



Phase One Environmental Site Assessment Report

**Existing Residential Property, 46 Stevens
Road, Bowmanville, Ontario**

Kaitlin Corporation

May 02, 2022

Executive Summary

A Phase One Environmental Site Assessment (ESA) was completed by GHD Limited (GHD) for Kaitlin Corporation (the Client) for the lands located at the municipal address of 46 Stevens Road in Bowmanville, Ontario (the Property or Site). The Property encompasses an area of 8.7 hectares (ha) (21.5 acres) and is a vacant lot formerly used for residential and agricultural purposes. The Property includes a dug well near the area of the former residential dwelling, and an agricultural field that extends north into a wooded area, including part of Bowmanville Creek. The Property was originally privately serviced for water and sewer. GHD previously completed a Phase One ESA October 2017 for due diligence and financing purposes. The surrounding area can be generally described as residential.

The Phase One ESA has been prepared to provide the Client with an assessment of areas of potential environmental concern as per Ontario Regulation 153/04, Records of Site Condition, as required by the Regional Municipality of Durham for site plan approval.

Based upon observations made during the site reconnaissance including the surrounding land uses and review of the historical documentation, some offsite and one (1) onsite potentially contaminating activity (PCA) was identified for the Property. The offsite PCA's are not deemed to present an area of potential environmental concern (APEC) for the Phase One Property. The onsite PCA was identified for the Property's historical use as an orchard prior to 1959 and the associated potential for the large-scale application of pesticides. The identified onsite PCA results in an APEC for the Property.

A Phase Two ESA is required to assess the APEC as per Ontario Regulation 153/04.

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1. Introduction

1.1 Phase One Property Information

A Phase One Environmental Site Assessment (ESA) was previously completed by GHD Limited (GHD) for Kaitlin Corporation (the Client) for the lands at the municipal address of 46 Stevens Road in Bowmanville, Ontario (the Property). GHD previously completed an ESA in 2017 titled “Environmental Site Assessment Report – Existing Residential Property, 46 Stevens Road, Bowmanville, Ontario, Project No. 11148515” previously completed by GHD Limited. The Property encompasses an area of approximately 8.7 ha (21.5 acres).

The Property is currently vacant of any structures, it is GHD’s understanding that the former residence has been demolished since the 2017 report. The property is generally grassed lands, an agricultural field and a wooded area including Bowmanville Creek. The Property was previously serviced privately for water, by a dug well, and sewage with a septic system. It is GHD’s understanding that the proposed development will be municipally serviced for water and sewage.

The location is illustrated on the **Vicinity Plan, Figure 1**. A more detailed depiction of the Property with respect to surrounding roads and watercourses is illustrated on the **Property Plan, Figure 2**. The **Plot Plan** is presented on **Figure 3** using a conceptual site plan provided to GHD by the Client. The **Phase One Conceptual Site Model (CSM) - Area** showing the Property and Phase One Study Area (surrounding lands within 250 m) and potentially contaminating activities (PCAs) is provided as **Figure 4**. A **CSM - Property** showing any resulting areas of potential environmental concern (APECs) for the Property is provided as **Figure 5**. The Property, PCAs and surrounding areas are discussed in detail in the following sections.

The Phase One ESA has been prepared to provide the Client with an assessment of areas of potential environmental concern as per Ontario Regulation 153/04, Records of Site Condition, as required by the Regional Municipality of Durham for site plan approval.

2. Scope of Investigation

The Phase One ESA was prepared by a Qualified Person, as defined by the Environmental Protection Act, using Ontario Regulation (O. Reg.) 153/04 (as periodically amended), Schedule D for Phase One Environmental Site Assessments under Part XV.1 of the Act.

The purpose of the Phase One ESA was to assess and document the current and historical environmental conditions and assess the presence of areas of potential environmental concern. To achieve the aforementioned purpose, the scope of work for this ESA included the following elements.

1. Compiled and reviewed available background information relating to past land use. Sources of information included mapping, plans, reports, aerial photography and land registry records.
2. Reviewed information available through the EcoLog Environmental Risk Information Service (ERIS). An ERIS report provides information associated with the Property through a comprehensive search of federal, provincial, and private source data.
3. Carried out an inventory request of the Ministry of the Environment, Conservation and Parks (MECP) and Technical Standards and Safety Authority (TSSA) files to search for prior reported issues on the Property including incidents such as spills.

4. Conducted a walkover inspection to evaluate ground surface features and nearby land use.
5. Conducted an interview with the Property owner.
6. Analyzed data obtained from the investigation and presented the findings in this written report with appropriate conclusions and recommendations. The conclusions presented in this report are professional opinions based on the data described herein.

3. Records Review

3.1 General

A historical records review was completed of readily available records which included a request of the following:

- ERIS report;
- Freedom of Information (FOI) request submitted to the MECP;
- TSSA database;
- Historical aerial photography;
- Chain of Title search based on the legal description; and
- Other environmental and historical reports.

The historical records reviewed are provided in Appendix A.

3.1.1 Phase One Study Area Determination

The requirements for the Phase One Study, under O. Reg. 153/04, are to obtain and review records to evaluate potential environmental issues that may exist and to interpret any PCAs that may result in APECs. Lands within 250 m (i.e. the Phase One Study Area), as shown on the CSM, **Figure 4** were reviewed and evaluated. In our opinion, no PCAs were identified greater than 250 m that should be included in the CSM or warrant additional environmental evaluation.

The adjacent land use at the time of the site reconnaissance included Bowmanville Creek, Stevens Road and residential lots.

3.1.2 First Developed Use Determination

Based on information compiled, the Property was first developed for agricultural use by 1927.

3.1.3 Fire Insurance Plans

There were no fire insurance plans (FIPs) of the Site or surrounding area available for review.

3.1.4 Chain of Title

The following information was obtained from the land registry office. The current owner is listed as VAD Retail Limited. Geographically, the Property is designated as PCL 13-2 SEC CON. 1 (BOWMANVILLE); PT RDAL BTN CONS 1 & 2 TOWNSHIP OF DARLINGTON AS STOPPED UP AND CLOSED BY BLAW N124565 AND PT LT 13 CON 1 AND PT LTS 13 & 14 CON 2 TOWNSHIP OF DARLINGTON, PTD 1, 2, 3, 4, 5, 6, 7 & 8 10R3926 ; CLARINGOTN, S/T EASE IN FAVOUR OF ENBRIDGE GAS DISTRIBUTION INC. OVER PTS 1, 2 & 3, PL

40R22556 AS IN DR254984 and encompasses approximately 8.7 ha (21.5 acres). There were no environmental concerns registered on title for the parcel. The Property Identifier Number (PIN) is 26614-0036 (LT).

3.1.5 Environmental Reports

A Phase One ESA for the Property titled “Environmental Site Assessment Report – Existing Residential Property, 46 Stevens Road, Bowmanville, Ontario, Project No. 11148515” was completed by GHD Ltd. in October 2017 and was reviewed for this report. The report was conducted at the request of Kaitlin Corporation to provide the Client with a professional opinion of the potential for materially significant environmental liabilities as part of the due diligence process for financing purposes. Based on the information compiled and research conducted it was concluded that the Property was of low environmental concern and no further work, in the form of a Phase Two ESA, was required at the time. Environmental Source Information

Inquiries were made to obtain a number of documents regarding environmental information including information provided by maps, regulatory agencies (MECP, TSSA, etc.), local agencies (municipal data, local library etc.) and environmental search information on file. The review of these documents is discussed in the following subsections.

3.1.6 Mapping

Mapping and figures are presented within the Enclosures of this report. The location is presented on the National Topographic System Mapping from Centre for Topographic Information, Natural Resources Canada Map 30 M/15, **Vicinity Plan, Figure 1**. The location with respect to adjacent roadways and surrounding land uses is presented on the Ministry of Natural Resources and Forestry (MNR) map and is shown on the **Property Plan, Figure 2**.

The **Plot Plan, Figure 3** illustrates the Property through a conceptual site plan of the proposed development.

The **Phase One CSM – Study Area, Figure 4** illustrates the Study Area (lands within 250 m) and identifies any PCAs in this area. The **Phase One CSM – Property** is presented as **Figure 5** and illustrates any resulting APECs warranting further investigation.

3.1.7 Zoning

According to information available from the Municipality of Clarington Zoning By-Law 84-63 Schedule 5A, the Property is zoned as Agricultural (A). Adjacent lands are generally zoned as Residential Zone (RE and RE-5) and Environmental Protection Zone (EP). Land east of Bowmanville Creek is zoned as Industrial (M) and Commercial (C1-12). The zoning should be verified with the Municipality of Clarington. There were no PCAs identified from the zoning.

3.1.8 Ontario Ministry of Environment, Conservation and Parks

A request under the FOI was made to the Ministry of Environment and Climate Change (MOECC, now the Ministry of Environment, Conservation and Parks) in regard to potential environmental concerns at the time of the October 2017 Phase One ESA report. A response letter dated October 4, 2017 indicated that no records were located for the property. A copy of the response letter is included in Appendix A.

3.1.9 Technical Standards and Safety Authority

A search request was made to the TSSA in regard to potential environmental concerns for this ESA. The response letter, dated April 19 2022, indicated that the TSSA has no records of any fuel storage tanks or spills on the property. A copy of this letter is included in Appendix A.

3.1.10 EcoLog Environmental Risk Information System

An ERIS report was requested for the Property. The ERIS report is based on several databases including, but not limited to, the National PCB Inventory, National Pollutant Release Inventory, Occurrence Reporting Information

System, Retail Fuel Storage Tanks, Private Fuel Storage Tanks, Waste Disposal Sites Inventory and Certificates of Approval. A copy of the ERIS report is provided in Appendix A.

No records were documented for the Property.

3.2 Physical Setting Sources

3.2.1 Aerial Photographs

Digital aerial photographs were obtained for the years 1927, 1959, 1966 and 1988. Recent aerial photographs from Google Earth were also reviewed from 2005 and 2017.

The 1927 aerial shows the Property as having a structure on site. The Property is developed agriculturally as an orchard and Bowmanville Creek appears is observed to the east. A rail line is visible to the south. The 1959 photo shows the Property no longer being used as an orchard the former residential building along with an access road and driveway is observed on the Property.

The 1966 air photo shows little change from the 1959 photo. Surrounding land use is primarily agricultural. Residential development around the Property is confirmed in the 1988 aerial photo. The Property, as well as surrounding properties, show little change from 1988 onwards.

The Google Earth images from 2005 and 2017 illustrates the Property as was observed during the previous Phase One ESA. It is noted that the structures observed in the most recent aerial photo are no longer present on the Site.

It is the opinion of GHD that the presence of historical orchards and associated application of pesticides are considered a PCA. Copies of the digital photographs are included in Appendix B.

3.2.2 Topography, Hydrogeology, & Geology

Topography: As depicted by the **Vicinity Plan** and observed during the site reconnaissance, the topography of the Property can be described as gently rolling, with slopes down to Bowmanville Creek. The surrounding general topographic relief is southward toward Lake Ontario.

Hydrogeology: Based on topographic relief, it is inferred that local groundwater flow direction is expected to be east towards Bowmanville Creek. The Creek path will influence local flow direction.

Hydrology: Surface water will flow in accordance with local topography eastwards toward Bowmanville Creek.

Geology: The Property is situated in the physiographic region known as the Iroquois Plain (Chapman and Putnam, 1984) and the localized terrain is dominated by clayey till plains. The Ontario Geological Survey information indicates that the Quaternary geology for the area is glaciofluvial ice-contact deposits. The surrounding areas are comprised of clayey till. Bedrock in the area is expected to be limestone.

3.2.3 Fill Materials

The lands have historically been used for agricultural and residential purposes. No evidence of deleterious fill was observed during site reconnaissance.

3.2.4 Water Bodies and Areas of Natural Significance

Approximately 360 meters of Bowmanville Creek flows through the Phase One Study area towards Lake Ontario.

3.2.5 Well Records

A dug well was observed on the Property. Measurements taken at the time of the 2017 Phase One ESA report show that the well had a depth of approximately 12.8 meters, and the water level was measured at 4.03 meters below

existing ground surface. The well on Site was also observed during the 2022 site reconnaissance. It is recommended that the well be decommissioned in accordance with Ontario Regulation 409 – Wells.

3.3 Site Operations Records

Site operations records are not applicable for residential properties.

4. Interview

An interview was conducted by GHD with a representative of the Client. The Client was not aware of any potential environmental concerns regarding historical or current activities associated with the Property. To the best of their knowledge, no spills, releases, or environmental related impacts have occurred on the Property. Based upon that interview, no additional PCAs were identified.

5. Site Reconnaissance

5.1 General Requirements

In accordance with the Regulation, a site reconnaissance was completed of the Property. Adjacent and surrounding sites were also generally observed from public access ways. Property photographs are provided in Appendix C and document the Property and surrounding area. The assessor qualifications are provided in Appendix D.

5.2 Specific Observations at the Phase One Property

The Site is located at the east end of Stevens Road. A partially overgrown driveway access from Stevens Road leads to where the former residential building was located. The Property is generally unmanicured grass areas surrounding by an agricultural field. Towards the north end of the Property the lands are wooded surrounding Bowmanville Creek. The creek bed is approximately 2 m below the grade of the rest of the Site. A former dug well was observed on the Property. No indications of any spills, deleterious fill material, or underground storage tanks were observed.

The immediately surrounding area can be generally described as residential. It is noted by GHD that a former industrial area is located east of the Property, across Bowmanville Creek. Activities at this property included a bulk fuel plant, foundry and other general industrial uses. The presence of the former industrial area is considered to be a PCA.

No other PCAs for the Property or surrounding area were identified from the site reconnaissance activities.

5.3 Enhanced Investigation Property

A Property is considered to be an Enhanced Investigation if the Property is used, or has ever been used, in whole or in part for an industrial use or for any of the following commercial uses: (i) as a garage; (ii) as a bulk liquid dispensing facility, including a gasoline outlet; or (iii) for the operation of dry-cleaning equipment. Based on the historical information obtained for the Phase One ESA, this Property is not considered to be an enhanced investigation property.

5.4 Written Description of Investigation

The site reconnaissance included an inspection to confirm the current conditions and identify any current land uses which may have or may cause actual and / or potential environmental impacts. Adjoining and neighbouring sites were observed from public access ways.

6. Review and Evaluation of Information

6.1 Current and Past Uses

Based upon the information obtained through the records review, the site reconnaissance and interview, the Property has historically been used for agricultural and rural residential purposes. In accordance with the Regulation, a table of current and past uses of the Property is required. Based on the information provided and reviewed, the following table is presented:

Table 1 Current and Past Uses

Year	Name of Owner	Description of Property Use	Property Use ¹	Other Observations from Aerial Photos, FIPs, etc.
2004 – Present	VAD Retail Limited	Vacant/unoccupied residential	Residential use	Land registry confirmed the current owners Site reconnaissance confirmed site layout and surrounding land use Aerial photographs from 2005 and 2017 show the Property as having a residential structure. Site reconnaissance confirm the former buildings have been demolished.
1982 – 2004	Stevens Family	Occupied residential dwelling, agricultural lands	Residential/Agricultural	Historical investigations confirmed former owners Aerial photograph from 1988 show the Property as in use for agricultural purposes. No new PCAs identified.
1945 – 1982	Bartlett Family	Occupied residential dwelling, agricultural lands	Agricultural or other	Historical investigations confirmed the former owner Aerials from 1959 & 1966 confirmed no orchard. No new PCAs identified.
Prior to 1945	Horsey Family	Occupied residential dwelling, agricultural lands	Agricultural or other	Historical investigations confirmed the former owner. Aerial photographs from 1927 confirm use as an orchard and shows an existing rail line. PCA identified from land use as an orchard. Not considered an APEC.

Notes: Dates and uses are estimated based on information obtained and reviewed.

(1) – the following types of property uses were considered: Agriculture or other; Commercial; Community; Industrial; Institutional; Parkland; and, Residential use.

6.2 Potentially Contaminating Activities

The MECP provides a list of PCAs in Schedule D of O. Reg. 153 (as amended by O. Reg. 511/09, O. Reg. 245/10 and O. Reg. 179/11). The following is a list and description of PCAs identified in the Phase One Study Area based on the MECP list. The PCAs are illustrated on the CSM Study Area, Figure 4 and identified as follows:

1. Onsite PCA #40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications. This PCA is identified for the historical Property use as an orchard. It is the opinion of GHD that this PCA will require further investigation in the form of a Phase Two ESA.
2. Offsite PCA #46 – Rail Yards, Tracks and Spurs. This PCA is identified for the presence of a rail line south of the Property. It is the opinion of GHD that the rail line is located downgradient to the Property and is located a significant distance away that no environmental impacts are anticipated.
3. Offsite PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks. This PCA is identified for the presence of a former bulk fuel plant located at an industrial lot east of the Property. Bowmanville Creek lies between the Property and the former bulk fuel plant. It is the opinion of GHD that any potential environmental impacts would not reach the property due to the presence of the creek.
4. Offsite PCA #34 – Metal Fabrication. This PCA is identified for the presence of a metal foundry to the East of the Property. Bowmanville Creek lies between the Property and the foundry. It is the opinion of GHD that any potential environmental impacts would not reach the property due to the presence of the creek.

6.3 Areas of Potential Environmental Concern

As outlined in **Section 6.2**, one onsite PCA was identified for the Phase One Property. Previous land use as an orchard was confirmed by the 1927 aerial photography. Based on the presence of the former orchard and the potential associated bulk application of pesticides, it is the opinion of GHD that this PCA has resulted in an APEC which requires further investigation.

6.4 Phase One Conceptual Site Model

The Phase One Conceptual Site Models are provided as **Figures 4 and 5** within the Enclosures section. The CSM provides a basic overview, approximate locations of corridors, basic geological and hydrogeological information and any other pertinent data that may affect the Phase One ESA of Schedule D of the Regulation. The CSM is required to contain figures, narrative descriptions, and assessments as per Subsection 16(7) of Table 1 of Schedule D (Sub-Heading (iv) in Report Section 7 of the Regulation). The following table and narrative is provided in accordance with O. Reg. 153 (as amended).

Table 2 Phase One Conceptual Site Model

Provide one or more figures of the Phase One Study area that,	Show any existing buildings and structures	There are no structures on the Property are shown on the CSM – Property, Figure 5.
	Identify and locate water bodies located in whole or in part on the Phase One Study Area	Bowmanville Creek is identified within the limits of the Property, as Shown on the CSM – Property, Figure 5.
	Identify and locate any areas of natural significance located in or in part on the Phase One Study Area	An area surrounding Bowmanville Creek is identified as being an Environmental Protection zone, as shown on the CSM – Property, Figure 4.
	Locate any drinking water wells at the Phase One Property	There is a dug well on the Property as identified on the CSM – Property Figure 5.
	Show roads, including names within the Phase One Study Area	Roads with names are provided on the Property Plan, Figure 2.
	Show uses of properties adjacent to the Phase One Property	Adjacent site uses are shown on the Property Plan, Figure 2. The surrounding area is residentially developed.
	Identify and locate where any potentially contaminating activity has occurred, and show tanks in such areas, and	PCAs are identified and shown on the CSM – Study Area, Figure 4.
	Identify and locate any APECs	An APEC has been identified on the Property as shown on the CSM – Property, Figure 5.
Provide a description and assessment of,	Any areas where PCA on or potentially affecting the Phase One Property has occurred	A PCA has been identified on-Site associated with the former land use as an orchard.
	Any contaminants of potential concern	Contaminants of potential concern associated with the APEC include organochlorine pesticides
	The potential for underground utilities, if any present, to affect distribution and transport	The potential for underground utilities to affect distribution and transport is not deemed to be a possibility as utilities are unlikely to be present within the area of the agricultural field where the former orchard was identified.
	Available regional or site specific geological and hydrogeological information, and	The Property is situated in the physiographic region known as the Iroquois Plain (Chapman and Putnam, 1984) and the surrounding terrain is dominated by clay plains. The Ontario Geological Survey information indicates that the Quaternary geology for the area is glaciofluvial ice-contact deposits. The surrounding areas are comprised of clayey till. Bedrock in the area is expected to be limestone.
	How any uncertainty or absence of information obtained in each of the components of the Phase One ESA could affect the validity of the model.	It is GHD's opinion that the degree of uncertainty is limited, and any ambiguity will be confirmed with the completion of a Phase Two ESA.

7. Conclusions and Recommendations

7.1 Phase Two Environmental Site Assessment Required?

The Phase One ESA represents a "snapshot" in time. GHD cannot guarantee the reliability of information provided by others. However, whenever possible, verification of authenticity was attempted. In conclusion, a Phase Two ESA is required to assess the APEC identified related to the onsite PCA of the potential for historical large-scale application of pesticides associated with orchards.

7.2 Phase One Environmental Site Assessment Alone

Based upon observations made during the site reconnaissance, including the surrounding land uses and review of historical documentation, an APEC is present on the Phase One Property and completion of a Phase Two ESA is required as per Ontario Regulation 153/04.

7.3 Signatures

The following signatures are provided of GHD staff that prepared and conducted the Phase One ESA. Mr. Wesley Moore, a Qualified Person within the meaning of the Environmental Protection Act and associated Regulation 153/04, has provided his opinion based on the information provided in this report. Following the References section of this report is the Statement of Limitations. These limitations are an integral part of this report. Should questions arise regarding any aspect of our report, please contact the undersigned or our office.

Sincerely,

GHD



Wesley Moore, P.Eng.
Project Manager



Steve Gagné, H.B.Sc.
Associate, Project Director

8. References

- Canadian Standards Association (CSA) Z768-01, "Phase I Environmental Site Assessment", reaffirmed 2012.
- Chapman and Putnam, 1966. The Physiography of Southern Ontario, 2nd Edition. University of Toronto Press.
- Chapman and Putnam, 1984. The Physiography of Southern Ontario, 3rd Edition. Ministry of Natural Resources.
- Environmental Protection Act, R.S.O. 1990, and associated regulations.
- Occupational Health and Safety Act, R.S.O. 1990, and associated regulations.
- Ontario Ministry of the Environment, 2011. Ontario Regulation 153/04: Records of Site Condition – Part XV.1 of the Act (Environmental Protection Act 153/04, as amended).
- GHD, 2017, "Phase One Environmental Site Assessment Report, Existing Residential Property, 46 Stevens Road, Bowmanville, Ontario"

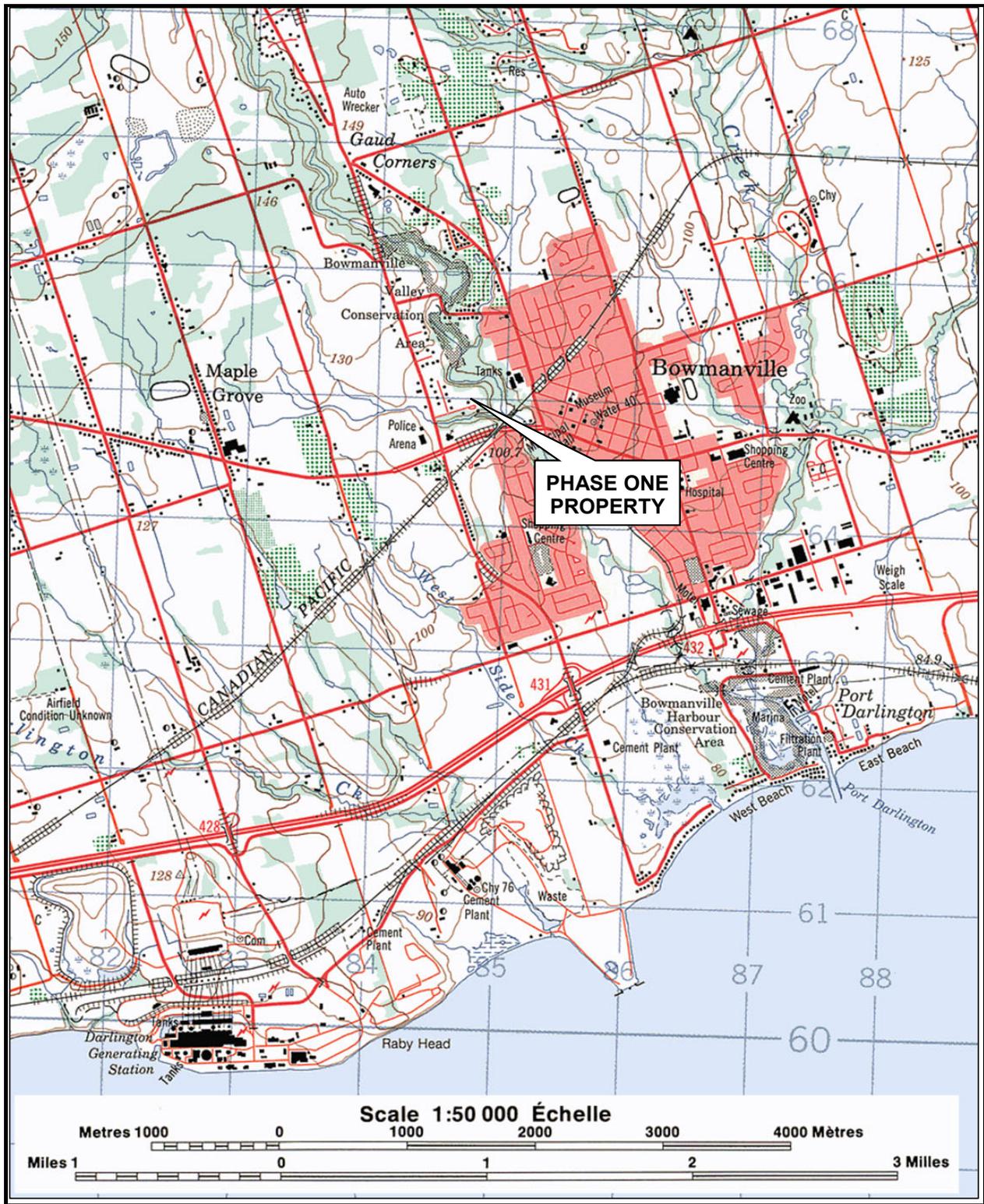
9. Statement of Limitations

This report is intended solely for Kaitlin Corporation in assessing the environmental concerns of lands located at the municipal address of 46 Stevens Road in Bowmanville, Ontario and is prohibited for use by others without GHD's prior written consent. This report is considered GHD's professional work product and shall remain the sole property of GHD. Any unauthorized reuse, redistribution of or reliance on the report shall be at the Client and recipient's sole risk, without liability to GHD. Client shall defend, indemnify and hold GHD harmless from any liability arising from or related to Client's unauthorized distribution of the report. No portion of this report may be used as a separate entity; it is to be read in its entirety and shall include all supporting drawings and appendices.

The conclusions and recommendations made in this report are in accordance with our present understanding of the project, the current site use, surface and subsurface conditions, and are based on available information, a site reconnaissance on the date set out in the report, records review and interviews with appropriate people and the work scope approved by the Client and described in the report and should not be construed as a legal opinion. Therefore, our liability is limited to interpreting accurately the information made available to us and assessing the property information investigated during this Phase One ESA. The services were performed in a manner consistent with that level of care and skill ordinarily exercised by members of environmental engineering professions currently practicing under similar conditions in the same locality. No other representations, and no warranties or representations of any kind, either expressed or implied, are made. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

If conditions at the Property change or if any additional information becomes available at a future date, modifications to the findings, conclusions and recommendations in this report may be necessary.

Figures



Base map compiled from Energy, Mines and Resources Canada Map 30 M/15 published 1994. Information current as of 1989.

Scale:
1:50000
Coordinate System
NAD 1983 UTM
Zone 17

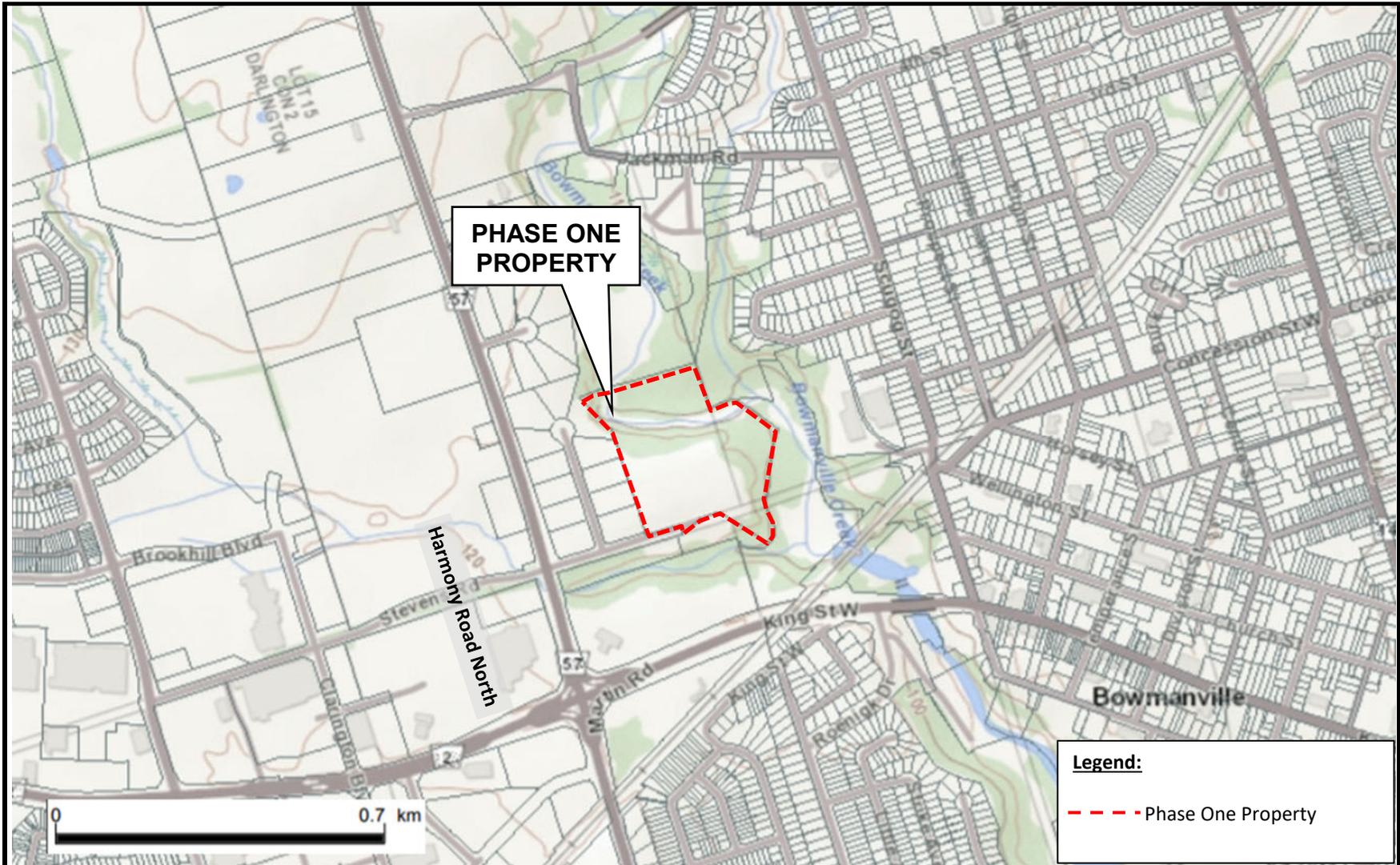


Kaitlin Corporation
46 Stevens Road, Bowmanville, ON
Phase One ESA

12579364-01
April 2022

Vicinity Plan

FIGURE 1



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2019.

Scale:
 Refer to Scale Bar
 Coordinate System:
 NAD 1983 UTM Zone 17



Kaitlin Corporation
 46 Stevens Road, Bowmanville, ON
 Phase One ESA

12579364-01
 April 2022

Property Plan

FIGURE 2



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2019.

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

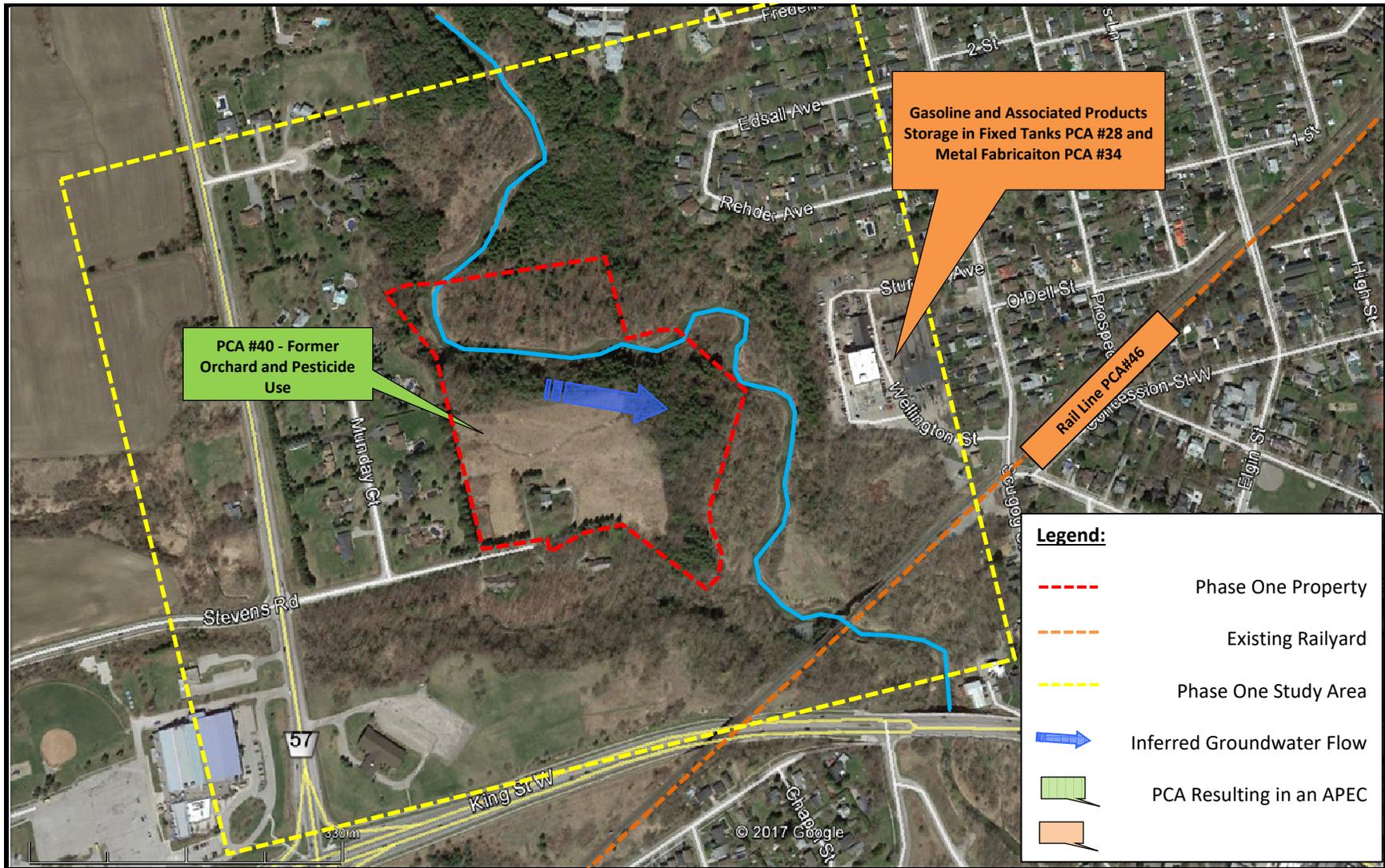


Kaitlin Corporation
46 Stevens Road, Bowmanville, ON
Phase One ESA

12579364-01
April 2022

Plot Plan

FIGURE 3



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2019.

Scale:
 Refer to Scale Bar
 Coordinate System:
 NAD 1983 UTM Zone 17



Kaitlin Corporation
 46 Stevens Road, Bowmanville, ON
 Phase One ESA

12579364-01
 April 2022

CSM - Study Area

FIGURE 4



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2019.

Scale:
Coordinate System
NAD 1983 UTM
Zone 17



Kaitlin Corporation
46 Stevens Road, Bowmanville, ON
Phase One ESA

12579364-01
April 2022

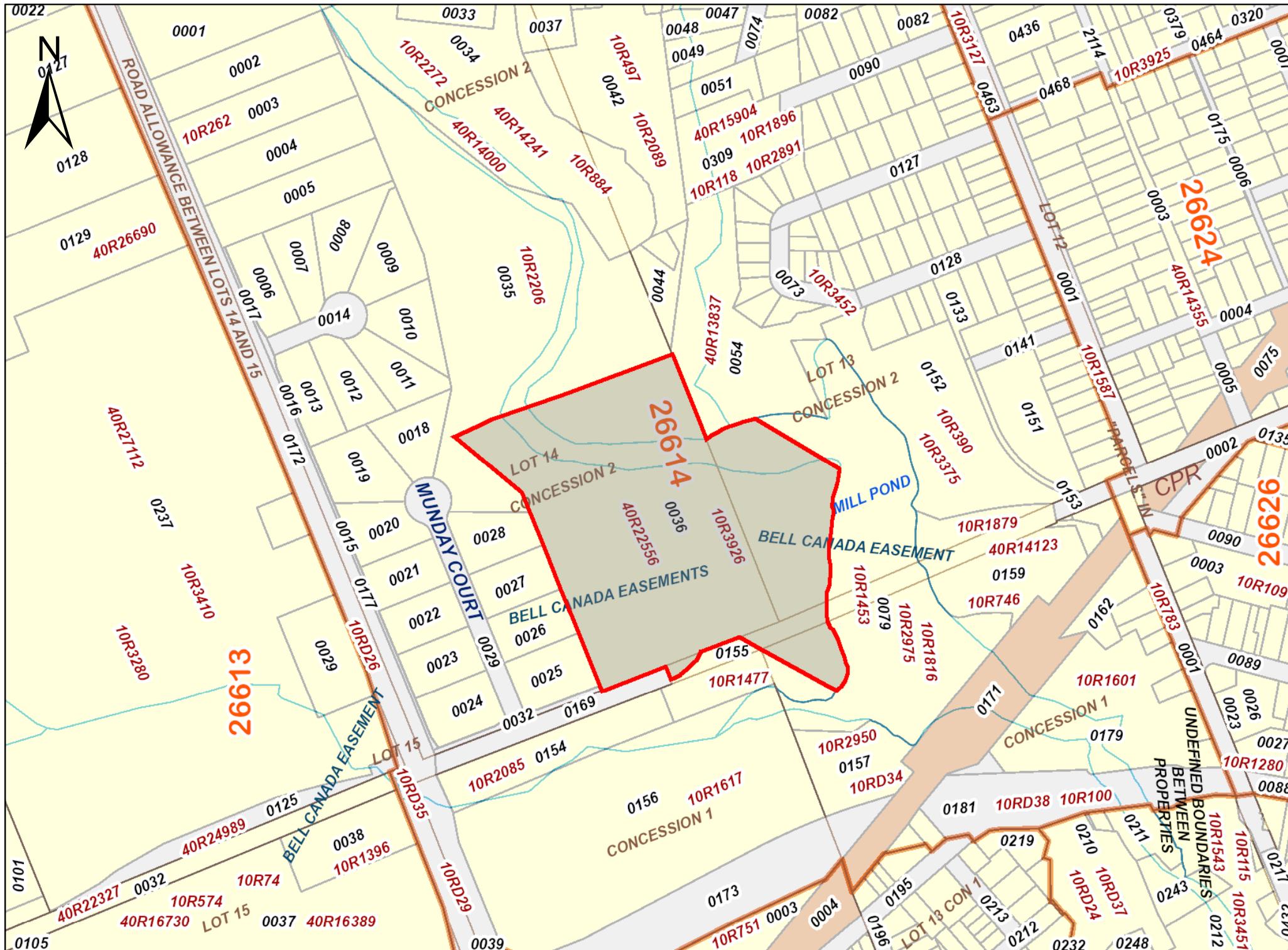
CSM - Property

FIGURE 5

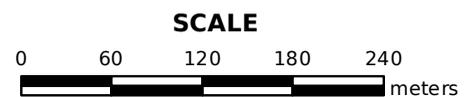
Appendices

Appendix A

Historical Records



PRINTED ON 29 SEP, 2017 AT 10:31:28
FOR JOSHUA BIGIONI



PROPERTY INDEX MAP
DURHAM(No. 40)

LEGEND

FREEHOLD PROPERTY	
LEASEHOLD PROPERTY	
LIMITED INTEREST PROPERTY	
CONDOMINIUM PROPERTY	
RETIRED PIN (MAP UPDATE PENDING)	
PROPERTY NUMBER	0449
BLOCK NUMBER	08050
GEOGRAPHIC FABRIC	
EASEMENT	

THIS IS NOT A PLAN OF SURVEY

NOTES

REVIEW THE TITLE RECORDS FOR COMPLETE PROPERTY INFORMATION AS THIS MAP MAY NOT REFLECT RECENT REGISTRATIONS

THIS MAP WAS COMPILED FROM PLANS AND DOCUMENTS RECORDED IN THE LAND REGISTRATION SYSTEM AND HAS BEEN PREPARED FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED



LAND
REGISTRY
OFFICE #40

26614-0036 (LT)

* CERTIFIED IN ACCORDANCE WITH THE LAND TITLES ACT * SUBJECT TO RESERVATIONS IN CROWN GRANT *

PROPERTY DESCRIPTION: PCL 13-2 SEC CON. 1 (BOWMANVILLE); PT RDAL BTN CONS 1 & 2 TOWNSHIP OF DARLINGTON AS STOPPED UP AND CLOSED BY BYLAW N124565 AND PT LT 13 CON 1 AND PT LTS 13 & 14 CON 2 TOWNSHIP OF DARLINGTON, PTS 1, 2, 3, 4, 5, 6, 7 & 8 10R3926 ; CLARINGTON, S/T EASE IN FAVOUR OF ENBRIDGE GAS DISTRIBUTION INC., OVER PTS 1, 2 & 3, PL 40R22556 AS IN DR254984.

PROPERTY REMARKS:

ESTATE/QUALIFIER:
FEE SIMPLE
ABSOLUTE

RECENTLY:
FIRST CONVERSION FROM BOOK

PIN CREATION DATE:
1998/08/10

OWNERS' NAMES
VAD RETAIL LTD.

CAPACITY SHARE
BENO

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/CHKD
<p>**EFFECTIVE 2000/07/29 THE NOTATION OF THE "BLOCK IMPLEMENTATION DATE" OF 1998/08/10 ON THIS PIN**</p> <p>**WAS REPLACED WITH THE "PIN CREATION DATE" OF 1998/08/10**</p> <p>** PRINTOUT INCLUDES ALL DOCUMENT TYPES AND DELETED INSTRUMENTS SINCE 1998/08/07 **</p>						
N142223	1988/05/18	CHARGE		*** COMPLETELY DELETED ***	THE ROYAL BANK OF CANADA	
10R3926	1991/02/14	PLAN REFERENCE				C
LT662955	1993/12/06	TRANSFER		*** COMPLETELY DELETED ***	STEVENS, LENA JEAN STEVENS, ROBERT LOUIS	
DR247266	2004/01/27	DISCH OF CHARGE		*** COMPLETELY DELETED *** THE ROYAL BANK OF CANADA		
REMARKS: RE: N142223						
40R22556	2004/02/19	PLAN REFERENCE				C
DR254984	2004/02/26	TRANSFER EASEMENT	\$100	STEVENS, LENA JEAN STEVENS, ROBERT LOUIS	ENBRIDGE GAS DISTRIBUTION INC.	C
DR304941	2004/08/04	TRANSFER	\$1,100,000	STEVENS, LENA JEAN STEVENS, ROBERT LOUIS	VAD RETAIL LTD.	C
REMARKS: PLANNING ACT STATEMENTS						
DR304942	2004/08/04	CHARGE	\$845,000	VAD RETAIL LTD.	STEVENS, ROBERT LOUIS STEVENS, LENA JEAN	C

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NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

Ministry of the Environment
and Climate Change

Freedom of Information and
Protection of Privacy Office

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

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

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

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



October 4, 2017

Joshua Bigioni
GHD
1801 Wentworth St, Units 10 and 11
Whitby, ON L1N 8R6

Dear Joshua Bigioni:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2017-06806, Your Reference 11148515-01

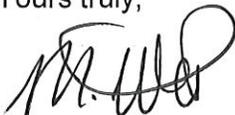
This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 46 Stevens Rd, Bowmanville.

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

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

If you have any questions regarding this matter, please contact Moliann Weir at Moliann.Weir4@ontario.ca.

Yours truly,

For 
Janet Dadufalza
FOI Manager

Riley Sanford

From: Public Information Services <publicinformationservices@tssa.org>
Sent: Tuesday, April 19, 2022 5:15 PM
To: Riley Sanford
Subject: RE: GHD Peterborough - Inquiry for 46 Stevens Road in Bowmanville Ontario

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,

Thank you for your request for confirmation of public information.

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

For a further search in our archives please complete our release of public information form found at https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?_mid_=392 and email the completed form to publicinformationservices@tssa.org 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,

Sherees



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: publicinformationservices@tssa.org

www.tssa.org



From: Riley Sanford <Riley.Sanford@ghd.com>
Sent: April 19, 2022 3:16 PM
To: Public Information Services <publicinformationservices@tssa.org>
Cc: 12579364 <12579364@ghd.com>
Subject: GHD Peterborough - Inquiry for 46 Stevens Road in Bowmanville Ontario

[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.

Hello,

I am inquiring to find out if there are any records within the TSSA database regarding underground storage tanks, storage of petroleum or associated products, outstanding instructions, incident reports, fuel oil spills or contamination records associated with the following property:

46 Stevens Road in Bowmanville Ontario

Regards,
Riley Sanford
H.B.Sc., G.I.T.
Environmental Technician

GHD
Proudly employee-owned | ghd.com
32 347 Pido Road Peterborough ON K9J6X7 Canada
M +1 249 387 1687 | E riley.sanford@ghd.com

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DATABASE REPORT

Project Property: *46 Stevens Rd
46 Stevens Road
Bowmanville ON L1C 4R7*

Project No: *12579364*

Report Type: *Site Report*

Order No: *22041900136*

Requested by: *GHD Limited*

Date Completed: *April 20, 2022*

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Executive Summary

Property Information:

Project Property: 46 Stevens Rd
46 Stevens Road Bowmanville ON L1C 4R7

Project No: 12579364

Coordinates:

Latitude: 43.9148198
Longitude: -78.6994547
UTM Northing: 4,864,984.15
UTM Easting: 684,704.18
UTM Zone: 17T

Elevation: 377 FT
114.90 M

Order Information:

Order No: 22041900136
Date Requested: April 19, 2022
Requested by: GHD Limited
Report Type: Site Report

Historical/Products:

ERIS Xplorer [ERIS Xplorer](#)

Executive Summary: Report Summary

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

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

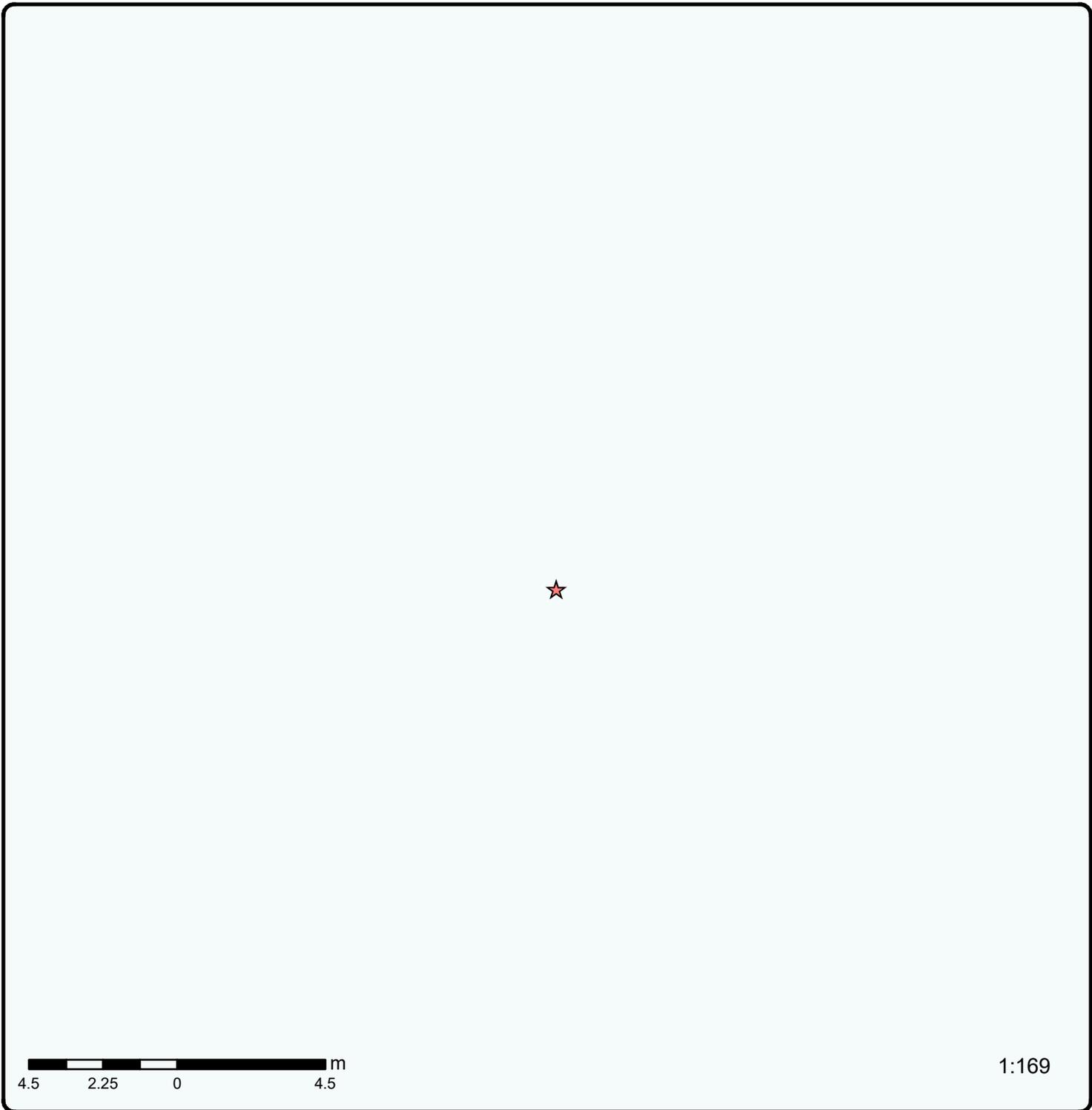
Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Page Number</i>
--------------------	-----------	--------------------------	----------------	------------------------

No records found in the selected databases for the project property.

Executive Summary: Summary By Data Source

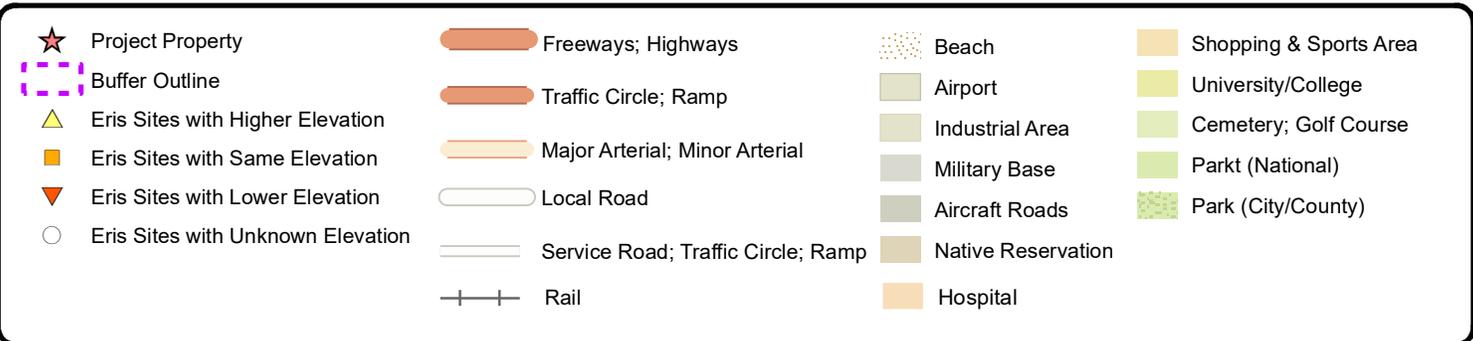
No records found in the selected databases for the project property.



Map: 0.001 Kilometer Radius

Order Number: 22041900136

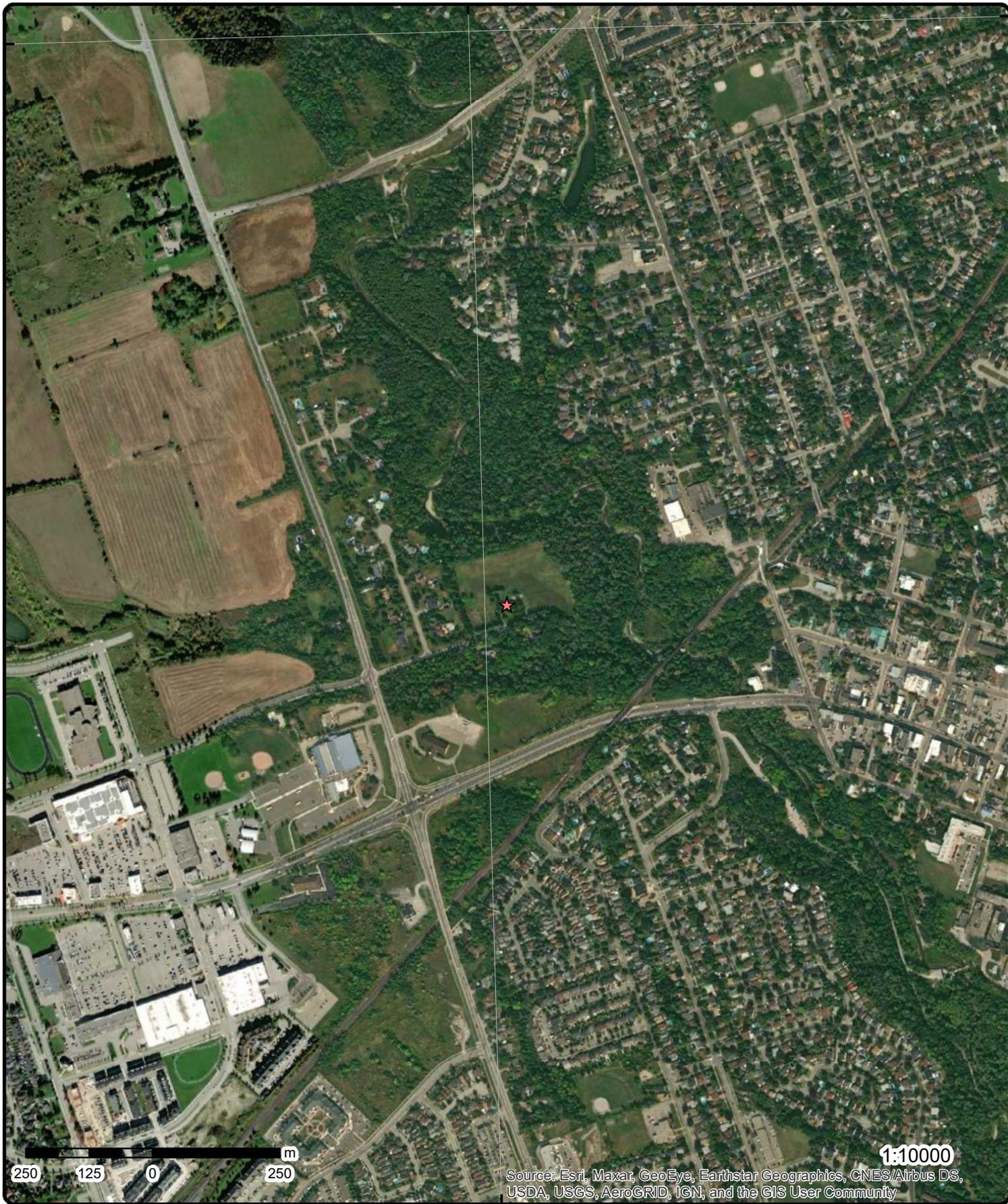
Address: 46 Stevens Road, Bowmanville, ON



78°42'W

43°55'30"N

43°55'30"N



Aerial Year: 2020

Order Number: 22041900136

Address: 46 Stevens Road, Bowmanville, ON



Source: ESRI World Imagery

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78°43'30"W

78°42'W

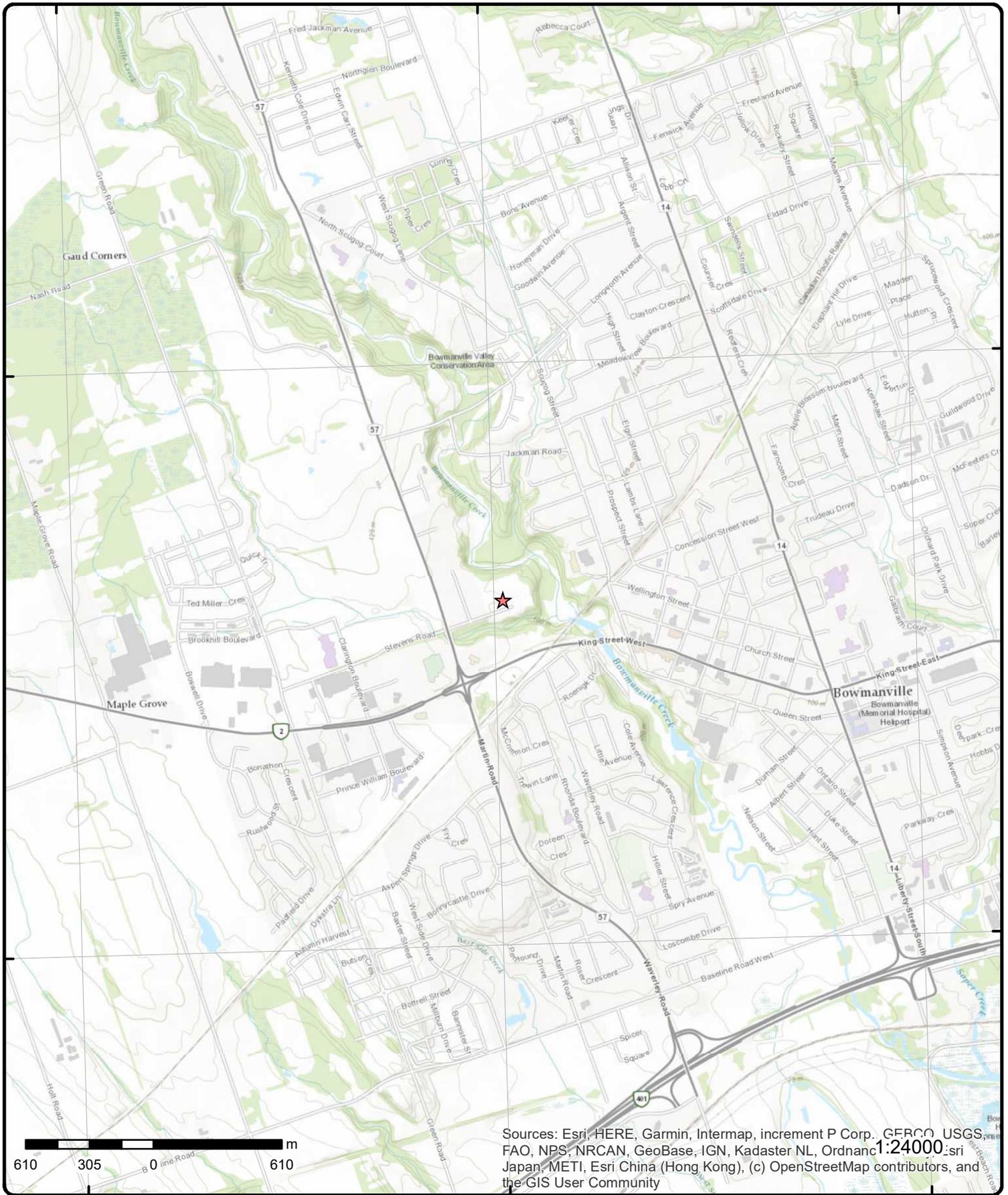
78°40'30"W

43°55'30"N

43°55'30"N

43°54'N

43°54'N



Topographic Map

Address: 46 Stevens Road, ON

Source: ESRI World Topographic Map

Order Number: 22041900136



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Detail Report

<i>Map Key</i>	<i>Number of Records</i>	<i>Elevation (m)</i>	<i>Site</i>	<i>DB</i>
----------------	--------------------------	----------------------	-------------	-----------

No records found in the selected databases for the project property.

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
----	------------------------	---------	------	--------

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

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 Nov 2021

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-Sep 30, 2021

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 2019

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: Feb 28, 2022

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-Sep 30, 2021

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 -Nov 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-Jan 2022

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, 2022

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: Feb 28, 2022

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- Feb 28, 2022

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, 2022

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- Feb 28, 2022

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-Nov 30, 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 ERIS 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 / 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, 2021

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: Feb 28, 2022

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-Nov 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: Feb 28, 2022

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-Nov 30, 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 2019

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: Feb 28, 2022

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-Feb 2022

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, 2020

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-Jun 30, 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, 2022

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-Jan 2021

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 - Feb 28, 2022

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- 28 Feb 2022

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 in an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2021

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, 2022

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, 1992-2019

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-Feb 2022

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-Sep 30, 2021

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. The Ministry of the Environment, Conservation and Parks cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: 1988-Sep 2020; Dec 2020-Mar 2021

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, 2019

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

Variations 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: Feb 28, 2022

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- Feb 28, 2022

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: Sep 30, 2021

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.

Appendix B

Aerial Photographs



PHASE ONE
PROPERTY



AERIAL PHOTOGRAPHY - 1927

Existing Residential Property

46 Stevens Road

Bowmanville, Ontario

Scale: 1:15,000



12579364-01

April 2022



PHASE ONE
PROPERTY



AERIAL PHOTOGRAPHY - 1959

Existing Residential Property

46 Stevens Road

Bowmanville, Ontario

Scale: 1:30,000



12579364-01

April 2022



PHASE ONE
PROPERTY



AERIAL PHOTOGRAPHY - 1966

Existing Residential Property

46 Stevens Road

Bowmanville, Ontario

Scale: 1:25,000



12579364-01

April 2022



PHASE ONE
PROPERTY



AERIAL PHOTOGRAPHY - 1988

Existing Residential Property

46 Stevens Road

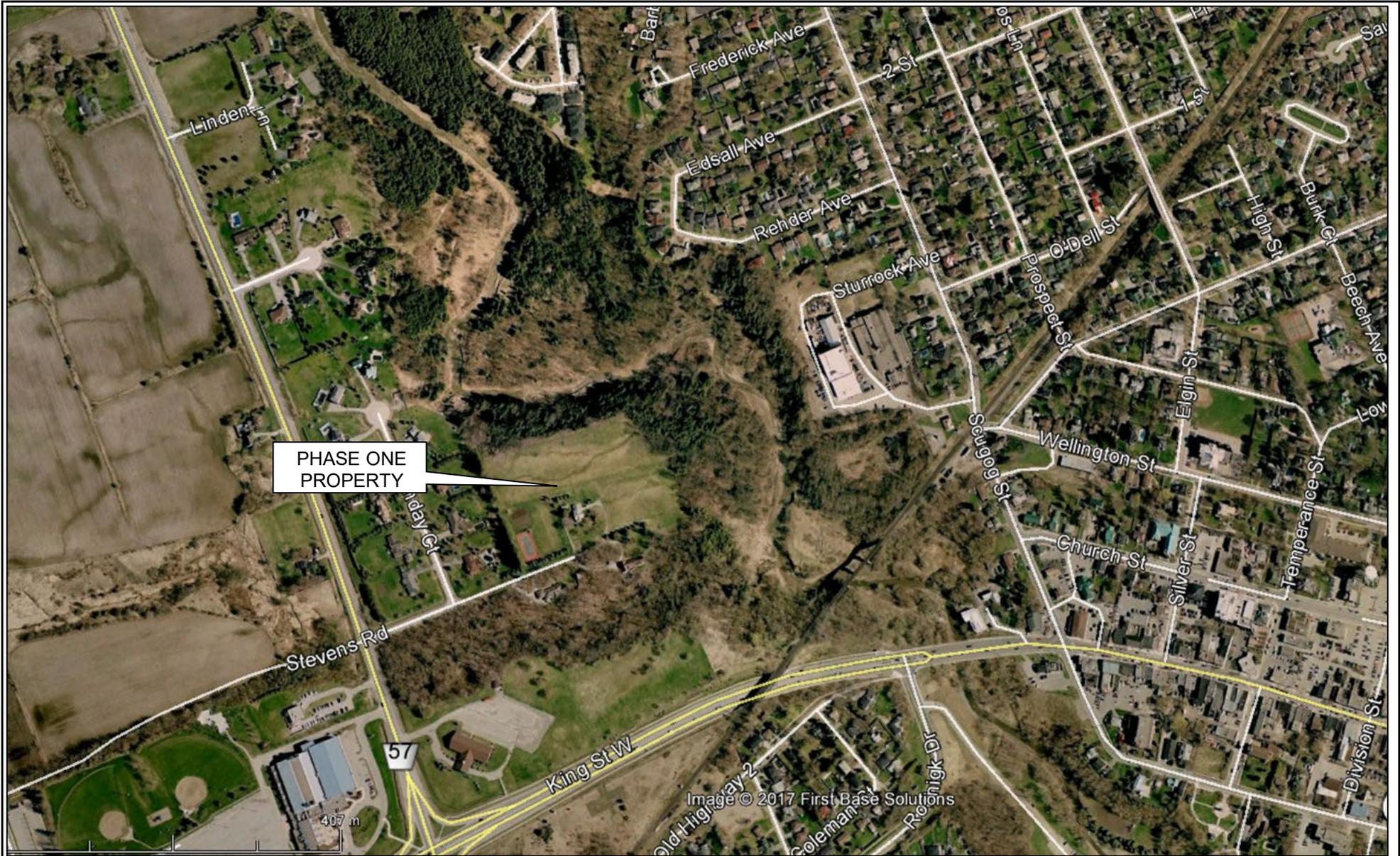
Bowmanville, Ontario

Scale: 1:50,000



12579364-01

April 2022



PHASE ONE
PROPERTY

AERIAL PHOTOGRAPHY - 2005

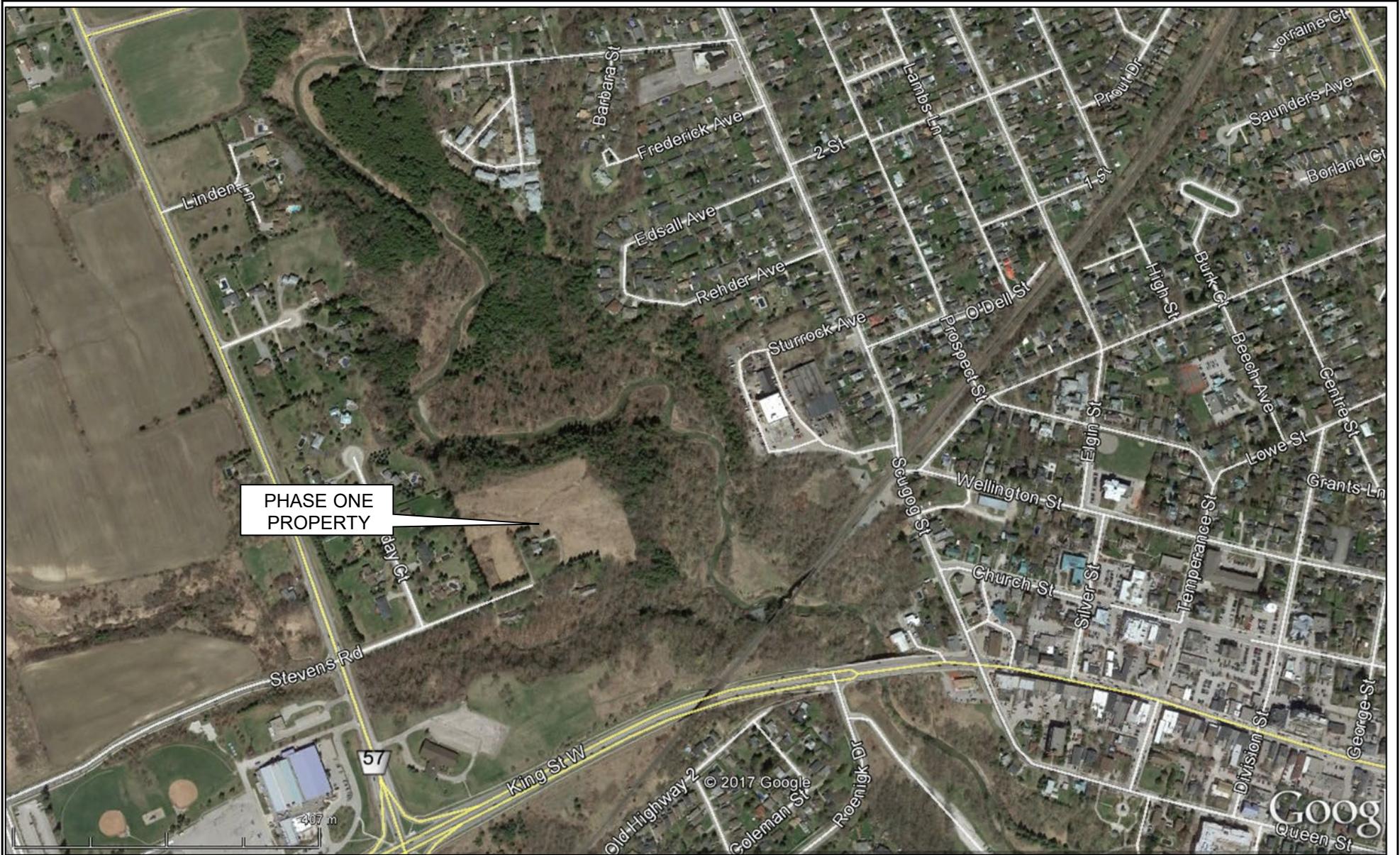
Existential Residential Property

46 Stevens Road

Bowmanville, Ontario

Scale: Refer to Scale Bar





PHASE ONE
PROPERTY

AERIAL PHOTOGRAPHY - 2017

Existential Residential Property

46 Stevens Road

Bowmanville, Ontario

Scale: Refer to Scale Bar



Appendix C

Property Photographs



Photo 1 - View of Property facing north from Stevens Road.



Photo 2 - View of former agricultural area of the Property, facing northwest.



Site Photographs



Photo 3 - View of Stevens Road from Property, facing west.



Photo 4 - View of typical residential dwelling on Stevens Road.



Site Photographs



Photo 5 - Mar. 2022, Looking south across Property from northeast corner



Photo 6 - View of former well on Property, facing southeast



Site Photographs



Photo 7 - View of agricultural area towards north end of Property, facing north.



Site Photographs

Appendix D

Qualifications of Site Assessors



Steven Gagne H.B.Sc. (ENVIRONMENTAL SCIENCE)

Associate



Location

Peterborough, Ontario, Canada

Experience

25 years

Qualifications/Accreditations

- H.B.Sc. (Environmental Science, 1996)
- OSHA 40 hour Hazardous Waste Worker, 2006 – Annual Refreshers 2007 – Present
- Standard First Aid with CPR Level A and AED, 2018
- WSIB Joint Health and Safety Management Chair and Committee Certified Member

- Training courses through employee training programs (Construction, Hazardous Waste, Subcontractor Management, WHMIS, fall protection, negotiation training, confined space training etc.)
- Workplace Safety Certification - Annual
- 2008 WSIB Basic Certification Training
- 2008 Hydro One, Grounding and Bonding
- 2007 Asbestos Control in Buildings and Industry

Relevant experience summary

Steve has over 15 years' experience in the hydrogeologic, geotechnical and environmental fields on a wide range of sites throughout Ontario. Project Management for environmental projects including design of project scopes and estimates, preparation of technical reports, proposals and budgets. Studies include annual landfill monitoring Reports, Phase I and Phase II Environmental Site Assessments (ESAs), Designated Substance Surveys, Asbestos Surveys and Hydrogeologic Assessments.

Landfill Studies and Monitoring

Project Manager/Director | Private Companies and Municipalities | Ontario, Canada | 2000 - Present

Experience has included all levels of involvement with landfill projects including data collection and annual reporting, design and operations reports, Financial Assurance, ECA consolidation, ECA amendments and compliance. Clients have included private facility and lower tier municipalities in the county of Peterborough and surrounding areas.

- Prepared annual monitoring reports for the closed and operating landfills
- Development of comprehensive trigger level and contingency plans for several sites
- Consolidated ECA's, submitted ECA Amendments along with supporting documentation including Design and Operations reports
- Completed D-4 studies to assess potential impacts to surrounding landowners

Phase One and Two Environmental Site Assessments

Project Manager/Director | Private Companies and Individuals, Financing Institutions, City of Peterborough, City of Toronto, City of Oshawa, City of Pickering, Town of Whitby, City of Kingston, City of Belleville, City of Quinte West, York Region, City of Kawartha Lakes, Renfrew County, Hastings County, Haliburton County, Peterborough County, Northumberland County, Durham Region| Ontario, Canada | 2000 – Present

Experience has included all levels of involvement with ESA projects for property owners, purchasers and financial institutions with field and agency data collection and reporting in order to meet with current legislation and guidelines outlined by the Ministry of the Environment (now O. Reg. 153) including client liason, project management, and submission of Records of Site Condition.

- Meet requirements of financial institutions for financing of industrial, commercial, residential including properties of environmental sensitivity

- Establishing environmental status of properties for owners and prospective purchasers
- Submitting Record of Site Condition to comply with proposed land use changes

Spill Response and Site Remediation

Project Manager/Director | Insurance Agencies, City of Peterborough, City of Toronto, City of Oshawa, CFB Trenton, CFB Petawawa, City of Quinte West, York Region, City of Kawartha Lakes, Renfrew County, Hastings County, Haliburton County, Peterborough County, Northumberland County, Durham Region | Ontario, Canada | 2000 - Present

Response to reported spills involving establishing remediation protocol and monitoring, in order to meet with current legislation and guidelines outlined by the Ministry of the Environment and the Technical Standards and Safety Authority Fuels Safety Division.

- Compliance with MOE or TSSA issued Orders
- Site remediation to meet with MOE Standards for O. Reg 153 Phase Two ESAs
- Remediation to meet with MOE Standards related to the removal of underground storage tanks
- Providing interim and final reports to establish environmental status of properties relative to contaminant of concern

Hydrogeologic Assessments

Project Manager/Director | Private Companies and Individuals, Peterborough County, Northumberland County, Durham Region, York Region, City of Kawartha Lakes, Simcoe County, Renfrew County, Hastings County, County of Lennox and Addington, Frontenac County, Prince Edward County, Haliburton County, Town of Whitby, City of Quinte West, District of Muskoka, District of Parry Sound, District of Nipissing, Ontario Parks | Ontario, Canada | 2000 - Present

Experience has included all levels of involvement with investigations and assessments in areas privately serviced with water wells and septic systems, groundwater monitoring programs, water system design and preparing reports for Regional, Township, MOE and Conservation Authority review.

- Proposed residential developments relative to MOE and Conservation Authority compliance
- Aquifer performance testing and groundwater modeling pertaining to proposed groundwater sources
- Assessment of water treatment systems regulated under the Safe Drinking Water Act
- Septic system assessment and compliance
- Submission of applications for PTTW for large groundwater takings and dewatering activities

- Submission of applications for ECAs pertaining to sewage works and waste disposal sites

Designated Substance Surveys, ACM, Mould and Fungi Inspections

Project Manager/Director | Private Companies, Public Institutions, City of Peterborough, City of Toronto, City of Oshawa, City of Pickering, City of Quinte West, CFB Trenton, York Region, City of Kawartha Lakes, Renfrew County, Haliburton County, Peterborough County, Northumberland County, Durham Region | Ontario, Canada | 2000 - Present

Experience has included building inspections and testing including air monitoring and report preparation for industrial, commercial and residential sites.

- Proposed renovation and demolition projects.
- Material identification for existing workspace conditions.
- Confirmation of remediation or post renovation assessments.

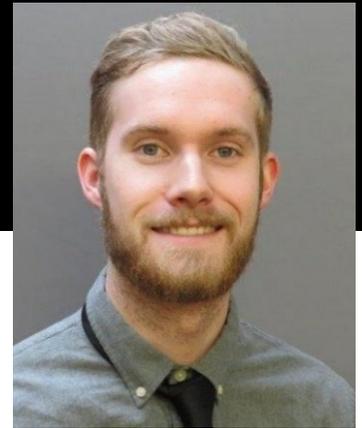
Career history

2000 - present	GHD Peterborough, Project Manager/Director
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Wesley Gordon Moore P.ENG.

Environmental Engineer



Location

Peterborough, ON, Canada

Experience

5 years

Qualifications/Accreditations

- Professional Engineer (P.Eng.), 2021
- Qualified Person (QP) as defined by the Ministry of the Environment as it pertains to O.Reg. 153/04 and O.Reg.406/19
- 40-hour HAZWOPER Training, 2020
- Canadian Red Cross First Aid & CPR/AED Level C Training, 2020
- Working From Heights – Fall Arrest Training Certified, 2019
- H2S Alive Training – Energy Safety Canada, 2018
- Bachelor of Engineering (B. Eng.), Environmental Engineering, Carleton University, 2014

Relevant experience summary

Wesley has acquired vast experience over the last five years through involvement with a variety of projects within Ontario and the United States. This experience includes Waste Disposal Site Monitoring and Reporting, Environmental Site Assessments, Environmental Remediation, Excess Soil Management, Contaminated Site Assessment and Remediation and Monitoring and Hydrogeology/Geotechnical projects.

Project experience – Hydrogeology

Landfill Monitoring

Environmental Technician/Project Coordinator | Twp. Asphodel-Norwood | County of Peterborough, ON, Canada | 2016 - present

- Infield monitoring and sampling of ground and surface water stations, methane gas monitoring, data breakdown and report preparation to for two landfill sites in the Township of Asphodel-Norwood

Landfill Monitoring

Environmental Technician/Project Coordinator | Twp. Minden Hills | County of Haliburton, ON, Canada | 2018 - present

- Infield monitoring and sampling of ground and surface water stations, methane gas monitoring, data breakdown and report preparation to for seven landfill sites in the Township of Minden Hills

Project experience – Environmental

Various Projects

Field Technician/Project Coordinator | 2016 - present

- Conducting and supervising environmental investigations and field exploration programs, including drilling and excavating activities, in-situ

testing, soil and groundwater sampling and site inspection services.

- Overburden and bedrock drilling.
- Extensive field experience in conducting hydrogeologic investigations including well surveys, water well sampling and establishing monitoring programs for groundwater/surface.
- Knowledge of landfill monitoring program development and continued works.
- Experienced with Phases One and Two Environmental Site Assessments (ESA) using protocol documented by the MOECC and Canadian Standards Association (CSA).
 - The Phases One and Two ESAs have been completed for banks, private individuals, large corporations and has knowledge of filing these documents on the Environmental Registry as Record of Site Condition submissions.
- Supervised and conducted remedial programs to meet applicable soil and groundwater standards for various properties to target chlorinated organics, PCBs, petroleum hydrocarbons and metals.
- Completed UST removals in accordance with Technical Standards and Safety Authority (TSSA) guidelines.
- Conducted extensive work in groundwater, surface water and residential (drinking) water sampling in a variety of projects i.e. landfill and ESA.

- Worked with GHD F.I.R.S.T (Fast Incident Response Services Team) on the Superior, WI HUSKY Refinery explosion in 2018. Related tasks included community and on-site air monitoring and sampling.
- Extensive environmental remediation work completed for Waterfront Toronto future development. Work included overseeing drilling of geotechnical and environmental boreholes; installation, development and sampling of groundwater monitoring wells; coordination with stakeholders and property owners for site access; managing field activities and coordinating multiple sub-contractors.

Various Projects

Project Manager | 2016 - present

- Conducting project management and project coordination for work relating to excess soil management, environmental site assessments and landfill monitoring programs.

Project experience – Geotechnical

Phase Two Environmental Site Assessment

**Field Technician/Project Coordinator |
Ribcor Holdings Inc. | Twp. Scugog, ON, Canada |**

- Development of Site Alteration and Fill Management Plans

Career history

2016 - present GHD (formerly Geo-Logic), P. Eng.



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