Test Duration:		4			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Level:		21			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024834			
Test Type:		Draw Down			
Test Duration:		15			
Test Level:		48			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024828			
Test Type:		Draw Down			
Test Duration:		4			
Test Level:		34			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024827			
Test Type:		Recovery			
Test Duration:		3			
Test Level:		27			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024835			
Test Type:		Recovery			
Test Duration:		15			
Test Level:		8			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024840			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		48			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1006024846			
Test Type:		Draw Down			
Test Duration:		60			
Test Level:		48			
Test Level UOM:		ft			
<u>Water Details</u>					
Water ID:		1006024817			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		62			
Water Found Depth UOM:		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Water Details</u>					
Water ID:		1006024818			
Layer:		2			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		91			
Water Found Depth UOM:		ft			
<u>Hole Diameter</u>					
Hole ID:		1006024816			
Diameter:		6.125			
Depth From:		20			
Depth To:		140			
Hole Depth UOM:		ft			
Hole Diameter UOM:		inch			
<u>3</u>	1 of 1	NNW/98.2	131.9 / -1.00	lot 14 con 6 ON	WWIS
Well ID:	1532563			Data Entry Status:	
Construction Date:				Data Src:	1
Primary Water Use:	Domestic			Date Received:	1/8/2002
Sec. Water Use:				Selected Flag:	Yes
Final Well Status:	Water Supply			Abandonment Rec:	
Water Type:				Contractor:	1119
Casing Material:				Form Version:	1
Audit No:	232687			Owner:	
Tag:				Street Name:	
Construction Method:				County:	OTTAWA
Elevation (m):				Municipality:	HUNTLEY TOWNSHIP
Elevation Reliability:				Site Info:	
Depth to Bedrock:				Lot:	014
Well Depth:				Concession:	06
Overburden/Bedrock:				Concession Name:	CON
Pump Rate:				Easting NAD83:	
Static Water Level:				Northing NAD83:	
Flowing (Y/N):				Zone:	
Flow Rate:				UTM Reliability:	
Clear/Cloudy:					
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/153\1532563.pdf				
<u>Bore Hole Information</u>					
Bore Hole ID:	10523596			Elevation:	131.997161
DP2BR:	0			Elevrc:	
Spatial Status:	Improved			Zone:	18
Code OB:	h			East83:	416109
Code OB Desc:	Mixed in a Layer			North83:	5015832
Open Hole:				Org CS:	N83
Cluster Kind:				UTMRC:	3
Date Completed:	10/2/2001			UTMRC Desc:	margin of error : 10 - 30 m
Remarks:				Location Method:	
Elevrc Desc:					
Location Source Date:					
Improvement Location Source:	1999-2004 MOE Water Well Data Improvement Project				
Improvement Location Method:	GIS				
Source Revision Comment:	Northing and/or Easting field has been changed. Location estimated from sketch map.				
Supplier Comment:	Determined to be an improvement rather than a Lot Centroid in December 2009.				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Overburden and Bedrock Materials Interval</u>					
Formation ID:		932857139			
Layer:		2			
Color:		2			
General Color:		GREY			
Mat1:		15			
Most Common Material:		LIMESTONE			
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:		4			
Formation End Depth:		80			
Formation End Depth UOM:		ft			
<u>Overburden and Bedrock Materials Interval</u>					
Formation ID:		932857138			
Layer:		1			
Color:		6			
General Color:		BROWN			
Mat1:		28			
Most Common Material:		SAND			
Mat2:		26			
Mat2 Desc:		ROCK			
Mat3:					
Mat3 Desc:					
Formation Top Depth:		0			
Formation End Depth:		4			
Formation End Depth UOM:		ft			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		933225225			
Layer:		1			
Plug From:		2			
Plug To:		22			
Plug Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		961532563			
Method Construction Code:		5			
Method Construction:		Air Percussion			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		11072166			
Casing No:		1			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		930095094			
Layer:		1			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Material:		4			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:					
Casing Diameter:		8			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
 <u>Construction Record - Casing</u>					
Casing ID:		930095095			
Layer:		2			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:					
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
 <u>Construction Record - Casing</u>					
Casing ID:		930095096			
Layer:		3			
Material:		4			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:					
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
 <u>Results of Well Yield Testing</u>					
Pump Test ID:		991532563			
Pump Set At:					
Static Level:		20			
Final Level After Pumping:		70			
Recommended Pump Depth:		70			
Pumping Rate:		12			
Flowing Rate:					
Recommended Pump Rate:		12			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		2			
Water State After Test:		CLOUDY			
Pumping Test Method:		1			
Pumping Duration HR:		1			
Pumping Duration MIN:		0			
Flowing:		No			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934400414			
Test Type:		Recovery			
Test Duration:		30			
Test Level:		20			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934117359			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Type:		Recovery			
Test Duration:		15			
Test Level:		20			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934661494			
Test Type:		Recovery			
Test Duration:		45			
Test Level:		20			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934917822			
Test Type:		Recovery			
Test Duration:		60			
Test Level:		20			
Test Level UOM:		ft			
 <u>Water Details</u>					
Water ID:		934016175			
Layer:		3			
Kind Code:		5			
Kind:		Not stated			
Water Found Depth:		74			
Water Found Depth UOM:		ft			
 <u>Water Details</u>					
Water ID:		934016174			
Layer:		2			
Kind Code:		5			
Kind:		Not stated			
Water Found Depth:		68			
Water Found Depth UOM:		ft			
 <u>Water Details</u>					
Water ID:		934016173			
Layer:		1			
Kind Code:		5			
Kind:		Not stated			
Water Found Depth:		38			
Water Found Depth UOM:		ft			
4	1 of 1	WNW/127.1	129.9 / -3.00	23 ABBEY WOOD COUR lot 14 con 7 Ottawa ON	WWIS
Well ID:	7171754			Data Entry Status:	
Construction Date:				Data Src:	
Primary Water Use:	Domestic			Date Received:	11/17/2011
Sec. Water Use:				Selected Flag:	Yes
Final Well Status:	Water Supply			Abandonment Rec:	
Water Type:				Contractor:	6574
Casing Material:				Form Version:	7
Audit No:	Z115814			Owner:	
Tag:	A102661			Street Name:	23 ABBEY WOOD COUR
Construction Method:				County:	OTTAWA

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Elevation (m): Elevation Reliability: Depth to Bedrock: Well Depth: Overburden/Bedrock: Pump Rate: Static Water Level: Flowing (Y/N): Flow Rate: Clear/Cloudy:				Municipality: Site Info: Lot: Concession: Concession Name: Easting NAD83: Northing NAD83: Zone: UTM Reliability:	HUNTLEY TOWNSHIP 014 07 CON CON CON CON
PDF URL (Map):		https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/717\7171754.pdf			

Bore Hole Information

Bore Hole ID:	1003608164	Elevation:	133.616683
DP2BR:		Elevrc:	
Spatial Status:		Zone:	18
Code OB:		East83:	415745
Code OB Desc:		North83:	5015603
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	3
Date Completed:	9/13/2011	UTMRC Desc:	margin of error : 10 - 30 m
Remarks:		Location Method:	www
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock

Materials Interval

Formation ID:	1004066382
Layer:	3
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Mat2 Desc:	
Mat3:	73
Mat3 Desc:	HARD
Formation Top Depth:	16
Formation End Depth:	94
Formation End Depth UOM:	ft

Overburden and Bedrock

Materials Interval

Formation ID:	1004066381
Layer:	2
Color:	2
General Color:	GREY
Mat1:	14
Most Common Material:	HARDPAN
Mat2:	13
Mat2 Desc:	BOULDERS
Mat3:	66
Mat3 Desc:	DENSE
Formation Top Depth:	5
Formation End Depth:	16

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Formation End Depth UOM:		ft			
<u>Overburden and Bedrock Materials Interval</u>					
Formation ID:		1004066380			
Layer:		1			
Color:		6			
General Color:		BROWN			
Mat1:		08			
Most Common Material:		FINE SAND			
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:		0			
Formation End Depth:		5			
Formation End Depth UOM:		ft			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1004066414			
Layer:		1			
Plug From:		0			
Plug To:		20			
Plug Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		1004066413			
Method Construction Code:		5			
Method Construction:		Air Percussion			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		1004066378			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1004066386			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:		0			
Depth To:		20			
Casing Diameter:		6.25			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Construction Record - Screen</u>					
Screen ID:		1004066387			
Layer:					
Slot:					
Screen Top Depth:					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Screen End Depth:					
Screen Material:					
Screen Depth UOM:		ft			
Screen Diameter UOM:		inch			
Screen Diameter:					
Results of Well Yield Testing					
Pump Test ID:		1004066379			
Pump Set At:		80			
Static Level:		12.7			
Final Level After Pumping:		54.1			
Recommended Pump Depth:		85			
Pumping Rate:		11			
Flowing Rate:					
Recommended Pump Rate:		11			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		0			
Pumping Duration HR:		1			
Pumping Duration MIN:					
Flowing:					
Draw Down & Recovery					
Pump Test Detail ID:		1004066389			
Test Type:		Recovery			
Test Duration:		1			
Test Level:		45.2			
Test Level UOM:		ft			
Draw Down & Recovery					
Pump Test Detail ID:		1004066391			
Test Type:		Recovery			
Test Duration:		2			
Test Level:		37.7			
Test Level UOM:		ft			
Draw Down & Recovery					
Pump Test Detail ID:		1004066399			
Test Type:		Recovery			
Test Duration:		10			
Test Level:		14.1			
Test Level UOM:		ft			
Draw Down & Recovery					
Pump Test Detail ID:		1004066409			
Test Type:		Recovery			
Test Duration:		40			
Test Level:		12.7			
Test Level UOM:		ft			
Draw Down & Recovery					
Pump Test Detail ID:		1004066411			
Test Type:		Draw Down			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Duration:		60			
Test Level:		54.2			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066405			
Test Type:		Recovery			
Test Duration:		25			
Test Level:		13.1			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066408			
Test Type:		Draw Down			
Test Duration:		40			
Test Level:		53.5			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066404			
Test Type:		Draw Down			
Test Duration:		25			
Test Level:		54.1			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066402			
Test Type:		Draw Down			
Test Duration:		20			
Test Level:		53.5			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066396			
Test Type:		Draw Down			
Test Duration:		5			
Test Level:		46.2			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066393			
Test Type:		Recovery			
Test Duration:		3			
Test Level:		30.8			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066410			
Test Type:		Draw Down			
Test Duration:		50			
Test Level:		54.1			
Test Level UOM:		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066397			
Test Type:		Recovery			
Test Duration:		5			
Test Level:		20.9			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066390			
Test Type:		Draw Down			
Test Duration:		2			
Test Level:		32.8			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066392			
Test Type:		Draw Down			
Test Duration:		3			
Test Level:		39.4			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066395			
Test Type:		Recovery			
Test Duration:		4			
Test Level:		23.5			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066407			
Test Type:		Recovery			
Test Duration:		30			
Test Level:		12.9			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066403			
Test Type:		Recovery			
Test Duration:		20			
Test Level:		13.1			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066406			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		53.5			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066398			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Type:		Draw Down			
Test Duration:		10			
Test Level:		52.4			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066394			
Test Type:		Draw Down			
Test Duration:		4			
Test Level:		43.9			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066388			
Test Type:		Draw Down			
Test Duration:		1			
Test Level:		24.6			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066401			
Test Type:		Recovery			
Test Duration:		15			
Test Level:		13.4			
Test Level UOM:		ft			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1004066400			
Test Type:		Draw Down			
Test Duration:		15			
Test Level:		53.5			
Test Level UOM:		ft			
 <u>Water Details</u>					
Water ID:		1004066385			
Layer:		1			
Kind Code:					
Kind:					
Water Found Depth:		90			
Water Found Depth UOM:		ft			
 <u>Hole Diameter</u>					
Hole ID:		1004066383			
Diameter:		6.25			
Depth From:		0			
Depth To:		20			
Hole Depth UOM:		ft			
Hole Diameter UOM:		inch			
 <u>Hole Diameter</u>					
Hole ID:		1004066384			
Diameter:		6			
Depth From:		20			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Depth To: Hole Depth UOM: Hole Diameter UOM:		94 ft inch			

5	1 of 1	N/173.3	133.9 / 1.00	121 ROCKY CREEK CARP ON	WWIS
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Well ID:	7139813	Data Entry Status:	
Construction Date:		Data Src:	
Primary Water Use:	Domestic	Date Received:	2/16/2010
Sec. Water Use:		Selected Flag:	Yes
Final Well Status:	Water Supply	Abandonment Rec:	
Water Type:		Contractor:	1558
Casing Material:		Form Version:	7
Audit No:	Z101780	Owner:	
Tag:	A082862	Street Name:	121 ROCKY CREEK
Construction Method:		County:	OTTAWA
Elevation (m):		Municipality:	HUNTLEY TOWNSHIP
Elevation Reliability:		Site Info:	
Depth to Bedrock:		Lot:	
Well Depth:		Concession:	
Overburden/Bedrock:		Concession Name:	
Pump Rate:		Easting NAD83:	
Static Water Level:		Northing NAD83:	
Flowing (Y/N):		Zone:	
Flow Rate:		UTM Reliability:	
Clear/Cloudy:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/713\7139813.pdf

Bore Hole Information

Bore Hole ID:	1002937574	Elevation:	132.306884
DP2BR:		Elevrc:	
Spatial Status:		Zone:	18
Code OB:		East83:	416193
Code OB Desc:		North83:	5015986
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	4
Date Completed:	12/16/2009	UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:		Location Method:	wwr
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1003105628
Layer:	2
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	74
Mat2 Desc:	LAYERED
Mat3:	73
Mat3 Desc:	HARD
Formation Top Depth:	3.96
Formation End Depth:	67.96

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Formation End Depth UOM:		m			
<u>Overburden and Bedrock Materials Interval</u>					
Formation ID:		1003105627			
Layer:		1			
Color:		6			
General Color:		BROWN			
Mat1:		02			
Most Common Material:		TOPSOIL			
Mat2:		81			
Mat2 Desc:		SANDY			
Mat3:		12			
Mat3 Desc:		STONES			
Formation Top Depth:		0			
Formation End Depth:		3.96			
Formation End Depth UOM:		m			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1003105631			
Layer:		1			
Plug From:		6.4			
Plug To:		0			
Plug Depth UOM:		m			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		1003105657			
Method Construction Code:		4			
Method Construction:		Rotary (Air)			
Other Method Construction:		AIR PERCUSSION			
<u>Pipe Information</u>					
Pipe ID:		1003105625			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1003105635			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:		-.45			
Depth To:		6.4			
Casing Diameter:		15.86			
Casing Diameter UOM:		cm			
Casing Depth UOM:		m			
<u>Construction Record - Screen</u>					
Screen ID:		1003105636			
Layer:					
Slot:					
Screen Top Depth:					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Screen End Depth:					
Screen Material:					
Screen Depth UOM:		m			
Screen Diameter UOM:		cm			
Screen Diameter:					
Results of Well Yield Testing					
Pump Test ID:		1003105626			
Pump Set At:		38.09			
Static Level:		2.78			
Final Level After Pumping:		12			
Recommended Pump Depth:		30.47			
Pumping Rate:		45.5			
Flowing Rate:					
Recommended Pump Rate:		45.5			
Levels UOM:		m			
Rate UOM:		LPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		0			
Pumping Duration HR:		4			
Pumping Duration MIN:		30			
Flowing:					
Draw Down & Recovery					
Pump Test Detail ID:		1003105654			
Test Type:		Draw Down			
Test Duration:		50			
Test Level:		11.39			
Test Level UOM:		m			
Draw Down & Recovery					
Pump Test Detail ID:		1003105638			
Test Type:		Recovery			
Test Duration:		1			
Test Level:		9.5			
Test Level UOM:		m			
Draw Down & Recovery					
Pump Test Detail ID:		1003105652			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		10.99			
Test Level UOM:		m			
Draw Down & Recovery					
Pump Test Detail ID:		1003105640			
Test Type:		Recovery			
Test Duration:		2			
Test Level:		7.48			
Test Level UOM:		m			
Draw Down & Recovery					
Pump Test Detail ID:		1003105648			
Test Type:		Recovery			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Duration:		10			
Test Level:		2.88			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105651			
Test Type:		Draw Down			
Test Duration:		25			
Test Level:		10.71			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105641			
Test Type:		Draw Down			
Test Duration:		3			
Test Level:		5.64			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105643			
Test Type:		Draw Down			
Test Duration:		4			
Test Level:		6.45			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105644			
Test Type:		Recovery			
Test Duration:		4			
Test Level:		5.41			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105645			
Test Type:		Draw Down			
Test Duration:		5			
Test Level:		6.92			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105637			
Test Type:		Draw Down			
Test Duration:		1			
Test Level:		4.13			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105639			
Test Type:		Draw Down			
Test Duration:		2			
Test Level:		5.12			
Test Level UOM:		m			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105642			
Test Type:		Recovery			
Test Duration:		3			
Test Level:		6.2			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105655			
Test Type:		Draw Down			
Test Duration:		60			
Test Level:		11.51			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105647			
Test Type:		Draw Down			
Test Duration:		10			
Test Level:		8.48			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105646			
Test Type:		Recovery			
Test Duration:		5			
Test Level:		3.2			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105653			
Test Type:		Draw Down			
Test Duration:		40			
Test Level:		11.24			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105650			
Test Type:		Draw Down			
Test Duration:		20			
Test Level:		10.28			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003105649			
Test Type:		Draw Down			
Test Duration:		15			
Test Level:		9.59			
Test Level UOM:		m			
<u>Water Details</u>					
Water ID:		1003105632			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Layer:		1			
Kind Code:		8			
Kind:		Untested			
Water Found Depth:		28.04			
Water Found Depth UOM:		m			
 <u>Water Details</u>					
Water ID:		1003105634			
Layer:		3			
Kind Code:					
Kind:					
Water Found Depth:		67.05			
Water Found Depth UOM:		m			
 <u>Water Details</u>					
Water ID:		1003105633			
Layer:		2			
Kind Code:		8			
Kind:		Untested			
Water Found Depth:		66.74			
Water Found Depth UOM:		m			
 <u>Hole Diameter</u>					
Hole ID:		1003105630			
Diameter:		15.55			
Depth From:		6.4			
Depth To:		67.96			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
 <u>Hole Diameter</u>					
Hole ID:		1003105629			
Diameter:		15.86			
Depth From:		0			
Depth To:		6.4			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
<u>6</u>	1 of 1	N/203.0	133.9 / 1.00	117 ROCK CREEK lot 14 con 7 CARP ON	WWIS
Well ID:	7151504			Data Entry Status:	
Construction Date:				Data Src:	
Primary Water Use:	Domestic			Date Received:	9/17/2010
Sec. Water Use:				Selected Flag:	Yes
Final Well Status:	Water Supply			Abandonment Rec:	
Water Type:				Contractor:	1558
Casing Material:				Form Version:	7
Audit No:	Z115580			Owner:	
Tag:	A102299			Street Name:	117 ROCK CREEK
Construction Method:				County:	OTTAWA
Elevation (m):				Municipality:	HUNTLEY TOWNSHIP
Elevation Reliability:				Site Info:	
Depth to Bedrock:				Lot:	014
Well Depth:				Concession:	07
Overburden/Bedrock:				Concession Name:	CON
Pump Rate:				Easting NAD83:	
Static Water Level:				Northing NAD83:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Flowing (Y/N): Flow Rate: Clear/Cloudy:				Zone: UTM Reliability:	
PDF URL (Map):		https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7151504.pdf			
<u>Bore Hole Information</u>					
Bore Hole ID:	1003337467			Elevation:	132.003662
DP2BR:				Elevrc:	
Spatial Status:				Zone:	18
Code OB:				East83:	416247
Code OB Desc:				North83:	5016062
Open Hole:				Org CS:	UTM83
Cluster Kind:				UTMRC:	4
Date Completed:	7/28/2010			UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:				Location Method:	wwr
Elevrc Desc:					
Location Source Date:					
Improvement Location Source:					
Improvement Location Method:					
Source Revision Comment:					
Supplier Comment:					
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
Formation ID:	1003451673				
Layer:	3				
Color:	2				
General Color:	GREY				
Mat1:	15				
Most Common Material:	LIMESTONE				
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:	4.26				
Formation End Depth:	60.34				
Formation End Depth UOM:	m				
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
Formation ID:	1003451671				
Layer:	1				
Color:	6				
General Color:	BROWN				
Mat1:	02				
Most Common Material:	TOPSOIL				
Mat2:	12				
Mat2 Desc:	STONES				
Mat3:					
Mat3 Desc:					
Formation Top Depth:	0				
Formation End Depth:	1.82				
Formation End Depth UOM:	m				
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
Formation ID:	1003451672				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Layer:		2			
Color:		6			
General Color:		BROWN			
Mat1:		05			
Most Common Material:		CLAY			
Mat2:					
Mat2 Desc:					
Mat3:		81			
Mat3 Desc:		SANDY			
Formation Top Depth:		1.82			
Formation End Depth:		4.26			
Formation End Depth UOM:		m			
<u>Annular Space/Abandonment</u>					
<u>Sealing Record</u>					
Plug ID:		1003451676			
Layer:		1			
Plug From:		6.4			
Plug To:		0			
Plug Depth UOM:		m			
<u>Method of Construction & Well</u>					
<u>Use</u>					
Method Construction ID:		1003451704			
Method Construction Code:		3			
Method Construction:		Rotary (Reverse)			
Other Method Construction:		AIR PERCUSSION			
<u>Pipe Information</u>					
Pipe ID:		1003451669			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1003451679			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:		-.45			
Depth To:		6.4			
Casing Diameter:		15.86			
Casing Diameter UOM:		cm			
Casing Depth UOM:		m			
<u>Construction Record - Screen</u>					
Screen ID:		1003451680			
Layer:					
Slot:					
Screen Top Depth:					
Screen End Depth:					
Screen Material:					
Screen Depth UOM:		m			
Screen Diameter UOM:		cm			
Screen Diameter:					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Results of Well Yield Testing</u>					
Pump Test ID:		1003451670			
Pump Set At:		48.76			
Static Level:		3.87			
Final Level After Pumping:		14.6			
Recommended Pump Depth:					
Pumping Rate:		40.95			
Flowing Rate:					
Recommended Pump Rate:		40.95			
Levels UOM:		m			
Rate UOM:		LPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		0			
Pumping Duration HR:		1			
Pumping Duration MIN:					
Flowing:		No			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451699			
Test Type:		Recovery			
Test Duration:		30			
Test Level:		3.94			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451681			
Test Type:		Draw Down			
Test Duration:		1			
Test Level:		5.67			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451700			
Test Type:		Draw Down			
Test Duration:		40			
Test Level:		14.4			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451688			
Test Type:		Recovery			
Test Duration:		4			
Test Level:		9.08			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451695			
Test Type:		Draw Down			
Test Duration:		20			
Test Level:		13.27			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test Detail ID:		1003451685			
Test Type:		Draw Down			
Test Duration:		3			
Test Level:		7.8			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451696			
Test Type:		Recovery			
Test Duration:		20			
Test Level:		4			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451702			
Test Type:		Draw Down			
Test Duration:		60			
Test Level:		14.6			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451689			
Test Type:		Draw Down			
Test Duration:		5			
Test Level:		9.07			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451682			
Test Type:		Recovery			
Test Duration:		1			
Test Level:		12.3			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451683			
Test Type:		Draw Down			
Test Duration:		2			
Test Level:		6.65			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451693			
Test Type:		Draw Down			
Test Duration:		15			
Test Level:		12.19			
Test Level UOM:		m			
 <u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451697			
Test Type:		Recovery			
Test Duration:		25			
Test Level:		3.95			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451684			
Test Type:		Recovery			
Test Duration:		2			
Test Level:		10.63			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451698			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		14.01			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451690			
Test Type:		Recovery			
Test Duration:		5			
Test Level:		8.34			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451686			
Test Type:		Recovery			
Test Duration:		3			
Test Level:		9.58			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451701			
Test Type:		Draw Down			
Test Duration:		50			
Test Level:		14.45			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451691			
Test Type:		Draw Down			
Test Duration:		10			
Test Level:		10.57			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		1003451692			
Test Type:		Recovery			
Test Duration:		10			
Test Level:		4.87			
Test Level UOM:		m			
<u>Draw Down & Recovery</u>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test Detail ID: 1003451694					
Test Type: Recovery					
Test Duration: 15					
Test Level: 4.15					
Test Level UOM: m					
<u>Draw Down & Recovery</u>					
Pump Test Detail ID: 1003451687					
Test Type: Draw Down					
Test Duration: 4					
Test Level: 8.7					
Test Level UOM: m					
<u>Water Details</u>					
Water ID: 1003451678					
Layer: 2					
Kind Code: 8					
Kind: Untested					
Water Found Depth: 57.9					
Water Found Depth UOM: m					
<u>Water Details</u>					
Water ID: 1003451677					
Layer: 1					
Kind Code: 8					
Kind: Untested					
Water Found Depth: 10.66					
Water Found Depth UOM: m					
<u>Hole Diameter</u>					
Hole ID: 1003451675					
Diameter: 15.55					
Depth From: 6.4					
Depth To: 60.34					
Hole Depth UOM: m					
Hole Diameter UOM: cm					
<u>Hole Diameter</u>					
Hole ID: 1003451674					
Diameter: 15.86					
Depth From: 0					
Depth To: 6.4					
Hole Depth UOM: m					
Hole Diameter UOM: cm					
7	1 of 2	W/233.5	128.9 / -4.00	Mississippi Mills Landfill The Corporation of the Town of Mississippi Mills City of Ottawa 1470 Howie Road; West 1/2 Lot 14, Concession 7, (formerly West Carleton Township) Ottawa ON	LIMO
ECA/Instrument No: A461001		Natural Attenuation:			
Oper Status 2016: Closed		Liners:			
C of A Issue Date:		Cover Material:			
C of A Issued to:		Leachate Off-Site:			

[illegible]

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Type: Waste Type Other: Waste Description: Landfill Monitoring: Landfill Ctrl Type: Site Closing Description: Project Description: Municipalities Served: Approval Description: Other Approvals/Permits: PDF URL: https://www.accessenvironment.ene.gov.on.ca/instruments/5870-7NBQBT-14.pdf					

8	1 of 1	W/275.8	128.9 / -4.00	Corkery Dump 1989	ANDR
				Almonte ON K0A 1A0	
Legal Description:		Huntley Con 7 Lot 14 pt			
Location Description:		wooded site, 750m SE of Highway 44			
Municipality:		West Carleton Township			
Current Municipality:		West Carleton Township			
RM:		Ottawa-Carleton Region			
Facility:		Dump			
Date Active:		1989			
Date Begun:					
Date Complete:					
Area (Ha):		6.825			
Landfill Type:		Sanitary landfill			
Group Name:					
Operated By:					
Serial:		MOEE a461001 1989			
NTS:		31F08			
Diameter (m):		325			
Historical Summary:					
Corkery Dump 1989 1994 NTS map 31F08 Dump marked, 325m x 210m approx., wooded site, 750m SE of Highway 44 [1994 NTS 1:50,000 map Annprior ON 31F08 edition 8 (information 1989, publication 1994)].					
Waste Type:					
UTM X Nad 27:		415468			
UTM Y Nad 27:		5015382			
UTM Zone:		18			

9	1 of 1	S/284.0	139.8 / 6.92	lot 12 con 7 ON	WWIS
Well ID: Construction Date: Primary Water Use: Sec. Water Use: Final Well Status: Water Type: Casing Material: Audit No: Tag: Construction Method: Elevation (m): Elevation Reliability: Depth to Bedrock: Well Depth: Overburden/Bedrock: Pump Rate:		1535098 Domestic Water Supply Z11756 A011703 7234 3 OTTAWA HUNTLEY TOWNSHIP 012 07 CON Easting NAD83:			
		Data Entry Status: Data Src: Date Received: Selected Flag: Abandonment Rec: Contractor: Form Version: Owner: Street Name: County: Municipality: Site Info: Lot: Concession: Concession Name: Easting NAD83:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Static Water Level: Flowing (Y/N): Flow Rate: Clear/Cloudy:				Northing NAD83: Zone: UTM Reliability:	
PDF URL (Map):		https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/153\1535098.pdf			
<u>Bore Hole Information</u>					
Bore Hole ID:	11172850			Elevation:	144.339538
DP2BR:	4			Elevrc:	
Spatial Status:				Zone:	18
Code OB:	r			East83:	416173
Code OB Desc:	Bedrock			North83:	5014660
Open Hole:				Org CS:	UTM83
Cluster Kind:				UTMRC:	3
Date Completed:	8/18/2004			UTMRC Desc:	margin of error : 10 - 30 m
Remarks:				Location Method:	wwr
Elevrc Desc:					
Location Source Date:					
Improvement Location Source:					
Improvement Location Method:					
Source Revision Comment:					
Supplier Comment:					
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
Formation ID:	932969002				
Layer:	1				
Color:	6				
General Color:	BROWN				
Mat1:	11				
Most Common Material:	GRAVEL				
Mat2:	01				
Mat2 Desc:	FILL				
Mat3:					
Mat3 Desc:					
Formation Top Depth:	0				
Formation End Depth:	4				
Formation End Depth UOM:	ft				
<u>Overburden and Bedrock</u>					
<u>Materials Interval</u>					
Formation ID:	932969003				
Layer:	2				
Color:	2				
General Color:	GREY				
Mat1:	15				
Most Common Material:	LIMESTONE				
Mat2:					
Mat2 Desc:					
Mat3:					
Mat3 Desc:					
Formation Top Depth:	4				
Formation End Depth:	154				
Formation End Depth UOM:	ft				
<u>Annular Space/Abandonment</u>					
<u>Sealing Record</u>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Plug ID:		933253247			
Layer:		1			
Plug From:		0			
Plug To:		20			
Plug Depth UOM:		ft			
 <u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		933253248			
Layer:		2			
Plug From:					
Plug To:					
Plug Depth UOM:		ft			
 <u>Method of Construction & Well Use</u>					
Method Construction ID:		961535098			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
 <u>Pipe Information</u>					
Pipe ID:		11181369			
Casing No:		1			
Comment:					
Alt Name:					
 <u>Construction Record - Casing</u>					
Casing ID:		930843171			
Layer:		2			
Material:		4			
Open Hole or Material:		OPEN HOLE			
Depth From:		20			
Depth To:		154			
Casing Diameter:					
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
 <u>Construction Record - Casing</u>					
Casing ID:		930843170			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:		0			
Depth To:		22			
Casing Diameter:		6.25			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
 <u>Results of Well Yield Testing</u>					
Pump Test ID:		11189729			
Pump Set At:		145			
Static Level:		25			
Final Level After Pumping:		140			
Recommended Pump Depth:		145			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pumping Rate:		10			
Flowing Rate:					
Recommended Pump Rate:		10			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		2			
Pumping Duration MIN:		15			
Flowing:					
 <u>Water Details</u>					
Water ID:		934050584			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		41			
Water Found Depth UOM:		ft			
 <u>Water Details</u>					
Water ID:		934050585			
Layer:		2			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		147			
Water Found Depth UOM:		ft			
 <u>Hole Diameter</u>					
Hole ID:		11306021			
Diameter:		6			
Depth From:		20			
Depth To:		154			
Hole Depth UOM:		ft			
Hole Diameter UOM:		inch			
10	1 of 1	NW/295.4	129.9 / -3.00	The Corporation of the Town of Mississippi Mills West 1/2 Lot 14, Concession 7 West Carleton ON K7C 3P1	WDS
Approval No:	A461001			Total Area (ha):	
Mob Unit Cert No:				Landfill Cap (m³):	
EBR Registry No:				Transfer Area (ha):	
Status:	Approved			Transfer Cap (m³):	
Facility Type:				Transfer Cert No:	
Record Type:	ECA			Inciner. Area (ha):	
Link Source:	IDS			Inciner. Cap (t):	
Project Type:	WASTE DISPOSAL SITES			Process Area (m³):	
Application Status:				Process Cap (m³/d):	
Issue Date:	2008-03-14			Process Vol (m³):	
Input Date:				Process Feed (m³):	
Date Received:				Site Concession:	
Est Closure Date:				Site Region/County:	
Mobile Capacity:				SWP Area Name:	Mississippi Valley
Mobile Units:				MOE District:	Ottawa
Mobile Description:				District Office:	
Prop City:				Latitude:	45.2911
Prop Postal:				Longitude:	-76.0738
Prop Phone:				Geometry X:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Serial Link:				Geometry Y:	
Approval Type:		ECA-WASTE DISPOSAL SITES			
Proponent:					
Prop Address:					
Proponent County/District:					
Full Address:		West 1/2 Lot 14, Concession 7			
Site Lot:					
Waste Class Code:					
Waste Class:					
Waste Type:					
Waste Type Other:					
Waste Description:					
Landfill Monitoring:					
Landfill Ctrl Type:					
Site Closing Description:					
Project Description:					
Municipalities Served:					
Approval Description:					
Other Approvals/Permits:					
PDF URL:		https://www.accessenvironment.ene.gov.on.ca/instruments/6757-4QUQ4V-14.pdf			

11	1 of 1	SE/296.6	135.9 / 3.00	lot 12 con 7 ON	WWIS
Well ID:		1520192	Data Entry Status:		
Construction Date:			Data Src:		1
Primary Water Use:		Domestic	Date Received:		11/1/1985
Sec. Water Use:			Selected Flag:		Yes
Final Well Status:		Water Supply	Abandonment Rec:		
Water Type:			Contractor:		5222
Casing Material:			Form Version:		1
Audit No:			Owner:		
Tag:			Street Name:		
Construction Method:			County:		OTTAWA
Elevation (m):			Municipality:		HUNTLEY TOWNSHIP
Elevation Reliability:			Site Info:		
Depth to Bedrock:			Lot:		012
Well Depth:			Concession:		07
Overburden/Bedrock:			Concession Name:		CON
Pump Rate:			Easting NAD83:		
Static Water Level:			Northing NAD83:		
Flowing (Y/N):			Zone:		
Flow Rate:			UTM Reliability:		
Clear/Cloudy:					
PDF URL (Map):		https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/152\1520192.pdf			

Bore Hole Information

Bore Hole ID:	10042037	Elevation:	133.070816
DP2BR:	0	Elevrc:	
Spatial Status:		Zone:	18
Code OB:	r	East83:	416616.5
Code OB Desc:	Bedrock	North83:	5014962
Open Hole:		Org CS:	
Cluster Kind:		UTMRC:	9
Date Completed:	10/11/1985	UTMRC Desc:	unknown UTM
Remarks:		Location Method:	lot
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Supplier Comment:					
<u>Overburden and Bedrock Materials Interval</u>					
Formation ID:		931044013			
Layer:		1			
Color:		2			
General Color:		GREY			
Mat1:		15			
Most Common Material:		LIMESTONE			
Mat2:		78			
Mat2 Desc:		MEDIUM-GRAINED			
Mat3:		73			
Mat3 Desc:		HARD			
Formation Top Depth:		0			
Formation End Depth:		130			
Formation End Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		961520192			
Method Construction Code:		5			
Method Construction:		Air Percussion			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		10590607			
Casing No:		1			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		930073370			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		18			
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Construction Record - Casing</u>					
Casing ID:		930073371			
Layer:		2			
Material:		4			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		130			
Casing Diameter:		6			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Results of Well Yield Testing</u>					
Pump Test ID:		991520192			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Set At:					
Static Level:		20			
Final Level After Pumping:		125			
Recommended Pump Depth:		125			
Pumping Rate:		2			
Flowing Rate:					
Recommended Pump Rate:		2			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		1			
Pumping Duration MIN:		0			
Flowing:		No			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934655999			
Test Type:		Draw Down			
Test Duration:		45			
Test Level:		125			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934377245			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		125			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934111425			
Test Type:		Draw Down			
Test Duration:		15			
Test Level:		125			
Test Level UOM:		ft			
<u>Draw Down & Recovery</u>					
Pump Test Detail ID:		934904968			
Test Type:		Draw Down			
Test Duration:		60			
Test Level:		125			
Test Level UOM:		ft			
<u>Water Details</u>					
Water ID:		933477370			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		46			
Water Found Depth UOM:		ft			
<u>Water Details</u>					
Water ID:		933477371			
Layer:		2			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<i>Kind Code:</i>		1			
<i>Kind:</i>		FRESH			
<i>Water Found Depth:</i>		67			
<i>Water Found Depth UOM:</i>		ft			

Unplottable Summary

Total: 7 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
AAGR		Lot 14 Con 6	West Carleton ON	
AAGR		Lot 13 Con 6	West Carleton ON	
AAGR		Lot 13 Con 8	West Carleton ON	
AAGR		Lot 14/15 Con 6	West Carleton ON	
AAGR		Lot 13/14 Con 7	West Carleton ON	
AAGR		Lot 12 Con 7	West Carleton ON	
EBR	Thomas Cavanagh Construction Limited,	Part of Lot 13, Concession VIII, Geographic Township of Huntley, Formerly the Township of West Carleton CITY OF OTTAWA	ON	

Unplottable Report

Site: **Lot 14 Con 6 West Carleton ON**

Database:
[AAGR](#)

Type: Pit
Region/County: Ottawa-Carleton
Township: West Carleton
Concession: 6
Lot: 14
Size (ha): 1.1
Landuse:
Comments:

Site: **Lot 13 Con 6 West Carleton ON**

Database:
[AAGR](#)

Type: Pit
Region/County: Ottawa-Carleton
Township: West Carleton
Concession: 6
Lot: 13
Size (ha):
Landuse:
Comments: rehabilitated

Site: **Lot 13 Con 8 West Carleton ON**

Database:
[AAGR](#)

Type: Pit/Quarry
Region/County: Ottawa-Carleton
Township: West Carleton
Concession: 8
Lot: 13
Size (ha): 0.6
Landuse:
Comments:

Site: **Lot 14/15 Con 6 West Carleton ON**

Database:
[AAGR](#)

Type: Pit
Region/County: Ottawa-Carleton
Township: West Carleton
Concession: 6
Lot: 14/15
Size (ha): 2.3
Landuse:
Comments:

Site: **Lot 13/14 Con 7 West Carleton ON**

Database:
[AAGR](#)

Type: Pit
Region/County: Ottawa-Carleton

Township: West Carleton
Concession: 7
Lot: 13/14
Size (ha):
Landuse:
Comments:

Site: **Lot 12 Con 7 West Carleton ON**

Database:
AAGR

Type: Pit
Region/County: Ottawa-Carleton
Township: West Carleton
Concession: 7
Lot: 12
Size (ha): 3.5
Landuse:
Comments:

Site: **Thomas Cavanagh Construction Limited,
Part of Lot 13, Concession VIII, Geographic Township of Huntley, Formerly the Township of West Carleton CITY OF
OTTAWA ON**

Database:
EBR

EBR Registry No: IB04E3044
Ministry Ref No: FSD - PEM 05/04
Notice Type: Instrument Decision
Notice Stage:
Notice Date: August 16, 2004
Proposal Date: June 30, 2004
Year: 2004
Instrument Type: (ARA s. 16 (2)) - Approval of licensee proposed amendment to a site plan
Off Instrument Name:
Posted By:
Company Name: Thomas Cavanagh Construction Limited,
Site Address:
Location Other:
Proponent Name:
Proponent Address: RR 2, Ashton Ontario, K0A 1B0
Comment Period:
URL:

Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:

Site Location Details:

Part of Lot 13, Concession VIII, Geographic Township of Huntley, Formerly the Township of West Carleton CITY OF OTTAWA

Appendix: Database Descriptions

*Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. **Note:** Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory:

Provincial [AAGR](#)

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.*

Government Publication Date: Sept 2002*

Aggregate Inventory:

Provincial [AGR](#)

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Sep 2020

Abandoned Mine Information System:

Provincial [AMIS](#)

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Oct 2018

Anderson's Waste Disposal Sites:

Private [ANDR](#)

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

Aboveground Storage Tanks:

Provincial [AST](#)

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

Automobile Wrecking & Supplies:

Private [AUWR](#)

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 1999-Dec 31, 2020

Borehole:

Provincial [BORE](#)

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

Certificates of Approval:

Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Government Publication Date: 1985-Oct 30, 2011*

Dry Cleaning Facilities:

Federal CDRY

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

Government Publication Date: Jan 2004-Dec 2018

Commercial Fuel Oil Tanks:

Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.

Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Chemical Manufacturers and Distributors:

Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

Chemical Register:

Private CHM

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

Government Publication Date: 1999-Dec 31, 2020

Compressed Natural Gas Stations:

Private CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 2012 -Apr 2021

Inventory of Coal Gasification Plants and Coal Tar Sites:

Provincial COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions:

Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Nov 2020

Certificates of Property Use:

Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994-Mar 31, 2021

Drill Hole Database:

Provincial

[DRL](#)

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886 - Sep 2020

Delisted Fuel Tanks:

Provincial

[DTNK](#)

List of fuel storage tank sites that were once found in - and have since been removed from - the list of fuel storage tanks made available by the regulatory agency under Access to Public Information.

Government Publication Date: Jul 31, 2020

Environmental Activity and Sector Registry:

Provincial

[EASR](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval). Please see our ECA database.

Government Publication Date: Oct 2011-Apr 30, 2021

Environmental Registry:

Provincial

[EBR](#)

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994-Mar 31, 2021

Environmental Compliance Approval:

Provincial

[ECA](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011- Apr 30, 2021

Environmental Effects Monitoring:

Federal

[EEM](#)

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007*

ERIS Historical Searches:

Private

[EHS](#)

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Jan 31, 2021

Environmental Issues Inventory System:

Federal

[EIIS](#)

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001*

Emergency Management Historical Event:

Provincial

EMHE

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Dec 31, 2016

Environmental Penalty Annual Report:

Provincial

EPAR

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2020

List of Expired Fuels Safety Facilities:

Provincial

EXP

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.

Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Federal Convictions:

Federal

FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land:

Federal

FCS

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Jan 2021

Fisheries & Oceans Fuel Tanks:

Federal

FOFT

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Government Publication Date: 1964-Sep 2019

Federal Identification Registry for Storage Tank Systems (FIRSTS):

Federal

FRST

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

Fuel Storage Tank:

Provincial

FST

List of registered private and retail fuel storage tanks. This is not a comprehensive or complete inventory of private and retail fuel storage tanks in the province; this listing is a copy of registered private and retail fuel storage tanks, obtained under Access to Public Information.

Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Fuel Storage Tank - Historic:

Provincial

FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary:

Provincial

GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Jan 31, 2021

Greenhouse Gas Emissions from Large Facilities:

Federal

GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO₂ eq).

Government Publication Date: 2013-Dec 2018

TSSA Historic Incidents:

Provincial

HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks:

Federal

IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Fuel Oil Spills and Leaks:

Provincial

INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing is a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Landfill Inventory Management Ontario:

Provincial

LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the Ministry of the Environment, Conservation and Parks compiles new and updated information. Includes small and large landfills currently operating as well as those which are closed and historic. Operators of larger landfills provide landfill information for the previous operating year to the ministry for LIMO including: estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Feb 28, 2019

Canadian Mine Locations:

Private

MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences:

Provincial

MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Dec 2020

National Analysis of Trends in Emergencies System (NATES):

Federal

NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports:

Provincial

NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2018

National Defense & Canadian Forces Fuel Tanks:

Federal

NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills:

Federal

NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites:

Federal

NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents:

Federal

NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Mar 31, 2021

National Energy Board Wells:

Federal

NEBP

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES):

Federal

NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

Government Publication Date: 1974-2003***National PCB Inventory:**

Federal

NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008***National Pollutant Release Inventory:**

Federal

NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Government Publication Date: 1993-May 2017**Oil and Gas Wells:**

Private

OGWE

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-Feb 28, 2021**Ontario Oil and Gas Wells:**

Provincial

OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Jun 2020**Inventory of PCB Storage Sites:**

Provincial

OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013**Orders:**

Provincial

ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994-Mar 31, 2021**Canadian Pulp and Paper:**

Private

PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014**Parks Canada Fuel Storage Tanks:**

Federal

PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005*

Pesticide Register:

Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

Government Publication Date: Oct 2011-Apr 30, 2021

Pipeline Incidents:

Provincial PINC

List of pipeline incidents (strikes, leaks, spills). This is not a comprehensive or complete inventory of pipeline incidents in the province; this listing is an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.

Government Publication Date: Oct 31, 2020

Private and Retail Fuel Storage Tanks:

Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water:

Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994-Mar 31, 2021

Ontario Regulation 347 Waste Receivers Summary:

Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-1990, 1992-2018

Record of Site Condition:

Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.

RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-Apr 2021

Retail Fuel Storage Tanks:

Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-Dec 31, 2020

Scott's Manufacturing Directory:

Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011*

Ontario Spills:

Provincial SPL

List of spills and incidents made available the Ministry of the Environment, Conservation and Parks. This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Government Publication Date: 1988-Aug 2020

Wastewater Discharger Registration Database:

Provincial

SRDS

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Government Publication Date: 1990-Dec 31, 2018

Anderson's Storage Tanks:

Private

TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks:

Federal

TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970 - Dec 2020

Variances for Abandonment of Underground Storage Tanks:

Provincial

VAR

Listing of variances granted for storage tank abandonment. This is not a comprehensive or complete inventory of tank abandonment variances in the province; this listing is a copy of tank abandonment variance records previously obtained under Access to Public Information. In Ontario, registered underground storage tanks must be removed within two years of disuse; if removal of a tank is not feasible, an application may be sought for a variance from this code requirement.

Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Waste Disposal Sites - MOE CA Inventory:

Provincial

WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011-Apr 30, 2021

Waste Disposal Sites - MOE 1991 Historical Approval Inventory:

Provincial

WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30th, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990*

Water Well Information System:

Provincial

WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Apr 30, 2020

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Jesse Andrechek

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: May 20, 2021 8:37 AM
To: Jesse Andrechek
Subject: RE: Search Records Request: PE5276

Follow Up Flag: Follow up
Flag Status: Flagged

Please refrain from sending documents to head office and only submit your requests electronically via email along with credit card payment. We are all working remotely and mailing in applications with cheques will lengthen the overall processing time.

NO RECORD FOUND

Hello Jesse,

Thank you for your request for confirmation of public information.

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

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

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

Kind regards,

Saara



Public Information Agent

Facilities and Business Services

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-6222 | Fax: +1-416-734-3568 | E-Mail: publicinformationsservices@tssa.org

www.tssa.org



From: Jesse Andrechek <JAndrechek@Patersongroup.ca>
Sent: May 19, 2021 4:16 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: Search Records Request: PE5276

[CAUTION]: This email originated outside the organisation.

Please do not click links or open attachments unless you recognise the source of this email and know the content is safe.

Good afternoon,

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

Howie Road: 1830, 1470, 1250, 1292, 1371

Bearhill Road: 1300

Thank you.

Best regards,

Jesse Andrechek, BASc

patersongroup
solution oriented engineering
over 60 years serving our clients

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381 Ext. 228
Cell: (613) 913-3381

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



PATERSON GROUP

solution oriented engineering



Jesse Andrechek, BASc Junior Environmental Engineer

Jesse joined Paterson Group in 2019 as part of the Environmental and Geotechnical Division. Jesse has received his Advanced Diploma in Civil Engineering Technology from St. Lawrence College in 2016, as well as his Bachelor of Applied Science in Civil Engineering from Queen's University in 2019. In his time with Paterson, Jesse has been involved primarily in residential and commercial developments across Ontario, where he completed environmental and geotechnical sampling programs, conducted Phase I and II environmental site assessments (CSA and MECP standards), performed settlement surcharge surveys and seismic shear-wave velocity surveys, and supervised environmental remediations. His scope of work consists of environmental investigation and reporting, field inspections, soil and groundwater sampling, supervising the remediation of contaminated sites, and ensuring compliance to applicable regulatory standards.

EDUCATION

Bachelor of Applied Science in Civil Engineering,
2019
Queen's University
Kingston, Ontario

Civil Engineering Technology, Advanced Diploma,
2016
St. Lawrence College
Kingston, Ontario

LICENCE/ PROFESSIONAL AFFILIATIONS

EIT Eligibility

YEARS OF EXPERIENCE

With Paterson: 3

OFFICE LOCATION

9 Auriga Drive, Ottawa, Ontario, K2E 7T9

SELECT LIST OF PROJECTS

- 930 Carling Avenue – Former Sir John Carling Building - Supplemental Phase II ESA and Site Remediation
- 52 Scarsdale Road, Toronto, ON – Supplemental Phase II ESA and Site Remediation
- 2070 Scott Street, Ottawa, ON – Site Remediation
- 667 Bank Street, Ottawa, ON – Phase I and II ESA (Enhanced Investigation Property)
- 359 Kent Street, 436 and 444 McLaren Street, Ottawa, ON – Phase I and II ESA for RSC Submission
- 720 March Road, Ottawa, ON - Phase I and II ESA Update
- Caivan Communities: The Ridge, Ottawa, ON - Environmental and Geotechnical Subsurface Investigations, Soil and Groundwater Sampling, and Remediation Supervision.
- Taggart Residential Development, Gardiners Road, Kingston, ON – Phase II ESA Supervision, Groundwater Monitoring, Remediation Supervision
- 668 Regional Road 17, Clarington, ON – Geotechnical Investigation
- Excess Soil Sampling and Testing – Various Sites, Ottawa Area
- Slope Stability Surveys – Various Sites, Ottawa Area
- Seismic Shear-Wave Velocity Surveys – Various Sites, Ottawa
- Soil, Water, and Sediment Sampling – Various Sites

PROFESSIONAL EXPERIENCE

2019 to present, **Junior Environmental Engineer, Paterson Group, Ottawa, Ontario**

- Conduct Phase I and Phase II - Environmental Site Assessments (ESAs), Soil and Groundwater Remediation Programs and the preparation of Records of Site Condition;
- Manage excavation contractors to ensure soil quality control; daily reporting to project manager;
- Present analytical test results, interpretations, assessments, recommendation and/or conclusions in a final technical report as well as verbal and written communication with clients;
- Oversee geotechnical investigations for test pitting on numerous proposed utility installations, residential and commercial developments;
- Conduct settlement surcharge surveys, settlement plate installations, slope stability surveys, seismic shear-wave velocity surveys, topographic surveys, and geotechnical subsurface investigations, including sensitive clay deposits;
- Conduct laboratory testing program of soils and water for detail recommendations;
- Problem solving to complete analysis required within regulatory framework;
- Adapt to unforeseen on-site challenges and provide first-hand insights to help collaborate toward a solution;
- Oversee large-scale remediation projects and monitor material being excavated;
- Monitor and sample multiple groundwater wells with a high degree of precision regarding the quality and parameters of the sample;

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

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

EDUCATION

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

LICENCE/ PROFESSIONAL AFFILIATIONS

Professional Engineers of Ontario

ESA Qualified Person with MECF

Ottawa Geotechnical Group

Consulting Engineers of Ontario

YEARS OF EXPERIENCE

With Paterson: 30

OFFICE LOCATION

9 Auriga Drive
Ottawa, Ontario, K2E 7T9

SELECT LIST OF PROJECTS

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

PROFESSIONAL EXPERIENCE

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

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

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

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