

4336 Willick Road, Niagara Falls
Phase One Environmental Site Assessment



Project Location:
4336 Willick Road
Niagara Falls, ON

Prepared For:
13071189 Canada Inc.
305-2585 Skymark Avenue
Mississauga, ON
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Prepared By:
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Date: September 13, 2024
NSSL File No.: NS2484-01

EXECUTIVE SUMMARY

Niagara Soils Solutions Ltd. (NSSL) was retained by 13071189 Canada Inc. to conduct a Phase One Environmental Site Assessment (ESA) of the vacant lot located at 4336 Willick Road, in the City of Niagara Falls, ON (herein referred to as the "Phase One Property" or the "Site"). It is understood that the Phase One ESA is requested for due diligence purposes related to proposed future development and as according to comments received from pre-consultation meetings with the Region. All work will be completed in accordance with Ontario Regulation (O. Reg) 153/04 (as amended) standards.

The Phase One ESA covers approximately 19.8-hectares of land that primarily consists of agricultural fields, some woodlot and scrub areas in the north, and a drainage ditch running north to northwest. The site is devoid of any buildings; however, the concrete pads remain. Historically, the Site was utilized for mixed use purposes (agricultural and residential) dating back to at least 1934. Notably, from around 2000 to 2018, as depicted in aerial photographs, the owner utilized the detached garage and surrounding land to store and work on a variety of automobiles, trucks, etc. All structures were removed from site between 2021 and 2023. The property is situated at the southwest corner of Willick Road and Sodom Road, approximately 1 km south of the Welland River and 2.6 km southwest of the Niagara River. Willick Road runs east to west along the northern property boundary, while Sodom Road runs north to south at the eastern boundary of the Site. According to Niagara Navigator, the Phase One Property is classified as a "Farm without residence – with secondary structures (farm outbuildings)". NSSL notes these secondary structures have been demolished. Adjacent properties include a mix of residential properties, agricultural fields, vacant lots, and the Weaver Family Cemetery to the north.

FINDINGS

O. Reg. 153/04 Table 2 of Schedule D – List of PCAs is provided in Appendix G for reference purposes. The Phase One ESA identified four PCAs, which resulted in four on-site APECs. Figures 3 highlight the PCAs.

PCA-1/APEC-1: #40 Pesticides (Including Herbicides, Fungicides, and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications.

Large portions of the property have been utilized for agricultural purposes dating from at least the early 1930's. Deposition of pesticides and/or herbicides to protect the crops may have occurred. The use of these chemicals results in an onsite APEC to the site's soil.

PCA-2/APEC-2: #27 Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles.

Aerial photographs depict a large personal garage on-site within the north central part of the property. Although no documentation was uncovered to indicate this was a commercial business, the aerial photos reveal a surplus of vehicles and materials surrounding this building. This historic use of the property



results in an area of concern to the site's soil and groundwater.

PCA-3/APEC-3: #28 Gasoline and Associated Products Storage in Fixed Tanks.

Although not confirmed through documentation, one site photograph from 2018 appears to depict an Above Ground Storage Tank on the south side of the garage building. The contents and use of which are unknown, however the presence of an AST results in an onsite APEC to the site's soil and groundwater.

CONCLUSIONS

The Phase One Environmental Site Assessment identified three potentially contaminating activities within the study area that resulted in three areas of potential environmental concern to the site's soil and groundwater. A Phase Two Environmental Site Assessment is recommended to investigate the environmental conditions at the Site.

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LIST OF ABBREVIATIONS

APEC	Area of Potential Environmental Concern
As, Se, Sb	Arsenic, Selenium, Antimony
AST	Above ground Storage Tank
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
B-HWS	Boron- Hot Water Soluble
CSM	Conceptual Site Model
EC	Electrical Conductivity
ERIS	Environmental Risk Information services
ESA	Environmental Site Assessment
FIP	Fire Insurance Plan
GEN	Ontario Regulation 347 Waste Generators Summary
MECP	Ministry of the Environment, Conservation and Parks MNRF
NSSL	Niagara Soils Solutions Ltd
UST	Underground Storage Tank
PAH	Polycyclic Aromatic Hydrocarbons
PCA	Potentially Contaminating Activity
PHC	Petroleum Hydrocarbons
SAR	Sodium Adsorption Ratio
VOCs	Volatile Organic Compounds



1.0 INTRODUCTION

1.1 Phase One Property Information

Niagara Soils Solutions Ltd. (NSSL) was retained by 13071189 Canada Inc. to conduct a Phase One Environmental Site Assessment (ESA) of the vacant lot located at 4336 Willick Road, in the City of Niagara Falls, ON (herein referred to as the “Phase One Property” or the “Site”). It is understood that the Phase One ESA is requested for due diligence purposes related to proposed future development and as according to comments received from pre-consultation meetings with the Region. All work will be completed in accordance with Ontario Regulation (O. Reg) 153/04 (as amended) standards. The Site location is shown in Figure 1.

The municipal and legal descriptions of the subject property included in the Phase One ESA are stated as PT LT 18 CON 3 WILLOUGHBY AS IN R0510993 EXCEPT PT 1 & 2, 59R10113 & PT 1, 59R6661: NIAGARA FALLS. The Property Identification Number (PIN) is 64258-0093 (LT). A copy of the Parcel Register is included in Appendix A. Authorization to proceed with the Phase One ESA was received from Mr. Imran Ahmed. The contact information for Mr. Imran Ahmed is:

13071189 Canada Inc.
305-2585 Skymark Avenue
Mississauga, ON
L4W 4L5

The Phase One ESA covers approximately 19.8-hectares of land that primarily consists of agricultural fields, some woodlot and scrub areas in the north, and a drainage ditch running north to northwest. The site is devoid of any buildings; however, the concrete pads remain. Historically, the Site was utilized for mixed use purposes (agricultural and residential) dating back to at least 1934. Notably, from around 2000 to 2018, as depicted in aerial photographs, the owner utilized the detached garage and surrounding land to store and work on a variety of automobiles, trucks, etc. All structures were removed from site between 2021 and 2023. The property is situated at the southwest corner of Willick Road and Sodom Road, approximately 1 km south of the Welland River and 2.6 km southwest of the Niagara River. Willick Road runs east to west along the northern property boundary, while Sodom Road runs north to south at the eastern boundary of the Site. According to Niagara Navigator, the Phase One Property is classified as a "Farm without residence – with secondary structures (farm outbuildings)". NSSL notes these secondary structures have been demolished. Adjacent properties include a mix of residential properties, agricultural fields, vacant lots, and the Weaver Family Cemetery to the north.

2.0 SCOPE OF INVESTIGATION

The Phase One ESA was completed in accordance with O. Reg. 153/04, as amended. The purpose of the Phase One ESA was to identify evidence of actual or potential contamination on the Site based on an evaluation of information collected through records review, site visit, and interview. The scope of work for the Phase One ESA included the following:

- Review of available environmental reports pertinent to the Site and surrounding lands.
- Review of municipal directory records related to the Site and surrounding lands (where available).
- Review of Chain-of-Title information.
- Review of physical setting information, including aerial photographs, fire insurance plans (FIPs), topographic maps, and geologic information related to the Site and surrounding lands.
- Review of EcoLog ERIS database report for the Site and surrounding lands.
- Review of the environmental source information, including published and online records from the Ministry of the Environment, Conservation and Parks (MECP), Ministry of Natural Resources and Forestry (MNRF).
- Site reconnaissance to observe Phase One Property and surrounding lands.
- Interview with key persons knowledgeable about the current and historical operations of the Site.
- Preparation of a photographic log.
- Preparation of a summary report of findings and recommendations.
- Assessment of information to illustrate the Site location and limits, the surrounding lands, Potentially Contaminating Activities (PCAs), and Areas of Potential Environmental Concern (APECs) on the Phase One Property.

3.0 RECORDS REVIEW

3.1 General

3.1.1 Phase One Study Area Determination

The Phase One study area includes properties located wholly or partially within 250 m of the nearest point on a boundary of the Phase One property. At this time, no other properties located beyond 250 m of the Site were considered relevant to the Phase One ESA. The study area is illustrated in Figure 1.

3.1.2 First Developed Use Determination

O. Reg. 153/04 22. (1) defines first developed land use as the earlier of (a) the first use of a Phase One Property in or after 1875 that resulted in the development of a building or structure on the property, and (b) the first potentially contaminating use or activity on the Phase One Property". The 1934 aerial photograph showed the Site as mixed use, residential and agricultural with one dwelling noted in the northern portion of the Site and the remainder of the Site utilized for agricultural purposes.

3.1.3 Fire Insurance Plans

Opta Historical Environmental Services was contracted via EcoLog ERIS to conduct a search of the available historical FIPS and records for information about the Phase One Property and surrounding study area, however, no FIPs were available for NSSL to review.

3.1.4 Chain of Title

Mackenzie Title was engaged by NSSL to complete a historical property ownership search for the Site. The research returned the Chain of Title for the Site dating back to 1798 when the parcel of land was registered to William Adams. The property remained associated with private individuals throughout current ownership as the land was transferred to 13071189 Canada Inc.

The Current parcel register for the property was obtained from Teranet Express through MacKenzie Title. The document covers the period of land ownership from 1999 to the present day. A copy of the property ownership records, and title search are included in Appendix A.

3.1.5 Vernon's City Directories

Niagara Soils Solutions Ltd. conducted a search of historical Vernon's City Directories for the Site and properties within the study area to determine chronicled property land use. Historical city directories generally document the occupants of municipal addresses annually. Two records were found pertaining to the Site.

Table 1: Findings of Vernon's City Directories

Municipal Address	Date	Occupant	Location in Relation to Site
4336 Willick Road	1978	Robt. G Marsh Can Home Prod,	Phase One Property
	2005/6	Graf, Rene and H.H.	

3.1.6 Environmental Reports

No previous environmental reports concerning the study site were made available for review.

3.2 Environmental Source Information

3.2.1 Environmental Risk Information Services

Environmental Risk Information Services (ERIS) was contracted to search the available government and private records and databases for information about the Phase One Property and surrounding study area. No records were found for the site that resulted in onsite areas of concern. The report's key findings are presented below in Table 1, with a copy of the full report provided in Appendix B.

Table 2: Key findings of ECOLOG ERIS report on the site and its surroundings

Municipal Address	Property relationship to Site	Database Record, a brief description
4510 Willick Road	WNW/62.1	<u>Enbridge Gas Distribution Inc</u> <i>One SPL:</i> Incident Dt: 2018/06/06, Methane Gas, compressed, Pipeline/Components, air. <i>One PINC:</i> FS-Pipeline Incident, Incident Reported Dt: 6/7/2018, Pipeline Hit.
9377 Emerald Avenue	NNW/202.8	<u>Enbridge Gas Distribution Inc</u> <i>One PINC:</i> FS-Pipeline Incident, Non-Mandated, Incident Reported Dt: 12/21/2020.
Unplottable Record	Part Lot 18 south, Con. 3	<u>Unknown Location:</u> <i>One LIMO:</i> ECA #A120308 CLOSED Based on additional research this ECA is referenced in the Ontario small landfills database (https://files.ontario.ca/opendata/small_landfills.xls) as being in the City of Port Colborne and therefore will not impact the Site

SPL = Ontario Spill, PINC = Pipeline Incidents., LIMO = Landfill Inventory Management Ontario, ECA = Environmental Certificate of Approval

3.2.2 Insurance Reports

Niagara Soils Solutions Ltd. contacted ERIS Enviroscan to conduct a search of Insurance Reports on the Phase One Property, however, no reports were available for review.

3.2.3 Other Environmental Sources

Niagara Soils Solutions Ltd. reviewed additional environmental resources for information about the Phase One Property. Table 2 provides details of the findings.

Table 3: Findings from other environmental sources

Source	Phase One Site Details
Environmental Incidents, Orders, Offences, Spills and Discharges	No records.
Environmental Registry of Ontario	No records.
Federal Contaminated Sites and Solid Waste Landfills Inventory	No records.
Hazardous Waste Information Network	No records.
Inventory of Coal Gasification Plants	No records.
Inventory of Industrial Sites Producing or Using Coal Tar in Ontario	No records.
Ministry of Natural Resources (MNR)	No records were available for the Site.
National Pollutant Release Inventory	No records.
PCB Waste Storage Inventory	No records.
Record of Site Condition (RSC)/ Brownfields Environmental Registry	No records.
Reports submitted to the MECP (Freedom of Information)	No records.
TSSA Retail Fuel Storage Tank Info	A request was submitted to the Technical Safety and Standards Authority (TSSA) for information concerning fueling systems (Underground Storage Tanks, Above Ground Storage Tanks, etc.). Email correspondence from TSSA dated August 20 th , 2024, indicated, "We confirm that there are NO fuels records in our database at the subject address (es)."
Waste Disposal Site Inventory	No records.
Waste Management Records	No records.

3.3 Physical Setting Sources

3.3.1 Aerial Photographs

Aerial photographs were reviewed for information about the Phase One Property and study area. The photographs were obtained through the Niagara Air Photo Index interactive database at Brock University as well as Google Earth. The earliest available aerial image for review was from 1934. A review of the selected aerial photographs, based on scale and quality, is presented in Table 3. Images are provided in Appendix C.

Table 2: Review of the selected aerial photographs

Date	Phase One Site	Study Area
1934	The Site appears to be utilized for residential and agricultural purposes, with one dwelling and barnlike structure located in the northern portion of the Site.	The north, south, and west adjacent properties are noted as agricultural farmlands. The east adjacent property is rural residential. The study area is identified as predominantly undeveloped and vacant agricultural farmlands.
1954-55	The structures in the north central portion of the Site remain. A few additional structures have been constructed northwest of both initial buildings. The remainder of the property consists of agricultural farmlands.	No significant changes occurred during this period to the study area.
1965	A pond has formed south of the residential dwelling and a smaller structure is identifiable due north of the pond.	No significant changes were noted to the study area in the 1965 aerial photograph.
1971	No significant changes were noted to the study area in the 1971 aerial photograph except an extension of a driveway or parking space south of the residential dwelling.	No significant changes were noted to the study area in the 1971 aerial photograph except maturely grown trees have developed towards the north adjacent property.
2000	A mature woodlot is established in the northern part of the site. The residential home has been demolished. New construction of a large garage has occurred. Parked cars and scrap debris can be seen surrounding the newly built structure. The eastern residential dwelling remains, and a shed located south between the garage and residential dwelling exists. The remainder of the Site is undeveloped.	Residential dwellings have been established in the west and southeast study area. The remainder of the study area is agricultural.
2013	No significant changes were noted to the study site in the 2013 aerial photograph.	No significant changes were noted to the study area in the 2013 - 2018 aerial photograph.
2018	Additional cars and auto/vehicle related items surround the garage.	
2023	All buildings and structures have been demolished onsite, concrete foundations remain. A creek is noticeable traversing from west to north through the property.	Some former agricultural properties in the eastern study area have been redeveloped for residential purposes.

3.3.2 Topography, Hydrology, and Geology

A review of the Ministry of Northern Development and Mines, Geology Ontario Spatial Search tool as well as “Quaternary Geology of Southern Ontario”, Map 2496 and Map 2544, showing the “Bedrock Geology of Southern Ontario”, indicated that the native overburden is glaciolacustrine deep water clay and silt, underlain by Upper Silurian Limestone, dolostone, shale, sandstone, gypsum and salt, which belongs to the Salina Formation. Based on a review of local well records the depth to unconfined groundwater was recorded to range between 3.0 to 4.0 meters below ground surface (mbgs), the confined aquifer at

approximately 25 mbgs. The estimated depth to bedrock is approximately 20 m bgs.

The Phase One Property land cover is characterized by mostly agricultural fields with a small section of gravel and reworked material within the northern part of the Site. As the Site is predominately covered by a permeable surface, overland flow would be limited. Any accumulation of surface water would be directed towards on-site intermittent swales and would flow northwards, off-site. The Site was noted to be relatively flat with a slight slope northward. The inferred local groundwater flow direction for the study area is northeast.

3.3.3 Fill Materials

Fill material was not observed onsite, some reworked material was noted in and around former buildings.

3.3.4 Water Bodies and Areas of Natural Significance

The Niagara Peninsula Conservation Authority (NPCA) map shows that the Phase One study area is part of the South Niagara Falls Hunters Drain Watershed (3,054,632 m²) and the South Niagara Falls Ushers Creek Watershed (19,424,738 m²). Two converging watercourses, creating the Hunters Drain, are noted on-site. There weren't any NPCA-regulated wetlands on-site. The Site is located approximately 1 km south of the Welland River.

The Phase One Property is not considered to be a sensitive site, based on the definition of O. Reg. 153/04. "41. (1) This section applies in relation to a property if,

- (a) The property is,
 - (i) Within an area of natural significance,
 - (ii) Includes or is adjacent to an area of natural significance or part of such an area, or applies
 - (iii) Includes land within 30 m of an area of natural significance or part of such an area."

3.3.5 Well Records

A review of Ontario Well Records shows no domestic wells within the study area. Well records can contain descriptive information about an area's hydrogeological and geological characteristics. Information from one of the monitoring wells identified approximately 1.4 km off-site and is summarized below in Table 4.

Table 3: Location and soil profile of the selected monitoring well

Well ID	Location in Relation to Phase One Property	Description
6602289	Off-site 1.4 km Southeast	Clay 0 – 16.8 mbgs Sandy Clay 16.8 – 19.8 mbgs Fine Gravel 19.8 – 20.1 mbgs Limestone 20.1+ mbgs

3.3.6 Radon

Radon is a naturally occurring gas produced by the decay of Uranium-238 that is commonly found in geological formations of granite, sandstone, coal, phosphate, and uranium deposits. Radon is colourless, odourless and tasteless and may migrate up through the soil and accumulate in basements of buildings through foundation cracks and joints. The recent release of Health Canada's Radon Testing Study for Niagara Region found Radon levels to be above World Health Organization guideline levels in 10 % of tested structures, with 2 % of these structures noted to be above the Canada Health guidelines. Local and regional municipalities are addressing the Radon Gas concern by requesting that all developers of new residential construction and/or residential additions provide radon gas mitigation options when applying for permitting. The following option summaries are per the Ontario Building Code Section 9.13.3.1 and Supplementary Standard SB-9.

- Radon Ready: This option will provide for the future connection of an extraction system should it become necessary.
- Radon Gas Barrier: This option will provide a barrier to soil gas ingress.
- Radon Extraction: This option will remove soil gases from under the floor slab before they can enter the home.
- Clients should reach out to their local building departments for site-specific information and requirements.



4.0 INTERVIEW

A questionnaire was provided to Mr. Abhay Mathur, the property owner. The questionnaire aimed to gather pertinent facts and historical information regarding the current and previous uses of the Site. With over 3 years of familiarity with the Site, Mr. Mathur shared essential details about the property. Mr. Mathur confirmed that the Site was historically utilized by the previous owner to work on vehicles. He indicated that historical heating sources may have been fuel but was uncertain. He also indicated a private water well and septic bed were documented onsite. NSSL's review of the ERIS EcoLog report and water well records database did not produce a corroborating document regarding the well, nor was one identified during site reconnaissance. Mr. Mathur was not aware of any environmental concerns at the Site or adjacent properties. A copy of the completed Site Questionnaire is included in Appendix E.

5.0 SITE RECONNAISSANCE

5.1 General Requirements

Site reconnaissance of the Phase One Property was completed on August 28th, 2024, by NSSL staff member Mr. Damen Nyland, Environmental Geologist, as overseen by Mr. Philip Adene, P.Geo/QP_{ESA}. The weather was sunny, with the temperature approximately 20°C. Historical buildings were removed from the Site prior to the Site Reconnaissance. The Site was accessible through the municipal roadways of Willick Road and Sodom Road. The Site reconnaissance and photo log are included in Appendix F.

5.2 Specific Observations at Phase One Property

Table 5 summarizes the general observations made at the Phase One property based on NSSL's Site reconnaissance.

Table 4: Results of Site reconnaissance by NSSL

Item	Specific Observation
General Site Description	The site is utilized predominantly for growing of crops by a local farmer. Pervious residential land use occurred within the northern part of the site. Currently, the site is vacant and devoid of structures.
General Description of Structures	No structures are currently present on-site.
Above and Below Ground Tanks	None were observed.
Utilities and Water Sources	The Site does not appear to be serviced by City utilities, however, access to gas, hydro, water, wastewater, and communications are feasible along the northern portion of the property.
Exit and Entry Points	Accessible from Willick Road and Sodom Road.
Existing and Former Heating/Cooling Systems	None were currently observed as the Site is vacant. Historic sources could not be confirmed.
Swales, catch basins, drains, pits, pumps, or sumps	Several drainage channels were noted throughout the agricultural fields directing water north towards Hunters Drain.
Staining and corrosion	Limited to no staining was observed on the remaining concrete pads.
Wells	None were observed.
Sewage Work	The Site was historically serviced by private wastewater, septic bed.
Surface Cover	The land cover is predominately agricultural crops. The northwestern corner of the Site contains scrub and woodlot vegetation surrounding previously developed area. A denser woodlot runs along Hunters Drain.
Areas of Stained Soil, Vegetation, Pavement, and Stressed Vegetation	None were observed.
Current or Former Railway Lines or Spurs	None were observed.



Item	Specific Observation
Debris & Fill Material	Fill material was not observed onsite, some reworked material was noted in and around former buildings.
Details of Unidentified Substances	None were observed.
Designated Substances & Hazardous Materials	As no building materials remained on-site, no potentially hazardous materials were identified.
Other	NA
Surrounding Properties within the Phase One Study Area	The properties surrounding the Site were a mix of residential dwellings, agricultural lots, and vacant lots. The Weaver Family Cemetery was identified to the north of the Site.

6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Potentially Contaminating Activities

O. Reg. 153/04 Table 2 of Schedule D – List of PCAs is provided in Appendix G for reference purposes. The Phase One ESA identified four PCAs, which resulted in four on-site APECs. Figures 3 highlight the PCAs.

On-Site

4336 Willick Road

PCA-1/APEC-1: #40 Pesticides (Including Herbicides, Fungicides, and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications.

Large portions of the property have been utilized for agricultural purposes dating from at least the early 1930's. Deposition of pesticides and/or herbicides to protect the crops may have occurred. The use of these chemicals results in an onsite APEC to the site's soil.

PCA-2/APEC-2: #27 Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles.

Aerial photographs depict a large personal garage on-site within the north central part of the property. Although no documentation was uncovered to indicate this was a commercial business, the aerial photos reveal a surplus of vehicles and materials surrounding this building. This historic use of the property results in an area of concern to the site's soil and groundwater.

PCA-3/APEC-3: #28 Gasoline and Associated Products Storage in Fixed Tanks.

Although not confirmed through documentation, one site photograph from 2018 appears to depict an Above Ground Storage Tank on the south side of the garage building. The contents and use of which are unknown, however the presence of an AST results in an onsite APEC to the site's soil and groundwater.

6.2 Areas of Potential Environmental Concern

The three PCAs identified above resulted in the creation of three on-site APECs to the Phase One ESA Property with the potential to have impacted the soil, and groundwater. Figures 4 highlight the APECs.

Table 6: Identified PCAs that could create APECs On-Site

Area of potential environmental concern	Location of the area of potential environmental concern on phase one property	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Groundwater, soil, and/or sediment)
APEC-1	Agricultural Areas	#40 Pesticides (Including Herbicides, Fungicides, and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site	OCs, As, Sb, Se	Soil
APEC-2	North Central Portion of the Site	#27 Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles	On-Site	PHCs, BTEX, VOCs, PAHs, Metals, As, Sb, Se, Cr (VI), B-HWS, Methyl Mercury, CL-, CN-, PCBs, pH/SAR/EC	Soil & Groundwater
APEC-3	North Central Portion of the Site (South of historical Automotive Garage)	#28 Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC, BTEX, VOCs, PAHs, Metals, As, Sb, Se	Soil & Groundwater

7.0 CONCLUSIONS

The Phase One Environmental Site Assessment identified three potentially contaminating activities within the study area that resulted in three areas of potential environmental concern to the site's soil and groundwater. A Phase Two Environmental Site Assessment is recommended to investigate the environmental conditions at the Site.

7.1 Closure

This report was prepared by Mr. Damen Nyland under the direction of Mr. Philip Adene.

Respectively submitted,

Niagara Soils Solutions Ltd.

A handwritten signature in black ink, appearing to read 'Dn' followed by a horizontal line.

Damen Nyland, BSC, GIT
Environmental Geologist

A handwritten signature in black ink, appearing to read 'Philip Adene' with a stylized flourish.

Philip Adene, P.Geo, QP_{ESA}
Professional Geoscientist

8.0 REFERENCES

The following resources were used as references:

- Niagara Historical Maps, Data & GIS Collection
- EcoLog ERIS
- Environmental Assessment Act
- Environmental Registry of Ontario
- Federal Contaminated Sites Inventory
- Google Earth Interactive Mapping
- Inventory of Coal Gasification Plant Waste Sites in Ontario, Volume II; MOE, 1987
- Ministry of Environment, Conservation & Parks Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario
- Ministry of the Environment Freedom of Information and Protection of Privacy Search
- Ministry of the Environment Hazardous Waste Information Network
- Ministry of Natural Resources (ANSIs)
- Ministry of Northern Development and Mines. Bedrock Geology of Ontario
- National Pollutant Release Inventory (NPRI) database
- Niagara Peninsula Conservation Authority (NPCA) Watershed Explorer
- Nutrient Managing Act
- Ontario Base Mapping
- Ontario Inventory of PCB Storage Site October 1991, Ministry of the Environment, January 1992.
- Ontario Oil, Gas, and Salt Resources Library
- Ontario Water Resources Act
- Safe Drinking Water Act
- Source Protection Information Atlas (MECP)
- Technical Safety and Standards Authority (TSSA) Fuel Storage Information
- "Radon Information Brochure." *City of Welland*, n.d. Web. 19 Aug. 2024.
- <https://www.welland.ca/Building/devForms/RadonBrochure.pdf>.



9.0 LIMITATIONS AND USE OF THE REPORT

Achieving the objectives that are stated in this report has required Niagara Soils Solutions Ltd. to derive conclusions based upon the best and most recent information currently available to Niagara Soils Solutions Ltd. No investigative method can completely eliminate the possibility of obtaining partially imprecise information. Niagara Soils Solutions Ltd. has expressed professional judgement in gathering and analyzing the information obtained and in the formulation of its conclusions.

Information in this report was obtained from sources deemed to be reliable; however, no representation or warranty is made as to the accuracy of this information. To the best of Niagara Soils Solutions Ltd.'s knowledge, the information gathered from outside sources contained in this report on which Niagara Soils Solutions Ltd. has formulated its opinions and conclusions, are both true and correct. Niagara Soils Solutions Ltd. assumes no responsibility for any misrepresentation of facts gathered from outside sources.

This report was prepared to assess and document evidence of potential environmental contamination, and not to judge the acceptability of the risks associated with such environmental contamination. Much of the information gathered for this report is only accurate at the time of collection and a change in the Site conditions may alter the interpretation of Niagara Soils Solutions Ltd.'s findings. Furthermore, the reader should note that the Site reconnaissance described in this report was an environmental assessment of the Site, not regulatory compliance, or an environmental audit of the Site.

Niagara Soils Solutions Ltd. prepared this Report for 13071189 Canada Inc. The material in it reflects Niagara Soils Solutions Ltd.'s best judgement in light of the information available to it at the time of preparation. 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. Niagara Soils Solutions Ltd. accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

Yours very truly,

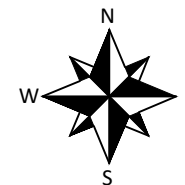
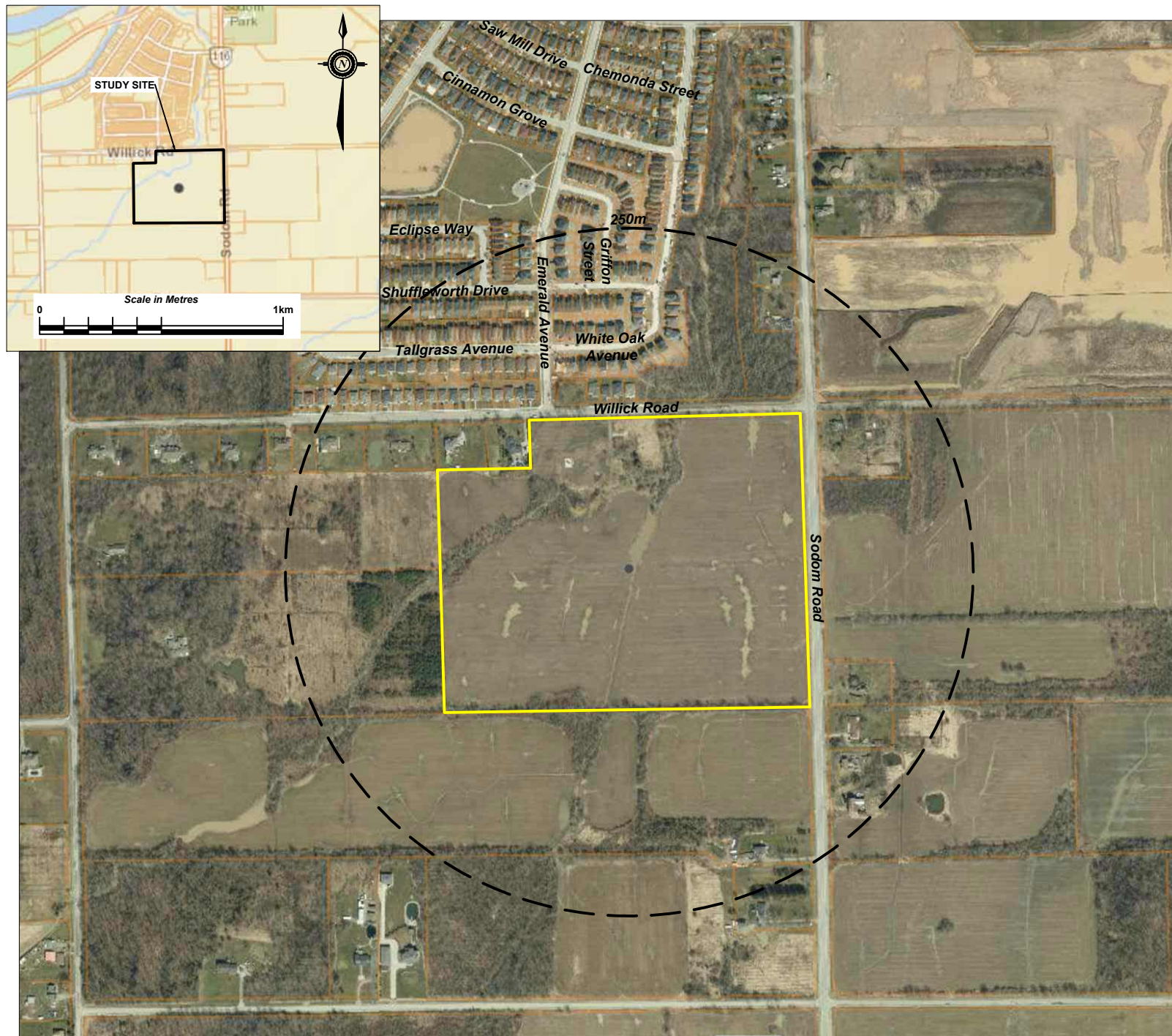
Niagara Soils Solutions Ltd.

A handwritten signature in cursive script that reads 'Jodie Glasier'.

Jodie Glasier, H.BA., M.MM, EMA, EP
Founder & CEO

FIGURES

1. SITE LOCATION
2. SITE LAYOUT & FEATURES
3. POTENTIALLY CONTAMINATING ACTIVITIES
4. AREA OF POTENTIAL ENVIRONMENTAL CONCERN



LEGEND

- Property Boundary
- 250 m Study Area



CLIENT:

13071189 CANADA INC.

PROJECT:

**PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
4336 WILICK ROAD
NIAGARA FALLS, ON.**

TITLE:

SITE LOCATION

DATE: SEPTEMBER 2024

PROJECT NO: NS2484-01

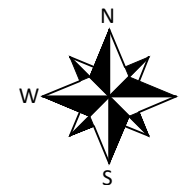
SCALE: AS SHOWN

DRAWN: CN REVIEWED: PA

DATUM: NAD 83 PROJECTION: 17T

NO:

Figure 1



LEGEND

Property Boundary



CLIENT:

13071189 CANADA INC.

PROJECT:

**PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
4336 WILICK ROAD
NIAGARA FALLS, ON.**

TITLE:

SITE LAYOUT & FEATURES

DATE: SEPTEMBER 2024

PROJECT NO: NS2484-01

SCALE: AS SHOWN

DRAWN: CN REVIEWED: PA

DATUM: NAD 83 PROJECTION: 17T

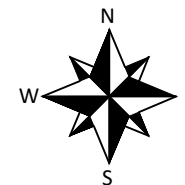
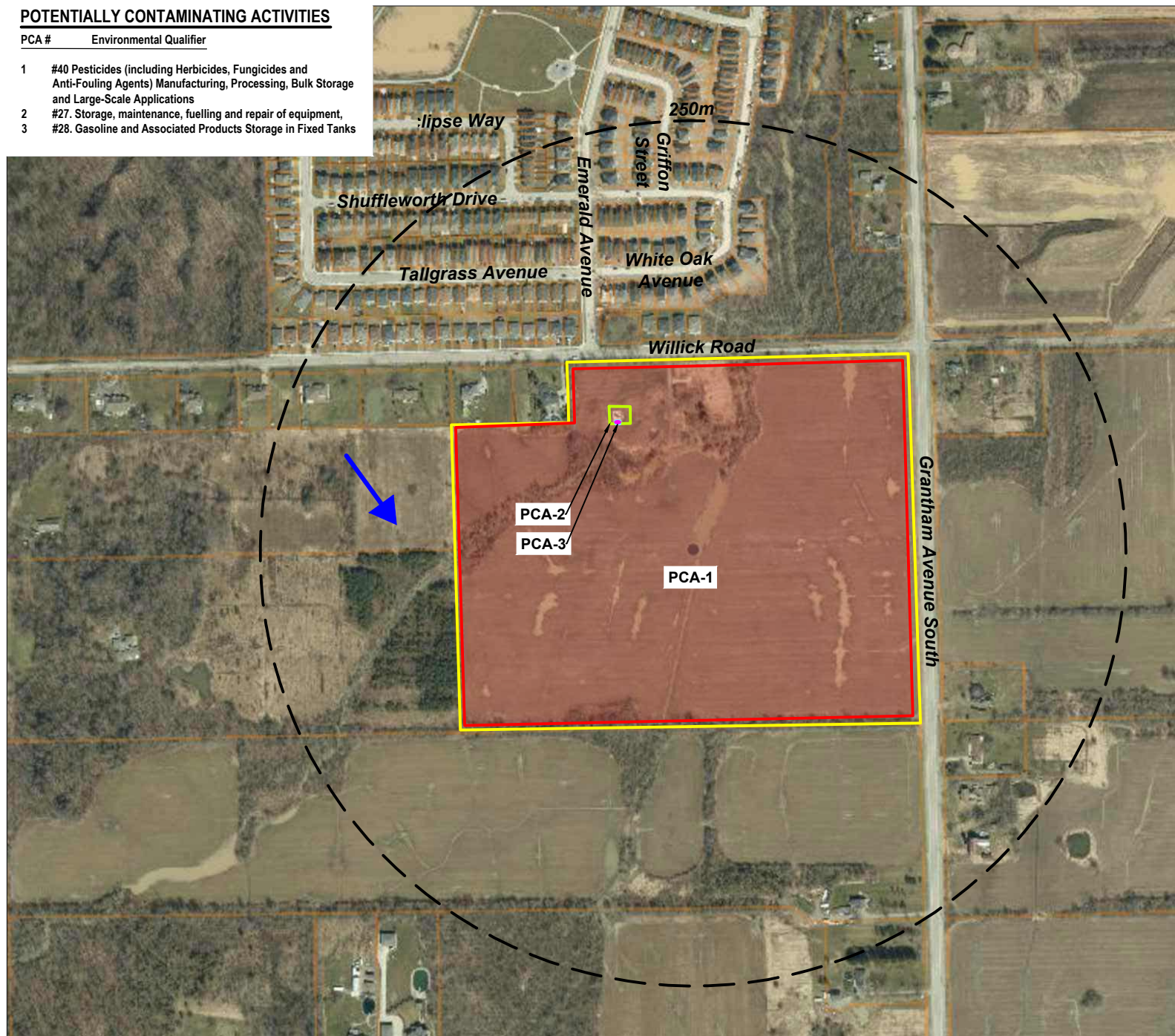
NO:

Figure 2

POTENTIALLY CONTAMINATING ACTIVITIES

PCA # Environmental Qualifier

- 1 #40 Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
- 2 #27. Storage, maintenance, fuelling and repair of equipment,
- 3 #28. Gasoline and Associated Products Storage in Fixed Tanks



LEGEND

- Property Boundary
- 250 m Study Area
- PCA not Generating APEC
- PCA Generating APEC
- Inferred Groundwater Flow Direction
- Aboveground Storage Tank



CLIENT:

13071189 CANADA INC.

PROJECT:

PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
4336 WILICK ROAD
NIAGARA FALLS, ON.

TITLE:

POTENTIALLY
CONTAMINATING ACTIVITIES

DATE: SEPTEMBER 2024

PROJECT NO: NS2484-01

SCALE: AS SHOWN

DRAWN: CN REVIEWED: PA

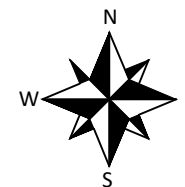
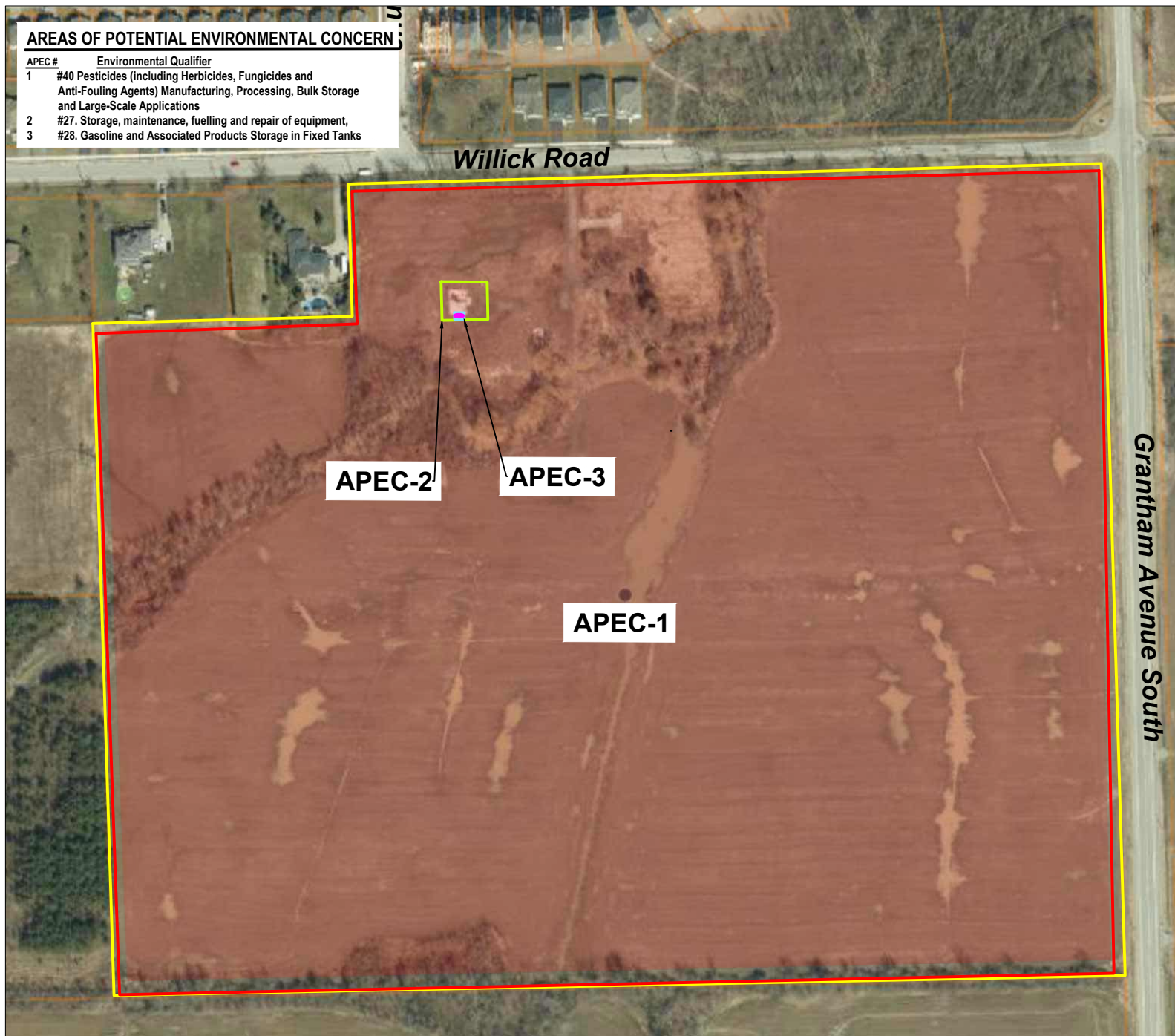
DATUM: NAD 83 PROJECTION: 17T

NO:

Figure 3

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

APEC #	Environmental Qualifier
1	#40 Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
2	#27. Storage, maintenance, fuelling and repair of equipment,
3	#28. Gasoline and Associated Products Storage in Fixed Tanks



LEGEND

- Property Boundary
- APEC
- Aboveground Storage Tank



CLIENT:
13071189 CANADA INC.

PROJECT:
**PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
4336 WILICK ROAD
NIAGARA FALLS, ON.**

TITLE:
**AREAS OF POTENTIAL
ENVIRONMENTAL CONCERN**

DATE: SEPTEMBER 2024
PROJECT NO: NS2484-01
SCALE: AS SHOWN
DRAWN: CN REVIEWED: PA
DATUM: NAD 83 PROJECTION: 17T

NO:
Figure 4

APPENDIX A

CHAIN OF TITLE/PARCEL REGISTER

HISTORICAL CHAIN OF TITLE
4336 Willick Road, Niagara Falls
Pin: 64258-0093(LT)
PT LT 18 CON 3 WILLOUGHBY AS IN RO510993
EXCEPT PT 1 & 2, 59R10113 & PT 1, 59R6661 ; NIAGARA FALLS

CROWN



Patent
October 24, 1798

William Adams

⋮

Break in Chain

⋮

John William Wieshulm



5545
B & S
March 29, 1819

Thomas Cummings

⋮

Break in Chain

⋮

James Cummings



9551
B & S
January 29, 1834

Thomas Clark &
Samuel Street

*Thomas Clark, deceased
Date of death: unknown*



11496
Probate
May 23, 1837

Samuel Street
Robert Grant &
James Hamilton
Executors

*Samuel Street, deceased
Date of death: unknown*



2096
Will
February 12, 1845

Thomas C. Street
Sole Executor & Devisee



*Sometime between February 12, 1845
and November 1, 1848 Gilbert McMicking
took title to the property. He subsequently died, date of death
unknown, and his Will was registered November 1, 1848*



Ann Forbes widow of the late
John Forbes and devisee of
Gilbert McMicking



484
B & S
January 11, 1876

George Denzer
George Denzer, deceased
Date of death: unknown

George F. Denzer
Thomas A. Somerville
Executors of George Denzer



3100
B & S
June 28, 1910

Martin Denzer



3102
B & S
June 28, 1910

George F. Denzer
George F. Denzer, deceased
Date of death: July 10, 1928

Christian Weaver
John Somerville
Executors of George F. Denzer



4504
Grant
September 26, 1928

Henry Willick
Henry Willick, deceased
Date of death: June 8, 1940



GR10231
Probate
November 18, 1946

Norman R. Willick
Wilfred L. Willick
Harry E. Willick
Carrie E. Hillock
Dorothy M. Willick

Dorothy M. Ort
Nee Dorothy M. Willick
Quit Claimed her share to the others
In 5551 - November 18, 1946

Wilfred L. Willick
Quit Claimed her share to the others
In 5550 1/2 - November 18, 1946

Norman R. Willick
Harry E. Willick
Carrie E. Willick



AA32887
Grant
December 7, 1959

George Radoyevich



AA35639
Grant
February 22, 1960

Momcilo Djujich
Mile Koscica



BB68013
Grant
August 4, 1967

Frederick G. Marsh
Mary O. Marsh



BB68443
Grant
August 15, 1967

The Director, The Veterans' Land Act

Frederick G. March, deceased
Date of death: unknown



RO510980
Transfer
October 5, 1987

Isabella Mary Marsh
Executor of Estate of
Frederick G. Marsh

RO510993
Transfer
October 5, 1987



Linda Graf

LT175510
Transfer
February 16, 2001



Helen Millward

SN281025
Transfer
May 21, 2010



Helen Millward
Linda Graf
Rene Graf

*Rene Graf, deceased
Date of death: October 5, 2011
SNN329044 - October 28, 2011
Survivorship Application*

Helen Millward
Linda Graf

SN403408
Transfer
May 13, 2014



Helen Millward

SN633799
Transfer
June 30, 2020



Imran Ahmed

SN715022
Transfer
February 25, 2022



13071189 Canada Inc.
(CURRENT OWNER)

LAND
REGISTRY
OFFICE #59

64258-0093 (LT)

PAGE 1 OF 3
PREPARED FOR JMackenzie
ON 2024/08/25 AT 16:34:59

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

PROPERTY DESCRIPTION: PT LT 18 CON 3 WILLOUGHBY AS IN RO510993 EXCEPT PT 1 & 2, 59R10113 & PT 1, 59R6661 ; NIAGARA FALLS

PROPERTY REMARKS:

ESTATE/QUALIFIER:

FEE SIMPLE
LT CONVERSION QUALIFIED

RECENTLY:

FIRST CONVERSION FROM BOOK

PIN CREATION DATE:

1999/11/15

OWNERS' NAMES

13071189 CANADA INC.

CAPACITY SHARE

ROWN

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
<div><div><div><div><div>**EFFECTIVE 2000/07/29</div><div>THE NOTATION OF THE</div></div><div><div>**WAS REPLACED WITH THE</div><div>"PIN CREATION DATE" OF 1999/11/15**</div></div><div><div>** PRINTOUT INCLUDES ALL DOCUMENT TYPES AND</div><div>DELETED INSTRUMENTS SINCE 1999/11/12 **</div></div><div><div>**SUBJECT, ON FIRST REGISTRATION UNDER THE LAND TITLES ACT, TO:</div><div></div></div><div><div>**</div><div>SUBSECTION 44(1) OF THE LAND TITLES ACT, EXCEPT PARAGRAPH 11, PARAGRAPH 14, PROVINCIAL SUCCESSION DUTIES</div><div>*</div></div><div><div>**</div><div>AND ESCHEATS OR FORFEITURE TO THE CROWN.</div><div></div></div><div><div>**</div><div>THE RIGHTS OF ANY PERSON WHO WOULD, BUT FOR THE LAND TITLES ACT, BE ENTITLED TO THE LAND OR ANY PART OF</div><div></div></div><div><div>**</div><div>IT THROUGH LENGTH OF ADVERSE POSSESSION, PRESCRIPTION, MISDESCRIPTION OR BOUNDARIES SETTLED BY</div><div></div></div><div><div>**</div><div>CONVENTION.</div><div></div></div><div><div>**</div><div>ANY LEASE TO WHICH THE SUBSECTION 70(2) OF THE REGISTRY ACT APPLIES.</div><div></div></div><div><div>**DATE OF CONVERSION TO</div><div>LAND TITLES: 1999/11/15 **</div></div></div><div><div>AA69374</div><div>1962/03/02</div><div>BYLAW</div><div></div><div></div><div></div><div></div></div><div><div>RO510993</div><div>1987/10/05</div><div>TRANSFER</div><div></div><div>*** COMPLETELY DELETED ***</div><div></div><div>GRAF, LINDA</div></div><div><div>RO631978</div><div>1992/05/25</div><div>CHARGE</div><div></div><div>*** COMPLETELY DELETED ***</div><div></div><div>LONDON LIFE INSURANCE COMPANY</div></div><div><div>RO757141</div><div>1998/12/07</div><div>TRANSFER OF CHARGE</div><div></div><div>*** COMPLETELY DELETED ***</div><div></div><div>THE TORONTO-DOMINION BANK</div></div><div><div></div><div>REMARKS: RO631978</div><div></div><div></div><div></div><div></div><div></div></div><div><div>RO757400</div><div>1998/12/14</div><div>AGR AM CH</div><div></div><div>*** COMPLETELY DELETED ***</div><div></div><div></div></div><div><div></div><div>REMARKS: RO631978</div><div></div><div></div><div></div><div></div><div></div></div></div></div>						

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

LAND
REGISTRY
OFFICE #59

64258-0093 (LT)

PAGE 2 OF 3
PREPARED FOR JMackenzie
ON 2024/08/25 AT 16:34:59

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

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
LT175510	2001/02/16	TRANSFER		*** COMPLETELY DELETED *** GRAF, LINDA	MILLWARD, HELEN	
SN281025	2010/05/21	TRANSFER		*** COMPLETELY DELETED *** MILLWARD, HELEN	MILLWARD, HELEN GRAF, LINDA GRAF, RENE	
SN283765	2010/06/17	CHARGE		*** COMPLETELY DELETED *** GRAF, LINDA GRAF, RENE MILLWARD, HELEN	THE TORONTO-DOMINION BANK	
SN284123	2010/06/21	DISCH OF CHARGE		*** COMPLETELY DELETED *** THE TORONTO-DOMINION BANK		
	REMARKS: RO631978.					
SN329044	2011/10/28	APL OF SURV-LAND		*** COMPLETELY DELETED *** GRAF, RENE	GRAF, LINDA MILLWARD, HELEN	
SN391452	2013/11/21	DISCH OF CHARGE		*** COMPLETELY DELETED *** THE TORONTO-DOMINION BANK		
	REMARKS: SN283765.					
SN403408	2014/05/13	TRANSFER		*** COMPLETELY DELETED *** GRAF, LINDA MILLWARD, HELEN	MILLWARD, HELEN	
SN572978	2018/11/23	NOTICE OF LEASE	\$2	MILLWARD, HELEN	ROGERS COMMUNICATIONS INC.	C
SN621044	2020/02/25	CHARGE		*** COMPLETELY DELETED *** MILLWARD, HELEN	AYHAN SHIPPING AND LOGISTICS INC.	
SN633790	2020/06/30	DISCH OF CHARGE		*** COMPLETELY DELETED *** AYHAN SHIPPING AND LOGISTICS INC.		
	REMARKS: SN621044.					
SN633799	2020/06/30	TRANSFER		*** COMPLETELY DELETED *** MILLWARD, HELEN	AHMED, IMRAN	
	REMARKS: PLANNING ACT STATEMENTS.					
SN715022	2022/02/25	TRANSFER	\$2,700,000	AHMED, IMRAN	13071189 CANADA INC.	C

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

64258-0093 (LT)

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

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
REMARKS: PLANNING ACT STATEMENTS.						

APPENDIX B

ECOLOG ERIS REPORT



DATABASE REPORT

Project Property: *Phase One ESA - 4336 Willick Road,
Niagara Falls, ON
4336 Willick Rd
Niagara Falls ON L2E 6S6*

Project No: *NS2484-01*

Report Type: *Quote - Custom-Build Your Own Report*

Order No: *24081900345*

Requested by: *Niagara Soils Solutions Ltd.*

Date Completed: *August 22, 2024*

Environmental Risk Information Services

A division of Glacier Media Inc.

1.866.517.5204 | info@erisinfo.com | erisinfo.com

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

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Executive Summary

Property Information:

Project Property: Phase One ESA - 4336 Willick Road, Niagara Falls, ON
4336 Willick Rd Niagara Falls ON L2E 6S6

Project No: NS2484-01

Order Information:

Order No: 24081900345
Date Requested: August 19, 2024
Requested by: Niagara Soils Solutions Ltd.
Report Type: Quote - Custom-Build Your Own Report

Historical/Products:

ERIS Xplorer [ERIS Xplorer](#)
Insurance Products Fire Insurance Maps/Inspection Reports/Site Plans

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AST	Aboveground Storage Tanks	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	0	0
CA	Certificates of Approval	Y	0	0	0
CDRY	Dry Cleaning Facilities	Y	0	0	0
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Manufacturers and Distributors	Y	0	0	0
CHM	Chemical Register	Y	0	0	0
CNG	Compressed Natural Gas Stations	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
DTNK	Delisted Fuel Tanks	Y	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Y	0	0	0
ECA	Environmental Compliance Approval	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	0	0	0
EIIS	Environmental Issues Inventory System	Y	0	0	0
EMHE	Emergency Management Historical Event	Y	0	0	0
EPAR	Environmental Penalty Annual Report	Y	0	0	0
EXP	List of Expired Fuels Safety Facilities	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Y	0	0	0
FST	Fuel Storage Tank	Y	0	0	0
FSTH	Fuel Storage Tank - Historic	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	0	0
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	0	0	0

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	Fuel Oil Spills and Leaks	Y	0	0	0
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPR2	National Pollutant Release Inventory 1993-2020	Y	0	0	0
NPRI	National Pollutant Release Inventory - Historic	Y	0	0	0
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PFCH	NPRI Reporters - PFAS Substances	Y	0	0	0
PFHA	Potential PFAS Handlers from NPRI	Y	0	0	0
PINC	Pipeline Incidents	Y	0	2	2
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	1	1
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	0	0

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Boundary to 0.25km</i>	<i>Total</i>
		Total:	0	3	3

Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
--------------------	-----------	--------------------------	----------------	---------------------	--------------------------	------------------------

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

Executive Summary: Site Report Summary - Surrounding Properties

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
1	SPL	Enbridge Gas Distribution Inc.	4510 Willick Rd Niagara Falls ON	WNW/62.1	-5.57	13
1	PINC	PIPELINE HIT 1/2"	4510 WILICK RD,,NIAGARA FALLS,ON, L2G 0W4,CA ON	WNW/62.1	-5.57	13
2	PINC	ENBRIDGE GAS INC	9377 EMERALD AVE,,NIAGARA FALLS, ON,L2G 0A4,CA ON	NNW/202.8	-4.40	14

Executive Summary: Summary By Data Source

PINC - Pipeline Incidents

A search of the PINC database, dated Feb 28, 2021 has found that there are 2 PINC site(s) within approximately 0.25 kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
PIPELINE HIT 1/2"	4510 WILLYCK RD,,NIAGARA FALLS,ON,L2G 0W4,CA ON	62.1	<u>1</u>
ENBRIDGE GAS INC	9377 EMERALD AVE,,NIAGARA FALLS,ON, L2G 0A4,CA ON	202.8	<u>2</u>

SPL - Ontario Spills

A search of the SPL database, dated 1988-Jan 2023; see description has found that there are 1 SPL site(s) within approximately 0.25 kilometers of the project property.

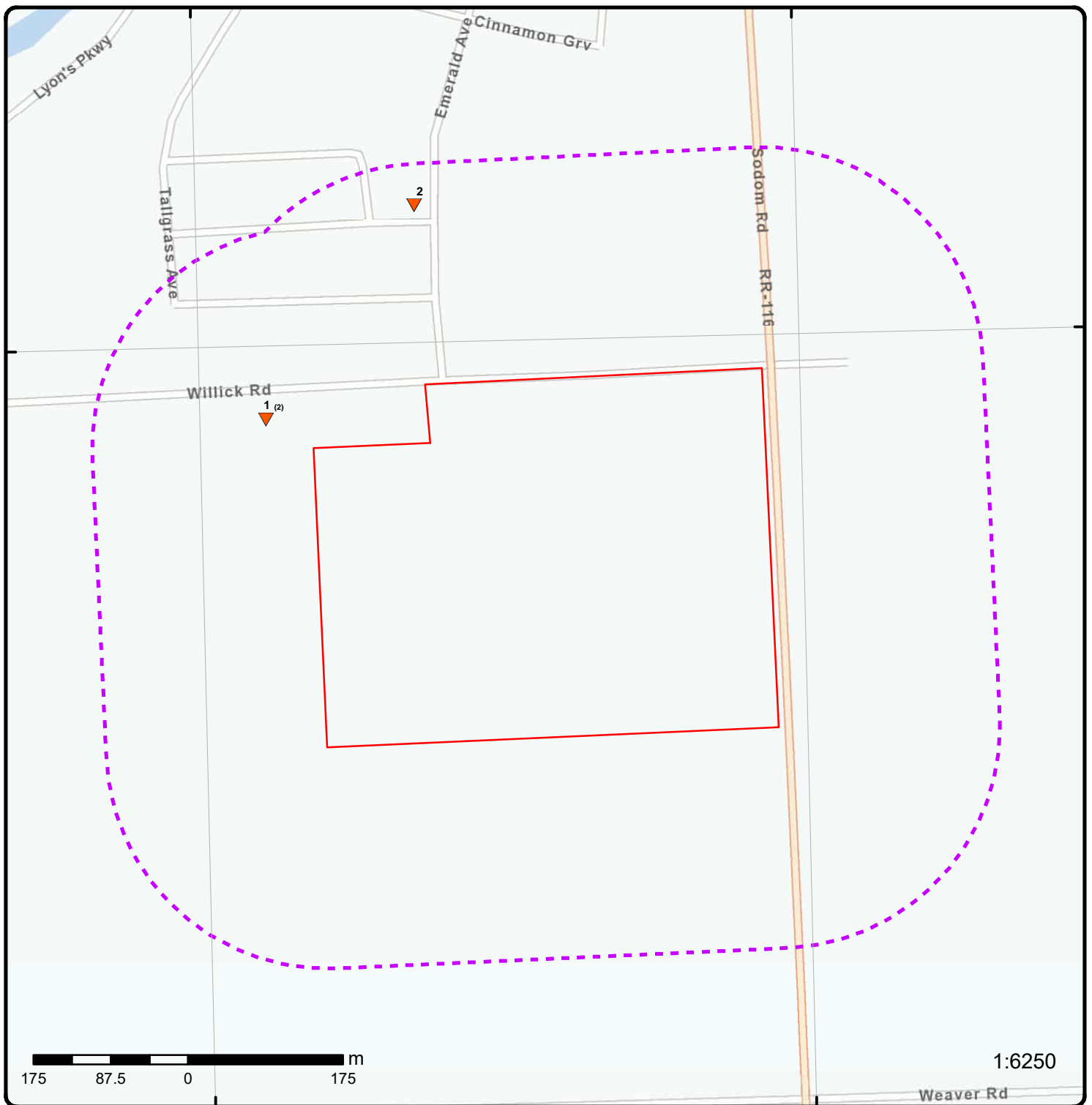
<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
Enbridge Gas Distribution Inc.	4510 Willick Rd Niagara Falls ON	62.1	<u>1</u>

79°4'W

79°3'30"W

43°2'30"N

43°2'30"N



Map: 0.25 Kilometer Radius

Order Number: 24081900345

Address: 4336 Willick Rd, Niagara Falls, ON



Project Property	Freeways; Highways	Beach	Shopping & Sports Area
Buffer Outline	Traffic Circle; Ramp	Airport	University/College
Eris Sites with Higher Elevation	Major Arterial; Minor Arterial	Industrial Area	Cemetery; Golf Course
Eris Sites with Same Elevation	Local Road	Military Base	Parkt (National)
Eris Sites with Lower Elevation	Service Road; Traffic Circle; Ramp	Aircraft Roads	Park (City/County)
Eris Sites with Unknown Elevation	Rail	Native Reservation	
		Hospital	

**Aerial****Year: 2023****Order Number: 24081900345****Address: 4336 Willick Rd, Niagara Falls, ON****Source: ESRI World Imagery****© ERIS Information Limited Partnership**

79°4'30"W

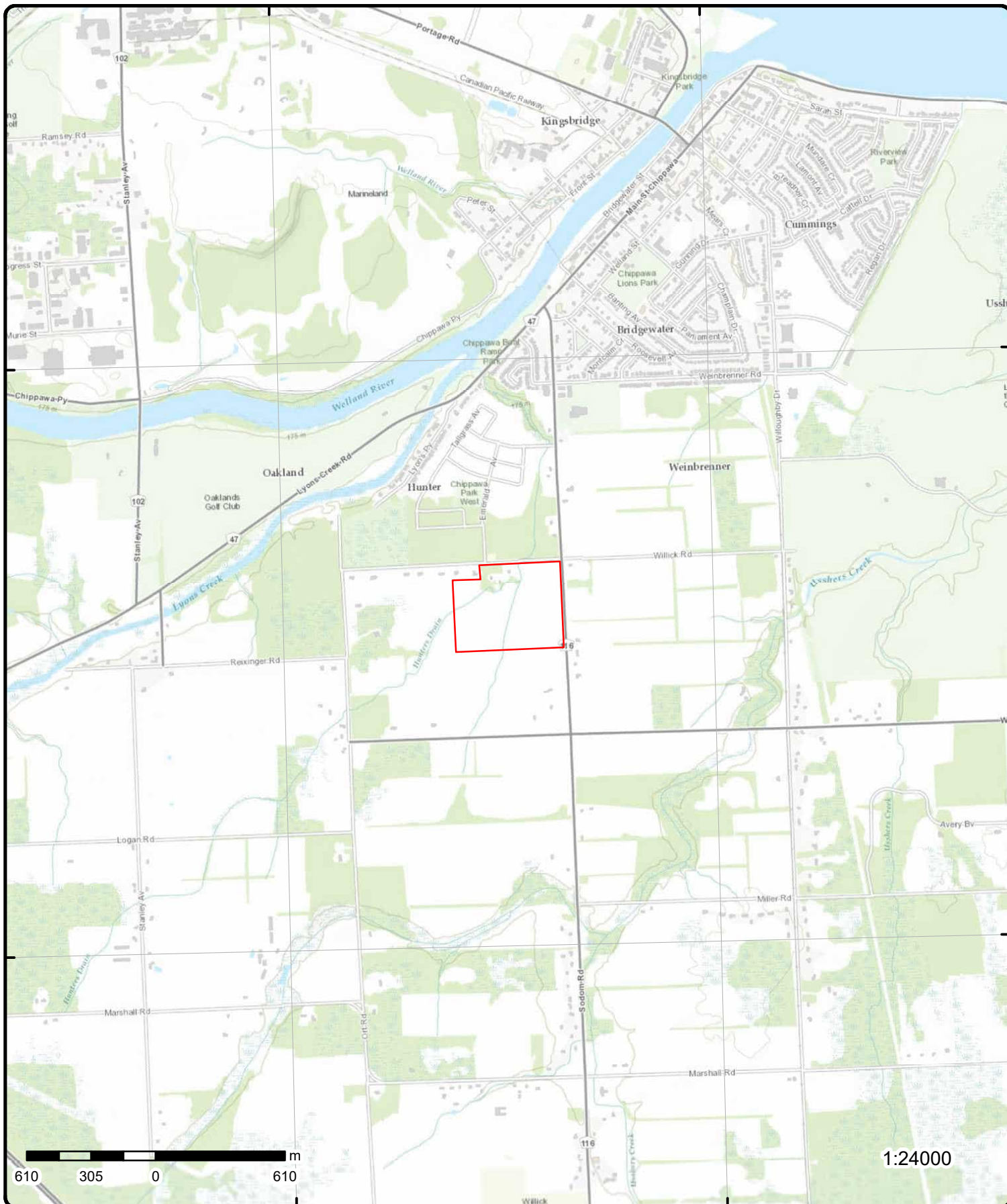
79°3'W

43°3'N

43°3'N

43°1'30"N

43°1'30"N



Topographic Map

Order Number: 24081900345

Address: 4336 Willick Rd, ON

Source: ESRI World Topographic Map



© ERIS Information Limited Partnership

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 2	WNW/62.1	169.3 / -5.57	Enbridge Gas Distribution Inc. 4510 Willick Rd Niagara Falls ON	SPL
<div> <div> Ref No: 4781-AZHE47 Year: Incident Dt: 2018/06/06 Dt MOE Arvl on Scn: MOE Reported Dt: 2018/06/07 Dt Document Closed: 2018/06/16 Site No: NA MOE Response: No Site County/District: Regional Municipality of Niagara Site Geo Ref Meth: Site District Office: Niagara Nearest Watercourse: Site Name: tssa<UNOFFICIAL> Site Address: 4510 Willick Rd Site Region: West Central Site Municipality: Niagara Falls Site Lot: Site Conc: Site Geo Ref Accu: Site Map Datum: Northing: 4767205 Easting: 657501 Incident Cause: Incident Preceding Spill: Leak/Break Environment Impact: Health Env Consequence: Nature of Impact: Contaminant Qty: 1 number (count) System Facility Address: Client Name: Enbridge Gas Distribution Inc. Client Type: Corporation Source Type: Pipeline/Components Contaminant Code: 35 Contaminant Name: METHANE GAS, COMPRESSED (NATURAL GAS) Contaminant Limit 1: Contam Limit Freq 1: Contaminant UN No 1: 1971 Receiving Medium: Air Incident Reason: Operator/Human Error Incident Summary: tssa 1/2" pl IP 4510 Willick Niagara Activity Preceding Spill: Property 2nd Watershed: Property Tertiary Watershed: Sector Type: Miscellaneous Communal SAC Action Class: Notifications Call Report Locatn Geodata: </div> <div> Municipality No: Nature of Damage: Discharger Report: Material Group: Impact to Health: 2 - Minor Environment Agency Involved: </div> </div>					
1	2 of 2	WNW/62.1	169.3 / -5.57	PIPELINE HIT 1/2" 4510 WILLICK RD,,NIAGARA FALLS,ON,L2G 0W4,CA	PINC

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
ON					
Incident Id: Incident No: 2322066 Incident Reported Dt: 6/7/2018 Type: FS-Pipeline Incident Status Code: Tank Status: Pipeline Damage Reason Est Task No: Spills Action Centre: Fuel Type: Fuel Occurrence Tp: Date of Occurrence: Occurrence Start Dt: Depth: Customer Acct Name: PIPELINE HIT 1/2" Incident Address: 4510 WILLICK RD,,NIAGARA FALLS,ON,L2G 0W4,CA Operation Type: Pipeline Type: Regulator Type: Summary: Reported By: Affiliation: Occurrence Desc: Damage Reason: Notes:	Pipe Material: Fuel Category: Health Impact: Environment Impact: Property Damage: Service Interrupt: Enforce Policy: Public Relation: Pipeline System: PSIG: Attribute Category: Regulator Location: Method Details:				

<u>2</u>	1 of 1	NNW/202.8	170.4 / -4.40	ENBRIDGE GAS INC 9377 EMERALD AVE,,NIAGARA FALLS,ON,L2G 0A4,CA ON	PINC
Incident Id: Incident No: 2984960 Incident Reported Dt: 12/21/2020 Type: FS-Pipeline Incident Status Code: Tank Status: Non Mandated Task No: Spills Action Centre: Fuel Type: Fuel Occurrence Tp: Date of Occurrence: Occurrence Start Dt: Depth: Customer Acct Name: ENBRIDGE GAS INC Incident Address: 9377 EMERALD AVE,,NIAGARA FALLS,ON,L2G 0A4,CA Operation Type: Pipeline Type: Regulator Type: Summary: Reported By: Affiliation: Occurrence Desc: Damage Reason: Notes:	Pipe Material: Fuel Category: Health Impact: Environment Impact: Property Damage: Service Interrupt: Enforce Policy: Public Relation: Pipeline System: PSIG: Attribute Category: Regulator Location: Method Details:				

Unplottable Summary

Total: **9** Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	CITY	SODOM RD.	NIAGARA FALLS ON	
CA	QUEENSWAY CHIPPAWA PROPS. INC.	CHIPPAWA W.SUB.PH.2/SODOM RD.	NIAGARA FALLS ON	
CA	QUEENSWAY CHIPPAWA PROPS. INC.	CHIPPAWA W.SUB.PH.2&3/SODOM RD	NIAGARA FALLS ON	
ECA	Queensway Chippawa Props. Inc.	4401 Willick Rd	Niagara Falls ON	L4K 4R1
ECA	Queensway Chippawa Props. Inc.	Willick Rd (West of Sodom Road)	Niagara Falls ON	L4K 4R1
LIMO	Part lot 18 south, Concession 3 K M Containers Limited City of Port Colborne	Part of Lot 18, Concession 3 Niagara	ON	
PINC	ENBRIDGE GAS INC	EMERALD AVE & SHUTTLEWORTH DR.,, NIAGARA FALLS,ON,L2E 6S6,CA	ON	
SPL	Bruce R. Smith Limited	West of Sodom Rd.	Niagara Falls ON	
SPL	NIAGARA FALLS HYDRO	ORT RD, N OF MARSHALL RD TRANSFORMER/CAPACITOR	NIAGARA FALLS CITY ON	

Unplottable Report

Site: CITY
SODOM RD. NIAGARA FALLS ON

Database:
CA

Certificate #: 3-0792-85-006
Application Year: 85
Issue Date: 7/31/85
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: QUEENSWAY CHIPPAWA PROPS. INC.
CHIPPAWA W.SUB.PH.2/SODOM RD. NIAGARA FALLS ON

Database:
CA

Certificate #: 3-1326-98-
Application Year: 98
Issue Date: 9/3/1998
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: QUEENSWAY CHIPPAWA PROPS. INC.
CHIPPAWA W.SUB.PH.2&3/SODOM RD NIAGARA FALLS ON

Database:
CA

Certificate #: 7-0885-98-
Application Year: 98
Issue Date: 9/4/1998
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: Queensway Chippawa Props. Inc.
4401 Willick Rd Niagara Falls ON L4K 4R1

Database:
ECA

Approval No: 1006-B63GEX

MOE District:

Approval Date: 2018-10-31
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: Queensway Chippawa Props. Inc.
Address: 4401 Willick Rd
Full Address:
Full PDF Link: <https://www.accessenvironment.ene.gov.on.ca/instruments/9173-B5TK3D-14.pdf>
PDF Site Location:

City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

Site: **Queensway Chippawa Props. Inc.**
Willick Rd (West of Sodom Road) Niagara Falls ON L4K 4R1

Database:
ECA

Approval No: 1763-ARVNL7
Approval Date: 2017-10-11
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: Queensway Chippawa Props. Inc.
Address: Willick Rd (West of Sodom Road)
Full Address:
Full PDF Link: <https://www.accessenvironment.ene.gov.on.ca/instruments/1853-ARLNNF-14.pdf>
PDF Site Location:

MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

Site: **Part lot 18 south, Concession 3 K M Containers Limited City of Port Colborne**
Part of Lot 18, Concession 3 Niagara ON

Database:
LIMO

ECA/Instrument No: A120308
Operation Status: Closed
C of A Issue Date:
C of A Issued to:
Lndfl Gas Mgmt (P):
Lndfl Gas Mgmt (F):
Lndfl Gas Mgmt (E):
Lndfl Gas Mgmt Sys:
Landfill Gas Mntr:
Leachate Coll Sys:
ERC Est Vol (m3):
ERC Volume Unit:
ERC Dt Last Det:
Landfill Type:
Source File Type:
Fill Rate:
Fill Rate Unit:
Tot Fill Area (ha):
Tot Site Area (ha):
Footprint:
Tot Apprv Cap (m3):
Contam Atten Zone:
Grndwtr Mntr:
Surf Wtr Mntr:
Air Emis Monitor:
Approved Waste Type:
Client Site Name:
ERC Methodology:
Site Name:

Natural Attenuation:
Liners:
Cover Material:
Leachate Off-Site:
Leachate On Site:
Req Coll Lndfl Gas:
Lndfl Gas Coll:
Total Waste Rec:
TWR Methodology:
TWR Unit:
Tot Aprv Cap Unit:
Financial Assurance:
Last Report Year:
Region:
District Office:
Site County:
Lot:
Concession:
Latitude:
Longitude:
Easting:
Northing:
UTM Zone:
Data Source:

Part lot 18 south, Concession 3
K M Containers Limited
City of Port Colborne

Site Location Details:
Service Area:

Site: ENBRIDGE GAS INC
EMERALD AVE & SHUTTLEWORTH DR,,NIAGARA FALLS,ON,L2E 6S6,CA ON

Database:
PINC

Incident Id:		Pipe Material:	
Incident No:	3087462	Fuel Category:	
Incident Reported Dt:	8/3/2021	Health Impact:	
Type:	FS-Pipeline Incident	Environment Impact:	
Status Code:		Property Damage:	
Tank Status:	Pipeline Damage Reason Est	Service Interrupt:	
Task No:		Enforce Policy:	
Spills Action Centre:		Public Relation:	
Fuel Type:		Pipeline System:	
Fuel Occurrence Tp:		PSIG:	
Date of Occurrence:		Attribute Category:	
Occurrence Start Dt:		Regulator Location:	
Depth:		Method Details:	
Customer Acct Name:	ENBRIDGE GAS INC		
Incident Address:	EMERALD AVE & SHUTTLEWORTH DR,,NIAGARA FALLS,ON,L2E 6S6,CA		
Operation Type:			
Pipeline Type:			
Regulator Type:			
Summary:			
Reported By:			
Affiliation:			
Occurrence Desc:			
Damage Reason:			
Notes:			

Site: Bruce R. Smith Limited
West of Sodom Rd. Niagara Falls ON

Database:
SPL

Ref No:	8665-6HAHE7	Municipality No:	
Year:		Nature of Damage:	
Incident Dt:	10/18/2005	Discharger Report:	0
Dt MOE Arvl on Scn:		Material Group:	Oil
MOE Reported Dt:	10/18/2005	Impact to Health:	
Dt Document Closed:		Agency Involved:	
Site No:			
MOE Response:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:	Niagara		
Nearest Watercourse:			
Site Name:	QEW <UNOFFICIAL>		
Site Address:			
Site Region:			
Site Municipality:	Niagara Falls		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:			
Site Map Datum:			
Northing:			
Easting:			
Incident Cause:	Other Transport Accident		
Incident Preceding Spill:			
Environment Impact:	Not Anticipated		
Health Env Consequence:			
Nature of Impact:	Surface Water Pollution		
Contaminant Qty:	401 L		
System Facility Address:			
Client Name:	Bruce R. Smith Limited		
Client Type:			
Source Type:			
Contaminant Code:			

Contaminant Name: DIESEL FUEL
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: Water
Incident Reason: Error- Operator error
Incident Summary: 18 wheeler roll over on QEW, saddle tank ruptured
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Other Motor Vehicle
SAC Action Class: Highway Spills (usually highway accidents)
Call Report Locatn Geodata:

Site: NIAGARA FALLS HYDRO
ORT RD, N OF MARSHALL RD TRANSFORMER/CAPACITOR NIAGARA FALLS CITY ON

Database:
SPL

Ref No: 224981
Year:
Incident Dt: 5/9/2002
Dt MOE Arvl on Scn:
MOE Reported Dt: 5/9/2002
Dt Document Closed:
Site No:
Municipality No: 18101
Nature of Damage:
Discharger Report:
Material Group:
Impact to Health:
Agency Involved:

MOE Response:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:

Site Name:
Site Address:
Site Region:
Site Municipality: NIAGARA FALLS CITY
Site Lot:

Site Conc:
Site Geo Ref Accu:
Site Map Datum:

Northing:

Easting:

Incident Cause: OTHER CONTAINER LEAK

Incident Preceding Spill:

Environment Impact: POSSIBLE

Health Env Consequence:

Nature of Impact: Multi Media Pollution

Contaminant Qty:

System Facility Address:

Client Name:

Client Type:

Source Type:

Contaminant Code:

Contaminant Name:

Contaminant Limit 1:

Contam Limit Freq 1:

Contaminant UN No 1:

Receiving Medium: LAND / WATER

Incident Reason: ERROR

Incident Summary: NIAGARA HYDRO: 50 L TRANSFORMER OIL TO GRND & WET DITCH.CONTAINED,CLEANING.

Activity Preceding Spill:

Property 2nd Watershed:

Property Tertiary Watershed:

Sector Type:

SAC Action Class:

Call Report Locatn Geodata:

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](#)

This database of licensed and permitted pits and quarries is maintained by the Ontario Ministry of Natural Resources and Forestry (MNRF), as regulated under the Aggregate Resources Act, R.S.O. 1990. Aggregate site data has been divided into active and inactive sites. Active sites may be further subdivided into partial surrenders. In partial surrenders, defined areas of a site are inactive while the rest of the site remains active.

Government Publication Date: Up to Nov 2023

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-Apr 2024

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-Apr 30, 2024

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 2022

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: Oct 2023

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-Apr 30, 2024

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 -May 2024

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-May 2024

Certificates of Property Use:Provincial [CPU](#)

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

Government Publication Date: 1994 - July 31, 2024

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 - Aug 2023

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: Oct 2023

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-Jun 30, 2024

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 - July 31, 2024

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-Jun 30, 2024

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-Mar 31, 2024

Environmental Issues Inventory System:

Federal

[EIIS](#)

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

Government Publication Date: 1992-2001*

Emergency Management Historical Event:

Provincial

EMHE

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

Government Publication Date: Apr 30, 2022**Environmental Penalty Annual Report:**

Provincial

EPAR

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

Government Publication Date: Jan 1, 2011 - Dec 31, 2023**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: Oct 2023**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-Jun 2024**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: Oct 31, 2021**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: Oct 2023

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-Oct 31, 2022

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 2022

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: 31 Oct, 2023

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: Mar 31, 2022

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 2024

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, 2022

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-Nov 2023

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 1993-2020:**

Federal

NPR2

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals, and transfers for recycling. The inventory, managed by Environment and Climate Change Canada, tracks over 300 substances. Under the authority of the Canadian Environmental Protection Act (CEPA), owners or operators of facilities that meet published reporting requirements are required to report to the NPRI.

Government Publication Date: Sep 2020**National Pollutant Release Inventory - Historic:**

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. This data holds historic records; current records are found in NPR2.

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-May 31, 2024**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-Aug 2023**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 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 - July 31, 2024

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-Jun 30, 2024

NPRI Reporters - PFAS Substances:

Federal

PFCH

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals, and transfers, tracking over 320 pollutants. Per - and polyfluoroalkyl substances (PFAS) are a group of over 4,700 human-made substances for which adverse environmental and health effects have been observed. This listing of PFAS substance reporters includes those NPRI facilities that reported substances that are found in either: a) the Comprehensive Global Database of PFASs compiled by the Organisation for Economic Co-operation and Development (OECD), b) the US Environmental Protection Agency (US EPA) Master List of PFAS Substances, c) the US EPA list of PFAS chemicals without explicit structures, or d) the US EPA list of PFAS structures (encompassing the largest set of structures having sufficient levels of fluorination to potentially impart PFAS-type properties).

Government Publication Date: Sep 2020

Potential PFAS Handlers from NPRI:

Federal

PFHA

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals, and transfers, tracking over 320 pollutants. Per - and polyfluoroalkyl substances (PFAS) are a group of over 4,700 human-made substances for which adverse environmental and health effects have been observed. This list of potential PFAS handlers includes those NPRI facilities that reported business activity (NAICS code) included in the US Environmental Protection Agency (US EPA) list of Potential PFAS-Handling Industry Sectors, further described as operating in industry sectors where literature reviews indicate that PFAS may be handled and/or released. Inclusion of a facility in this listing does not indicate that PFAS are being manufactured, processed, used, or released by the facility - these are facilities that potentially handle PFAS based on their industrial profile.

Government Publication Date: Sep 2020

Pipeline Incidents:

Provincial

PINC

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

Government Publication Date: 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 PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994 - July 31, 2024

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, 1992-2021

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). The Government of Ontario states that it is not responsible for the accuracy of the information in this Registry.

Government Publication Date: 1997-Sept 2001, Oct 2004-Jul 2024

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-Apr 30, 2024

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 by 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. This database includes spill incidents that occurred in Mar 2023-Mar 2024, May 2024 in addition to those listed in the Government Publication Date.

Government Publication Date: 1988-Jan 2023; see description

Wastewater Discharger Registration Database:

Provincial

SRDS

Facilities that report either municipal treated wastewater effluent or industrial wastewater discharges under the Effluent Monitoring and Effluent Limits (EMEL) and Municipal/Industrial Strategy for Abatement Regulations. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment keeps record of 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.

Government Publication Date: 1990-Dec 31, 2021

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 - Apr 2023

Variances for Abandonment of Underground Storage Tanks:

Provincial

VAR

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

Records are not verified for accuracy or completeness.

Government Publication Date: 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-Jun 30, 2024

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 30st, 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: Dec 31 2023

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 C

AERIAL PHOTOGRAPHS

AERIAL PHOTOGRAPHS



Photograph No.:

1

Year:

1934

Source :

Ministry of Natural Resources | Maxar

AERIAL PHOTOGRAPHS



Photograph No.:	2	Year:	1954-55
Source :	Ministry of Natural Resources Maxar		

AERIAL PHOTOGRAPHS



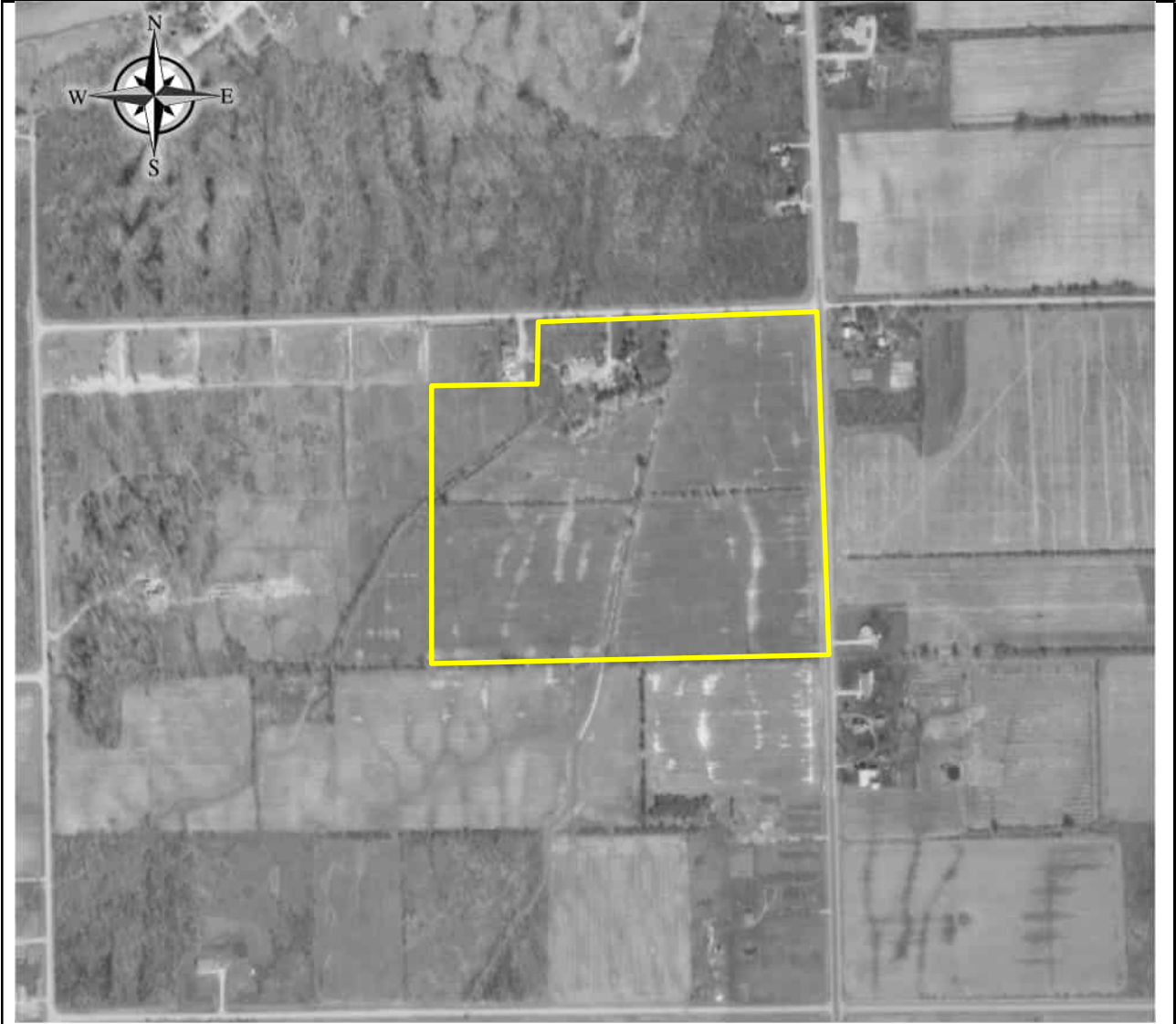
Photograph No.:	3	Year:	1965
Source :	Ministry of Natural Resources Maxar		

AERIAL PHOTOGRAPHS



Photograph No.:	4	Year:	1971
Source :	Ministry of Natural Resources Maxar		

AERIAL PHOTOGRAPHS



Photograph No.:	5	Year:	2000
Source :	Ministry of Natural Resources Maxar		

AERIAL PHOTOGRAPHS



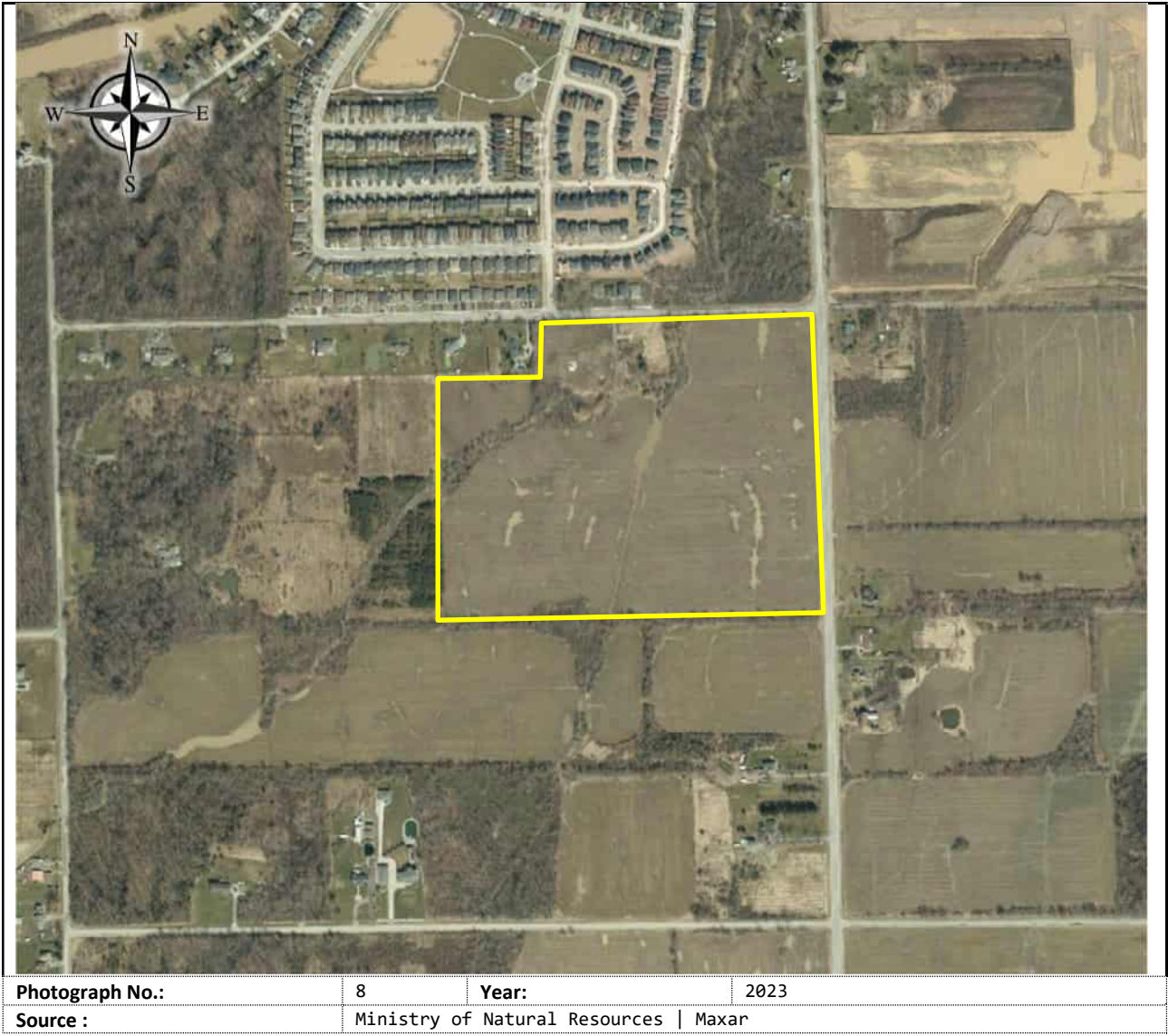
Photograph No.:	6	Year:	2013
Source :	Ministry of Natural Resources Maxar		

AERIAL PHOTOGRAPHS



Photograph No.:	7	Year:	2018
Source :	Ministry of Natural Resources Maxar		

AERIAL PHOTOGRAPHS

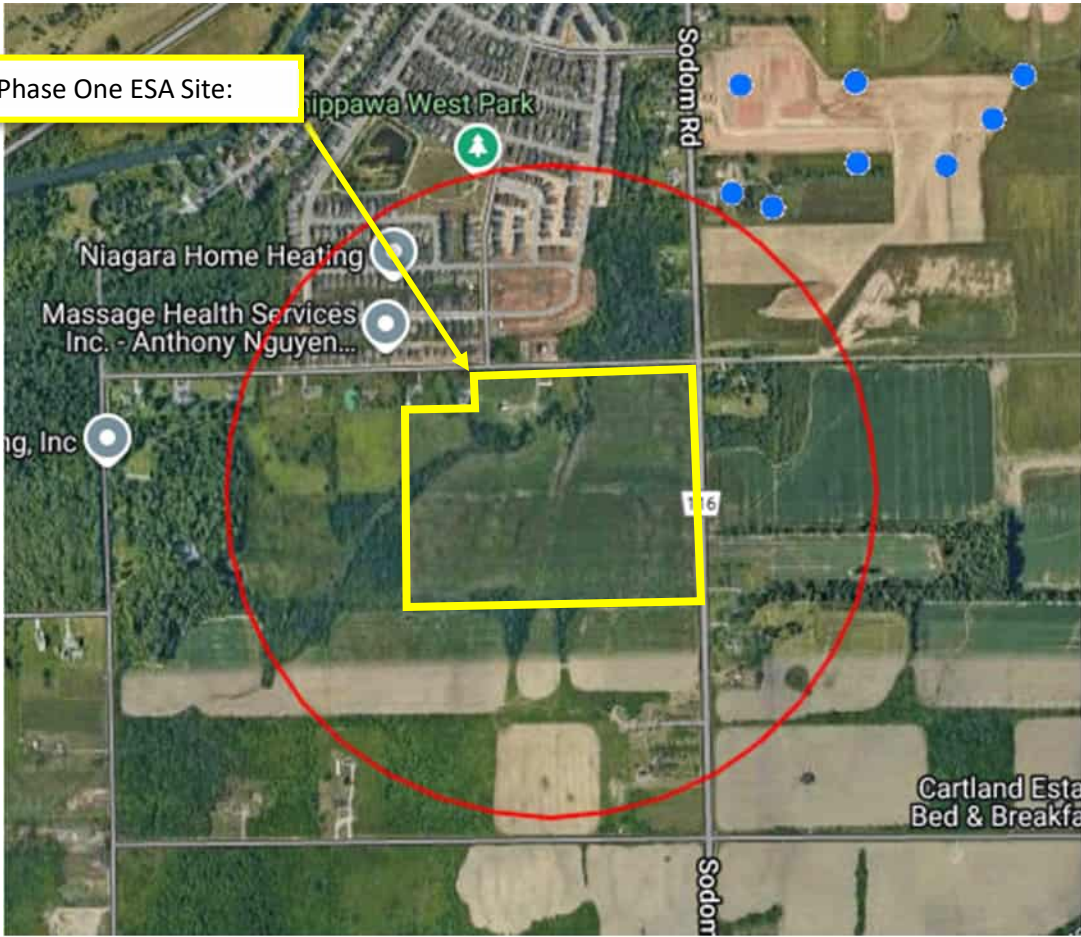


APPENDIX D

WELL RECORDS

WATER WELL RECORDS

Phase One ESA Site:



Map Source: Ministry of Environment and Energy ©2022

Well ID	Well Depth (m)	Date of Completion (MM/DD/YYYY)
No Well Records were identified within the Study Area		

APPENDIX E

SITE QUESTIONNAIRE

ENVIRONMENTAL SITE ASSESSMENT INTERVIEW QUESTIONNAIRE

Project Information			
Site Address	4336 WILICK ROAD Niagara Falls ON.		<div style="border-bottom: 1px solid black; padding-bottom: 2px;">NSSL Project No.</div> <div style="border-bottom: 1px solid black; padding-bottom: 2px;">Date</div>
Client Information			
Interviewee Name	ABHAY MATHUR 905-978-3788 3788		
Position		Years Familiar with the Site 3 years	
Current owner(s) of the site, time period	Unknown		NA
	13071189 CANADA INC. 305-2585 SKYMARK AVENUE. MISSISSAUGA, ON.		
Historic Information			
Previous owner(s) of the site, time period	Unknown		NA
	UNKNOWN.		
Current tenant(s) of the site, time period	Unknown		NA
	NA		
Previous tenant(s) of the site, time period	Unknown		NA
	UNKNOWN.		
Was the property ever used as a dry cleaner, garage, gasoline or liquid dispensing facility, or other industrial use?	Yes yes.	No	Unknown
	If yes, please elaborate only 2 acres was used as garage North side of the this site. It was before the previous tenants has taken over		
Have any reports and/or studies (environmental or other) been completed on the property? If yes, are they available for review?	Yes	No	Unknown
	UNKNOWN		

ENVIRONMENTAL SITE ASSESSMENT INTERVIEW QUESTIONNAIRE

Site Information			
What type of potable water supply is available at the Site?	Municipal	<div style="display: flex; justify-content: space-between;"> <div>Private</div> <div>None</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Cistern</div> <div>Drilled Well</div> <div>Other</div> </div> <div style="display: flex; justify-content: space-between;"> <div></div> <div>Drilled well.</div> <div></div> </div>	
What type of wastewater (sewage) system is available at the Site?	Municipal	<div style="display: flex; justify-content: space-between;"> <div>Private</div> <div>None</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Septic Bed</div> <div>Other</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Septic Bed.</div> <div></div> </div>	
Are there any electrical transformers located at the Site?	Yes	No	Unknown
Has there ever been any fires at the Site? If yes, please provide details.	Yes	No	Unknown
	NO -		
Has any soil (fill, gravel, topsoil, etc.) been brought to and deposited on the Site for construction, grading or backfill purposes or for the creation of berms?	NO -		
Are there any existing monitoring wells on the Site?	Yes	(No)	Unknown
Building Information			
Are there existing or former buildings at the Site? If yes, please provide details.	Yes	No	Unknown
	NO -		
Have any additions been constructed on the existing building(s)?	Yes	No	Unknown
	NO -		
What are the current heating systems associated with the building(s)?	—		
What were the former heating systems (fuel oil, wood, coal, electric etc.)?	1 twin fuel.		
Are there any sumps in the building(s)?	Yes	No	Unknown
Are there any areas of water damage in the building(s)? If yes, where?	Yes	No	Unknown
	—		

ENVIRONMENTAL SITE ASSESSMENT INTERVIEW QUESTIONNAIRE

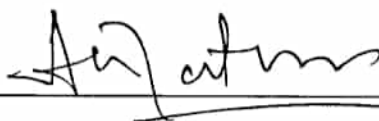
Building Information cont'd			
Is there evidence of mould growth? If so, where?	Yes	No	Unknown
	—		
Are there any concerns related to indoor air quality in the building(s)?	Yes	No	Unknown
	—		
Is there any asbestos, lead, Urea Foam Formaldehyde Insulation (UFFI) or PCB containing materials in the building(s)? If so, where and what type of building material.	Yes	No	Unknown
	—		
Have any of these materials been previously removed from the building(s)?	Yes	No	Unknown
	—		
Site Operations			
Are there any site plans or drawings, available for review, showing areas of production, manufacturing, chemical or waste storage in the building(s) or Site?	Yes	No	Unknown
	—		
Fuel Storage & Handling, Liquid & Solids Wastes, Chemicals & Spills			
Are there any above ground or underground storage tanks (AST/UST) on Site? If yes, where?	Yes	No	Unknown
	—		
Were any AST/USTs historically removed from the Site?	Yes	No	Unknown
	—		
Are there any current or former fuel pumps or fuelling systems on Site?	Yes	No	Unknown
	—		
Are there any waste oils generated and/or stored on Site?	Yes	No	Unknown
	—		
Are there any oil-water separators and/or floor drains on Site?	Yes	No	Unknown
	—		
Is there any hydraulic lift equipment ie. inground hoists or elevators?	Yes	No	Unknown
	—		
Are any chemicals or solvents stored or used on Site?	Yes	No	Unknown
	—		
Are Material Safety Data Sheets (MSDS) or Safety Data Sheets (SDS) for the chemicals available for review?	Yes	No	Unknown
	—		

ENVIRONMENTAL SITE ASSESSMENT INTERVIEW QUESTIONNAIRE

Environmental Compliance			
Is there any known or suspected soil and/or groundwater contamination at the Site? If yes, please explain.	Yes	No	Unknown
Are you aware of any site-specific permits, waste generation numbers, Environmental Compliance Approvals or Certificates of Approval associated with the Site? If yes, please list.	Yes	No	Unknown
Are there any records of spills or records of discharge of contaminants associated with the Site?	Yes	No	Unknown
Adjacent Site Information			
Are you aware of any current or historic environmental concerns associated with an adjacent property? If yes, please explain.	Yes	No	Unknown
Additional Information			
Is there another person we should contact for additional information pertaining to the Site?	NO.		
Do you have any additional comments?	you can go directly to the site but there are wooden logs to stop vehicle to enter.		

The above information is a true representation of my knowledge of the Site and operations. I understand that this information will be reviewed by NSSL and compiled in the Environmental Site Assessment report.

Signature of Interviewee: _____



APPENDIX F

SITE RECONNAISSANCE & PHOTOGRAPHIC LOG

ENVIRONMENTAL SITE ASSESSMENT SITE RECONNAISSANCE

Project Information			
Site Address	4336 Willick Road, Niagara Falls, ON	NSSL Project No.	NS2484-01
		Date	August 8, 2024
Client Information			
Site Meet	NA		
Position	NA		
Surrounding Land Use Features			
North	North adjacent is Willick Road, beyond is residential dwellings, Weaver Family Cemetery, and vacant lots		
South	South adjacent is agricultural fields of soybeans		
East	East adjacent is Sodom Road, beyond is residential dwellings, and agricultural fields		
West	West adjacent is vacant lots		
Study Site Features			
Potable Water Source	As per received client communications, a private water well is located onsite. This well was not found during site reconnaissance. Confirmation of existence was not determined at this time.		
Wastewater Source	Private septic bed, east of the historic dwelling on-site		
Groundwater Monitoring Wells	N/A		
Fill Material	Fill material was not observed onsite, reworked material was identified within the general footprint area of the historic dwelling.		
Surface Water Runoff (swales, catch basins)	Several drainage paths were noted throughout the agricultural portion of the site. Surface water would infiltrate the soils on-site, overland runoff would be directed towards Hunters Drain, flowing north off-site.		
Watercourses, ditches, standing water	Hunters Drain, traversing the site from southwest to the north.		
Electrical Transformers on site? Company name, transformer #	N/A		
Ground Cover	Predominately agricultural fields utilized by a local farmer for growing soyabeans. Woodlot trees and shrubs have infilled previously developed and unused areas of the site.		
Other			
Exterior Building Observations			
Exterior wall material	N/A		
Roofing material	N/A		
Foundation type	N/A		
Number of storeys	N/A		
Number exits/entrances of	N/A		
Basement (full/partial/none)	N/A		

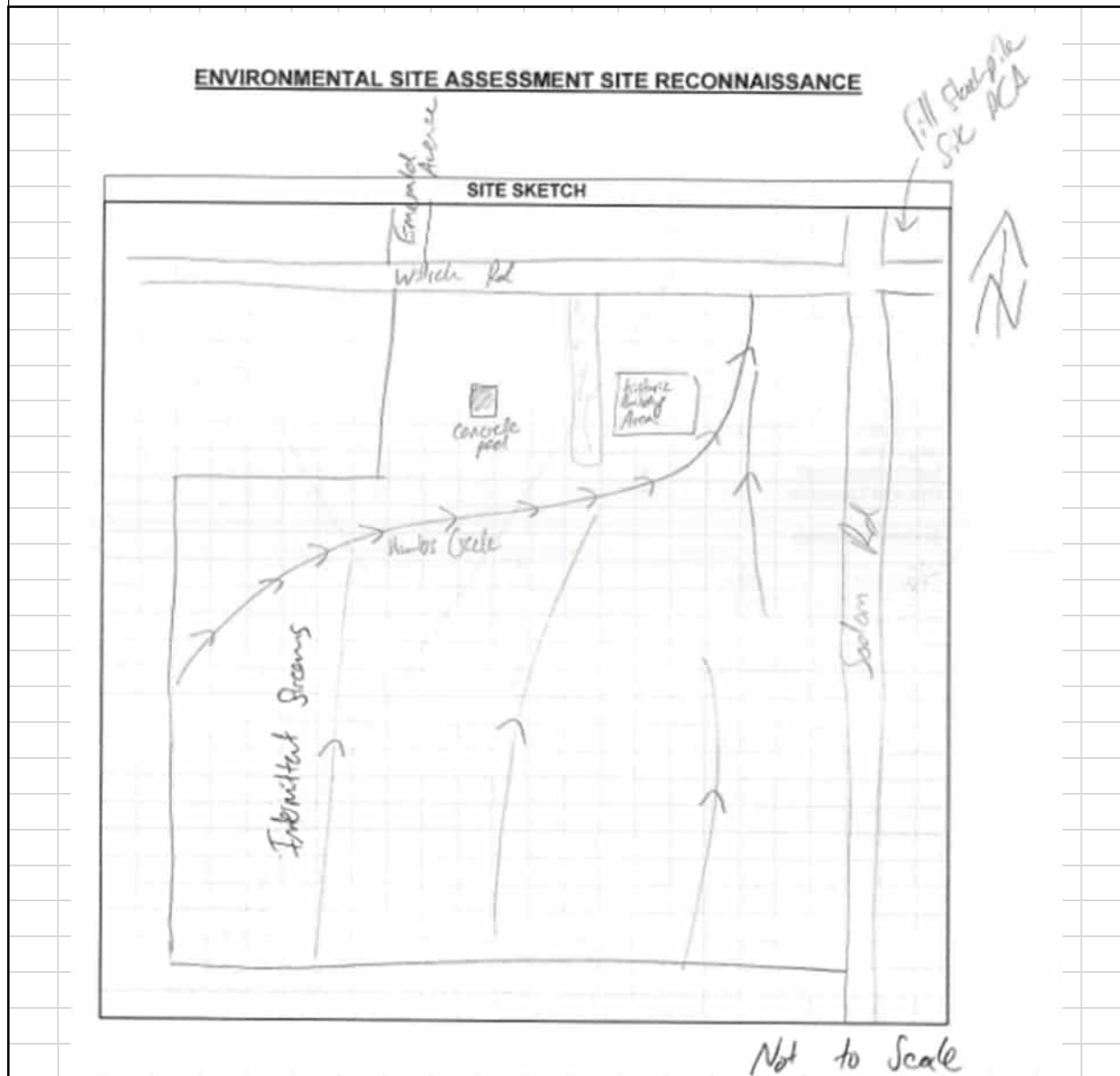
ENVIRONMENTAL SITE ASSESSMENT SITE RECONNAISSANCE

Lighting	N/A
Other	The Site was vacant with no exterior materials to be investigated.
Above Ground or Underground Storage Tanks	
Location of AST/UST	N/A
Contents of AST/UST	N/A
Material (fiberglass, steel)	N/A
Year installed/removed	N/A
Secondary containment?	N/A
Fill frequency	N/A
Visible Staining, stressed vegetation	N/A
Associated Pumps/Lines	N/A
Interior Building Observations	
Interior wall materials	N/A
Floor materials	N/A
Ceiling materials	N/A
Lighting	N/A
Oil water separators, floor drains, sumps	N/A
Hydraulic equipment (inground hoists/elevators)	N/A
Pits and Lagoons	N/A
Stained materials	N/A
Chemicals or other generated and/or stored	N/A
Heating System	N/A
UFFI (urea formaldehyde foam insulation)	N/A
PCB's	N/A
Lead	N/A
Asbestos Containing Materials (ACM)	N/A
Mercury	N/A
Water damage	N/A

ENVIRONMENTAL SITE ASSESSMENT SITE RECONNAISSANCE

Mould	N/A
Noise	N/A
Indoor Air Quality	N/A

SITE SKETCH



PHOTOGRAPHIC LOG

PHASE ONE PROPERTY



Photograph 1: Looking across the northwestern part of the site. The historic footprint of the dwelling was located on the left side of the gravel laneway, and the detached garage was situated to the right.

PHOTOGRAPHIC LOG

PHASE ONE PROPERTY



Photograph 2: Remaining concrete pad foundation of the garage. Limited staining was noted.

PHOTOGRAPHIC LOG

PHASE ONE PROPERTY



Photograph 3: Central area of the site, the soyabean crop is uniformly present throughout this area.

PHOTOGRAPHIC LOG

PHASE ONE PROPERTY



Photograph 4: Southern area of the site utilized for agricultural purposes.

PHOTOGRAPHIC LOG

PHASE ONE PROPERTY



Photograph 5: Eastern area of the s, agricultural.

PHOTOGRAPHIC LOG

PHASE ONE PROPERTY



Photograph 6: Hunters Drain, noted to be dry at the time of the site visit.

PHOTOGRAPHIC LOG

SURROUNDING LAND USES



Photograph 7: The north adjacent land use was noted as the municipal roadway Willick Road. Properties north of Willick Rd. were identified as single-family residential homes. Weaver Family Cemetery, and vacant land uses are beyond.

PHOTOGRAPHIC LOG

SURROUNDING LAND USES



Photograph 8: East adjacent land use is Sodom Road. Properties east of Sodom Road were identified as residential, and vacant/agricultural land use.

PHOTOGRAPHIC LOG

SURROUNDING LAND USES



Photograph 9: South adjacent land use, agricultural.

PHOTOGRAPHIC LOG

SURROUNDING LAND USES



Photograph 10: West adjacent land use, rural residential and vacant lots.

APPENDIX G

POTENTIALLY CONTAMINATING ACTIVITIES

POTENTIALLY CONTAMINATING ACTIVITIES

#	Activity	#	Activity
1.	Acid and Alkali Manufacturing, Processing and Bulk Storage	31.	Ink Manufacturing, Processing and Bulk Storage
2.	Adhesives and Resins Manufacturing, Processing and Bulk Storage	32.	Iron and Steel Manufacturing and Processing
3.	Airstrips and Hangars Operation	33.	Metal Treatment, Coating, Plating and Finishing
4.	Antifreeze and De-icing Manufacturing and Bulk Storage	34.	Metal Fabrication
5.	Asphalt and Bitumen Manufacturing	35.	Mining, Smelting and Refining; Ore Processing; Tailings Storage
6.	Battery Manufacturing, Recycling and Bulk Storage	36.	Oil Production
7.	Boat Manufacturing	37.	Operation of Dry Cleaning Equipment (where chemicals are used)
8.	Chemical Manufacturing, Processing and Bulk Storage	38.	Ordnance Use
9.	Coal Gasification	39.	Paints Manufacturing, Processing and Bulk Storage
10.	Commercial Autobody Shops	40.	Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
11.	Commercial Trucking and Container Terminals	41.	Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage
12.	Concrete, Cement and Lime Manufacturing	42.	Pharmaceutical Manufacturing and Processing
13.	Cosmetics Manufacturing, Processing and Bulk Storage	43.	Plastics (including Fibreglass) Manufacturing and Processing
14.	Crude Oil Refining, Processing and Bulk Storage	44.	Port Activities, including Operation and Maintenance of Wharves and Docks
15.	Discharge of Brine related to oil and gas production	45.	Pulp, Paper and Paperboard Manufacturing and Processing
16.	Drum and Barrel and Tank Reconditioning and Recycling	46.	Rail Yards, Tracks and Spurs
17.	Dye Manufacturing, Processing and Bulk Storage	47.	Rubber Manufacturing and Processing
18.	Electricity Generation, Transformation and Power Stations	48.	Salt Manufacturing, Processing and Bulk Storage
19.	Electronic and Computer Equipment Manufacturing	49.	Salvage Yard, including automobile wrecking
20.	Explosives and Ammunition Manufacturing, Production and Bulk Storage	50.	Soap and Detergent Manufacturing, Processing and Bulk Storage
21.	Explosives and Firing Range	51.	Solvent Manufacturing, Processing and Bulk Storage
22.	Fertilizer Manufacturing, Processing and Bulk Storage	52.	Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems
23.	Fire Retardant Manufacturing, Processing and Bulk Storage	53.	Tannery
24.	Fire Training	54.	Textile Manufacturing and Processing
25.	Flocculants Manufacturing, Processing and Bulk Storage	55.	Transformer Manufacturing, Processing and Use
26.	Foam and Expanded Foam Manufacturing and Processing	56.	Treatment of Sewage equal to or greater than 10,000 litres per day
27.	Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles	57.	Vehicles and Associated Parts Manufacturing
28.	Gasoline and Associated Products Storage in Fixed Tanks	58.	Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
29.	Glass Manufacturing	59.	Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products
30.	Importation of Fill Material of Unknown Quality		

Table 2, Schedule D, Ontario Regulation (O.Reg.) 153/04 (as amended)

APPENDIX H

CONCEPTUAL SITE MODEL

PHASE ONE CONCEPTUAL SITE MODEL

Niagara Soils Solutions Ltd. (NSSL) was retained by 13071189 Canada Inc. to conduct a Phase One Environmental Site Assessment (ESA) of the vacant lot located at 4336 Willick Road, in the City of Niagara Falls, ON (herein referred to as the “Phase One Property” or the “Site”). It is understood that the Phase One ESA is requested for due diligence purposes related to proposed future development and as according to comments received from pre-consultation meetings with the Region. All work will be completed in accordance with Ontario Regulation (O. Reg) 153/04 (as amended) standards. The Site location is shown in Figure 1.

Site Description

The Phase One ESA covers approximately 19.8-hectares of land that primarily consists of agricultural fields, some woodlot and scrub areas in the north, and a drainage ditch running north to northwest. The site is devoid of any buildings; however, the concrete pads remain. Historically, the Site was utilized for mixed use purposes (agricultural and residential) dating back to at least 1934. Notably, from around 2000 to 2018, as depicted in aerial photographs, the owner utilized the detached garage and surrounding land to store and work on a variety of automobiles, trucks, etc. All structures were removed from site between 2021 and 2023. The property is situated at the southwest corner of Willick Road and Sodom Road, approximately 1 km south of the Welland River and 2.6 km southwest of the Niagara River. Willick Road runs east to west along the northern property boundary, while Sodom Road runs north to south at the eastern boundary of the Site. According to Niagara Navigator, the Phase One Property is classified as a "Farm without residence – with secondary structures (farm outbuildings)". NSSL notes these secondary structures have been demolished. Adjacent properties include a mix of residential properties, agricultural fields, vacant lots, and the Weaver Family Cemetery to the north.

Water Bodies & Areas of Natural Significance

The Niagara Peninsula Conservation Authority (NPCA) map shows that the Phase One study area is part of the South Niagara Falls Hunters Drain Watershed (3,054,632 m²) and the South Niagara Falls Ushers Creek Watershed (19,424,738 m²). Two converging watercourses, creating the Hunters Drain, are noted on-site. There weren't any NPCA-regulated wetlands on-site. The Site is located approximately 1 km south of the Welland River.

The Phase One Property is not considered to be a sensitive site, based on the definition of O. Reg. 153/04. “41. (1) This section applies in relation to a property if,

- (a) The property is,
 - (i) Within an area of natural significance,
 - (ii) Includes or is adjacent to an area of natural significance or part of such an area, or applies
 - (iii) Includes land within 30 m of an area of natural significance or part of such an area.”

Topography, Hydrology and Geology

A review of the Ministry of Northern Development and Mines, Geology Ontario Spatial Search tool as well as “Quaternary Geology of Southern Ontario”, Map 2496 and Map 2544, showing the “Bedrock Geology of Southern Ontario”, indicated that the native overburden is glaciolacustrine deep water clay and silt, underlain by Upper Silurian Limestone, dolostone, shale, sandstone, gypsum and salt, which belongs to the Salina Formation. Based on a review of local well records the depth to unconfined groundwater was recorded to range between 3.0 to 4.0 meters below ground surface (mbgs), the confined aquifer at approximately 25 mbgs. The estimated depth to bedrock is approximately 20 m bgs.

The Phase One Property land cover is characterized by mostly agricultural fields with a small section of gravel and reworked material within the northern part of the Site. As the Site is predominately covered by a permeable surface, overland flow would be limited. Any accumulation of surface water would be directed towards on-site intermittent swales and would flow northwards, off-site. The Site was noted to be relatively flat with a slight slope northward. The inferred local groundwater flow direction for the study area is northeast.

Drinking Water Wells

A review of Ontario Well Records shows no domestic wells within the study area. Well records can contain descriptive information about an area’s hydrogeological and geological characteristics. Information from one of the monitoring wells identified approximately 1.4 km off-site and is provided in Table 4.

Roads Within the Phase One Study Area

Refer to Figure 1 and 2 for the names of the roads within the Phase One Study Area.

Uses of Properties Adjacent to the Site

The properties surrounding the Site were a mix of residential dwellings, agricultural lots, and vacant lots. The Weaver Family Cemetery was identified to the north of the Site.

Potentially Contaminating Activities

O. Reg. 153/04 Table 2 of Schedule D – List of PCAs is provided in Appendix G for reference purposes. The Phase One ESA identified four PCAs, which resulted in four on-site APECs. Figures 3 highlight the PCAs.



On-Site

4336 Willick Road

PCA-1/APEC-1: #40 Pesticides (Including Herbicides, Fungicides, and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications.

Large portions of the property have been utilized for agricultural purposes dating from at least the early 1930's. Deposition of pesticides and/or herbicides to protect the crops may have occurred. The use of these chemicals results in an onsite APEC to the site's soil.

PCA-2/APEC-2: #27 Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles.

Aerial photographs depict a large personal garage on-site within the north central part of the property. Although no documentation was uncovered to indicate this was a commercial business, the aerial photos reveal a surplus of vehicles and materials surrounding this building. This historic use of the property results in an area of concern to the site's soil and groundwater.

PCA-3/APEC-3: #28 Gasoline and Associated Products Storage in Fixed Tanks.

Although not confirmed through documentation, one site photograph from 2018 appears to depict an Above Ground Storage Tank on the south side of the garage building. The contents and use of which are unknown, however the presence of an AST results in an onsite APEC to the site's soil and groundwater.

Areas of Potential Environmental Concern

The three PCAs identified above resulted in the creation of three on-site APECs to the Phase One ESA Property with the potential to have impacted the soil, and groundwater. Figures 4 highlight the APECs.

Table 1: Identified PCAs that could create APECs On-Site

Area of potential environmental concern	Location of the area of potential environmental concern on phase one property	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Groundwater, soil, and/or sediment)
APEC-1	Agricultural Areas	#40 Pesticides (Including Herbicides, Fungicides, and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site	OCs, As, Sb, Se	Soil
APEC-2	North Central Portion of the Site	#27 Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles	On-Site	PHCs, BTEX, VOCs, PAHs, Metals, As, Sb, Se, Cr (VI), B-HWS, Methyl Mercury, CL-, CN-, PCBs, pH/SAR/EC	Soil & Groundwater
APEC-3	North Central Portion of the Site (South of historical Automotive Garage)	#28 Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC, BTEX, VOCs, PAHs, Metals, As, Sb, Se	Soil & Groundwater

Uncertainty or Absence of Information

At the time of report issuance, MECP records have not been returned to NSSL. The records are not anticipated to result in a different recommendation for the site.